

Housing repairs

Common service pattern

February 2020

Final alpha report



An alpha to understand
what a common pattern for
housing repairs would look
like

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- A **discovery** project exploring a common service pattern to housing repairs and the barriers to adoption of digital repairs service was undertaken by Southwark, Lincoln, Gravesham and Lewisham in 2019.
- The outputs of that discovery can be viewed here.
- Following the discovery, an **alpha** has been completed by Southwark, Greenwich, Lincoln and South Kesteven councils in partnership with dxw digital.
- In **alpha**, we've built prototypes to explore different ideas and tested the riskiest assumptions.
- This **alpha** phase ran for 3 sprints during January and February 2020



Project team



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SOUTH
KESTEVEN
DISTRICT
COUNCIL



CITY OF
Lincoln
COUNCIL

Scope and focus of alpha



We held a short inception phase to align goals and set vision statements to act as our guiding stars

https://miro.com/app/board/o9J_kvoZFdE=/

Vision: residents

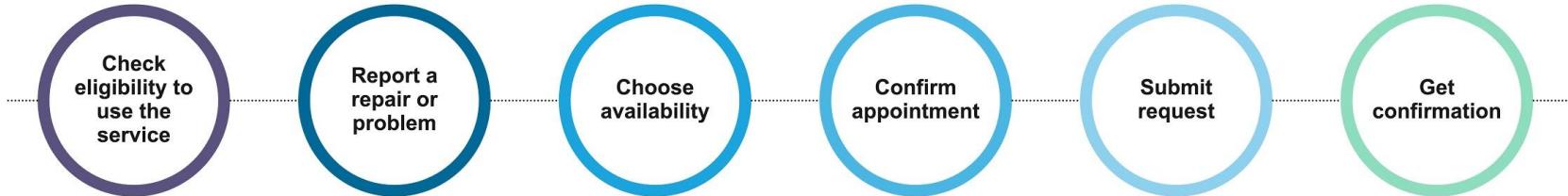
If I need a repair in my home (or in a communal area), I can easily and confidently find information about how to resolve my issue, request and book a repair and understand what will happen, and by when.

Vision: organisations

If a resident needs a repair in their home (or in a communal area), the correct diagnosis can be easily made so that the right people with the right tools can fix the problem in the right timescale.

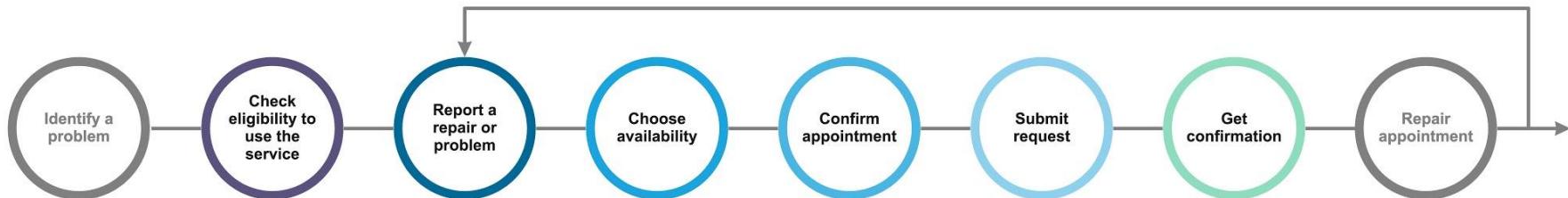
The service pattern we've developed in alpha focuses on the user goal of **“requesting a new repair online”**

This highly-focused scope allowed us to deeply explore a section of the journey in this 6 week project.



There is opportunity to expand this service pattern in beta and beyond

There is a lot of fertile ground around the scope of this alpha to expand the service pattern to encompass the whole repair journey of the resident, including the repair appointment itself.



Riskiest assumptions

We identified key assumptions behind the project and tested these during alpha:

- That we can design a digital service that users will prefer to use
- That there is sufficient commonality between authorities for a common pattern to have value
- That repair types follow a sufficiently common journey for a single pattern to be viable
- That improving the reporting and booking journey will better meet the underlying user needs
- That organisations can realise cashable savings by improving the reporting and booking journey

Service pattern

A service pattern can be seen as a best practice guide for providing services that meet user needs.

- It does not require uniformity across all service providers
- It does not mean that there should be a single system that multiple councils will use
- Councils should be able to adopt all or part of a pattern
- Existing suppliers could also adopt the pattern

[Examples of effective service patterns for local government are available here](#)

Housing repairs is a complex service. , Depending on the information that a resident provides in the reporting journey, many different things can happen. Parts of the journey aren't linear - for example diagnosis can happen in several different places (on the phone, during a visit) and jobs are often not completed on the first visit and require multiple tradespersons - potentially sending the resident back to an earlier part of the journey.

Because of this, we've defined where there are patterns in the different stages of the reporting and booking journey, rather than assuming that a single end-to-end pattern is the answer.

Where patterns exist in these different stages, local authorities may be able to adopt the patterns in part of the journey if they have constraints that prevent them adopting the whole journey.

Service pattern

A service pattern can be seen as a recipe to design and build a service.

A successful service pattern can be picked up by a service designer, service owner, or digital development team in a council who can then use the pattern to build the service itself (the meal).

Each council (kitchen) is different and has different tools that work in different ways, and different ways of working - but the recipe gives them enough that they can create that meal.

The recipe can be adapted and changed, but the meal is fundamentally the same. If one kitchen finds a better way of cooking the meal, they can update the recipe for other kitchens to benefit.



Approach to this alpha

This is an alpha of a service *pattern*. It isn't an alpha of the actual transactional service.

We used prototyping to test ideas and concepts that will inform the pattern.

This means we recorded our design decisions as we prototyped and tested (why are we asking this thing?, why do we display this content to the user?, why do we send this notification?) and these design decisions then informed different parts of the overall pattern.

Each part of the pattern is informed by research about what meets the needs of residents and staff involved in the housing repairs service.



WHAT WE DID

Research and design activities



Overarching questions

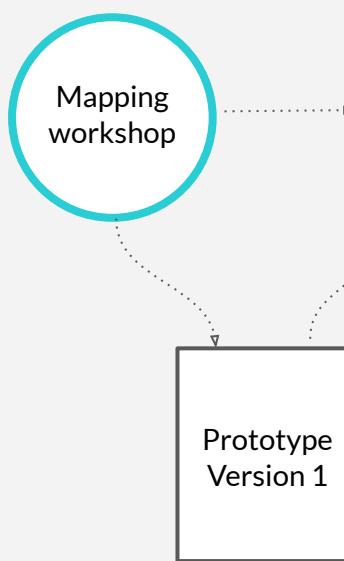
Following the inception workshop we prioritised and formulated our overarching questions for alpha to select the right methods and participants. We captured our thinking in a [high-level plan](#):

1. What are the challenges with diagnosis and how might the service improve it?
2. How could the service improve reporting, booking, tracking and visibility of repairs for residents?
3. What repairs should not be handled online? And what repair journey should we experiment with first?
4. What are the components of a viable service pattern across participating authorities? And how can it be shared?
5. What technology constraints are there across participating authorities?

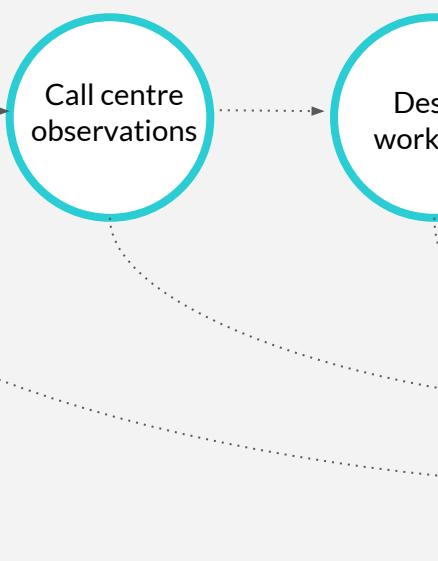
We worked in three two week sprints.

We designed the activities in each sprint to deliver maximum input for the pattern

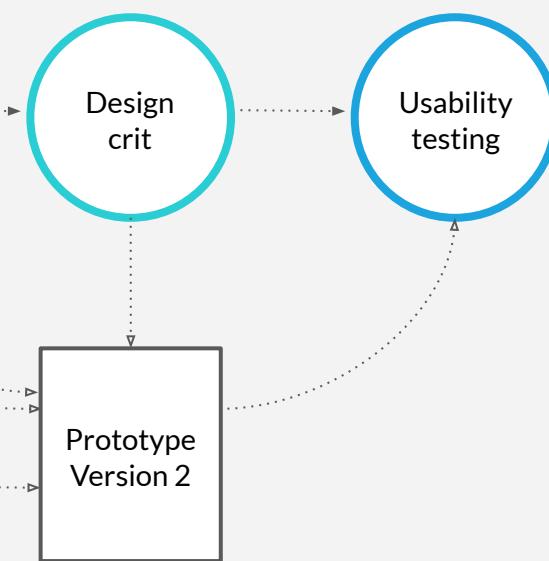
SPRINT 1



SPRINT 2



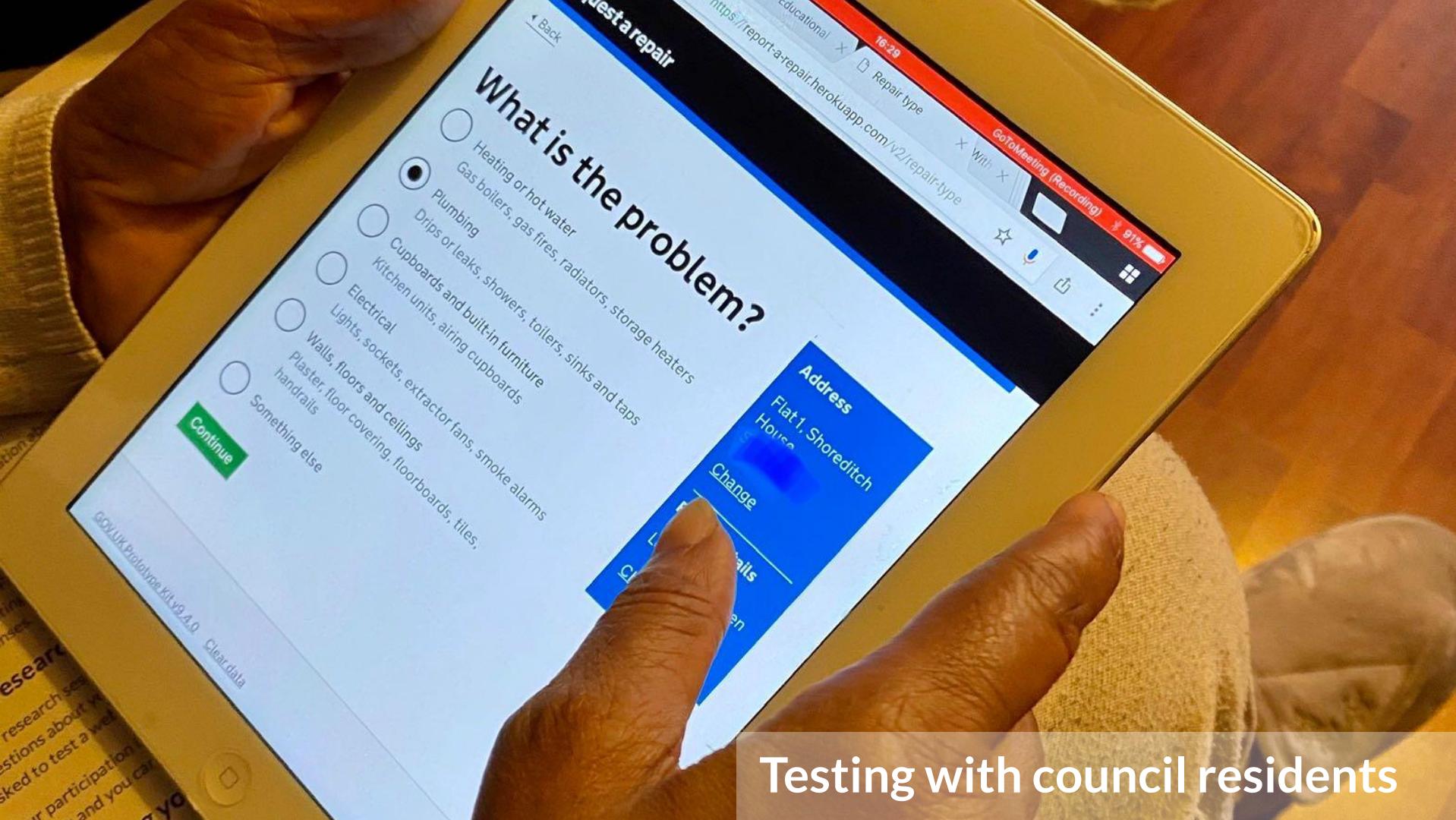
SPRINT 3



Research with internal users

Research with residents

| What we did | Why we did it | What happened | Outputs |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Mapping workshop | To walk through a resident's experience of housing repairs with the council and understand how repair problems are diagnosed. | Four, two hour workshops took place with Southwark, Greenwich, Lincoln and South Kesteven repair team staff. | Service mapping insights |
| Usability testing - round one | To evaluate the usefulness of the first version of the prototype with council residents. | 4 residents took part in usability research. | Analysis miro board Show and tell 1 slides |
| Observations | To find out how customer service teams at Lincoln and South Kesteven handle different types of housing repairs requests. | Two observation sessions took place with customer service agents from Lincoln and South Kesteven | Show and tell 2 slides |
| Design workshop | To explore and visualise the common steps involved in reporting a repair and to generate new ideas for dealing with a repair request (sketching). To gain further insight into whether the current prototype gathers the required information for processing a repairs request (design crit). | One design and sketching workshop took place with customer service agents from Southwark and Greenwich. | Show and tell 2 slides |
| Design crit | To improve on the first design of the prototype by involving different perspectives. | Two design crit sessions took place with customer service agents from Southwark, Greenwich, Lincoln and South Kesteven | Crit summary |
| Usability testing - round two | To evaluate the usefulness of the second version of the prototype with council residents. | 4 residents took part in usability research. | Analysis miro board Show and tell 3 |



Testing with council residents

| Age group | | | |
|-------------------------|----------------|-------------------|------------------|
| 30 to 39 | 45 to 54 | 65 or older | |
| 3 | 2 | 3 | |
| Council represented | | | |
| Greenwich | South Kesteven | Southwark | |
| 3 | 2 | 3 | |
| Property type | | | |
| House | Flat | | |
| 3 | 5 | | |
| Living ... | | | |
| alone | partner only | children only | partner and kids |
| 3 | 1 | 1 | 3 |
| Type of session | | | |
| online | cafe (F2F) | home visit (F2F) | |
| 4 | 2 | 2 | |
| Device used for testing | | | |
| Tablet | Smartphone | Laptop or MacBook | |
| 2 | 2 | 4 | |

8 in-depth testing sessions with council tenants online and face to face.

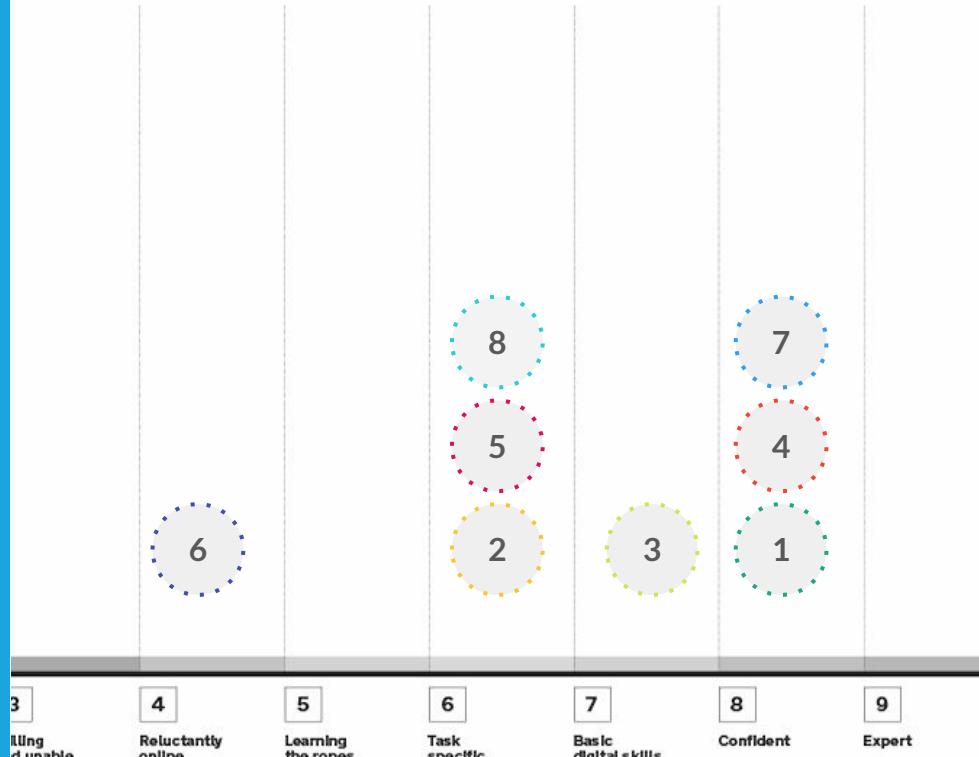
We tested prototypes with 8 residents across two rounds of testing. All had some experience with leaks, drips, mould, damp, condensation.

We had a good mix across:

- Age (up to 72 years of age)
- [Digital inclusion](#)
- Location
- Type of property (flat vs house)
- Living with others (kids, partner, alone)
- Accessibility needs (wheelchair, English not first language)

Only one participant identified as male but gender is unlikely to have significant impact on users' needs or how they approached the service.

PARTICIPANTS' DIGITAL INCLUSION



All participants had some digital skills and a method to access the internet.

Some didn't have a smartphone or internet access at home but were willing to report online anyway.

*Scores are approx based on [GOV.UK digital inclusion scale](#)

2 ROUNDS OF TESTING

1 hour sessions

- Short contextual interview
- Test prototype with a real scenario

Participants talked through their experience and were asked to show how they'd approach it from the 'start page'

- Test prototype with (at least one) hypothetical scenario based on an imagine.

Participants described what it is and where it may be in their home.

- Wrap-up and summary of overall experience

Examples of real scenarios

I can't use my washing machine because if I use it the water from the machine fills up in the sink

Shower leaks all over my floor and then it comes into my kitchen cupboards [bathroom is above the kitchen]

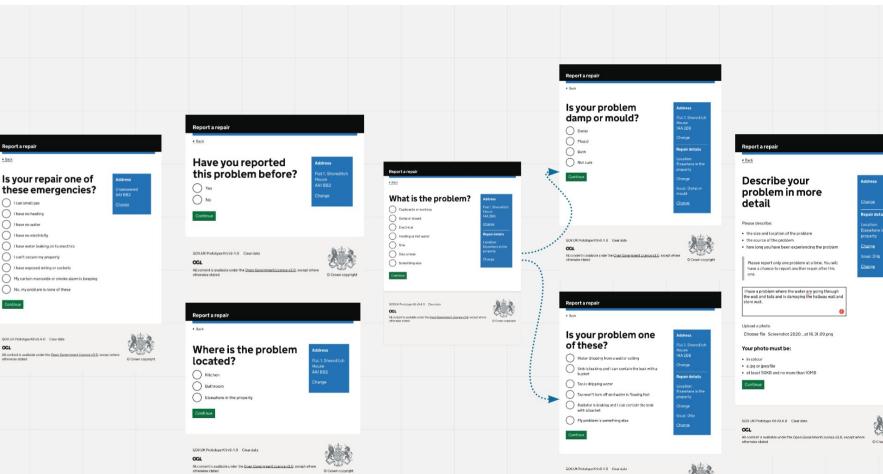
Hypothetical scenarios



TWO ROUNDS OF TESTING

Round one

- Elimination style journey including a list of emergencies
 - Multiple/more detailed steps to determine what the problem is



Round two

- Separated 'check before you start' eligibility (not tested)
 - Simplified/shortened category and keyword-based problem selection. And revised problem description page
 - Ability to book an appointment
 - Confirmation template (tested)

Request a repair

What is the problem?

- Household hot water. Domestic water line, radiator,中央加热器
- Plumbing. Sink, toilet, shower, bath, pipes,中央加热器
- Gas. Gas meter, pipe, burner, boiler, gas cylinder,中央加热器
- Electrical. Lights, sockets, extension leads, power points,中央加热器
- Heating. Radiator, central heating, boiler, chimney,中央加热器
- General. General household items, furniture, books,中央加热器

Address:
Flat 1, 123 Victoria Square
London
Greater London
England
Postcode
Change

Report details

Describe your problem in more detail

Please enter only one problem at a time. We will have a choice to report another problem at this time.

You can start a new form here to fix a different problem.

Please describe the problem in detail
Add any relevant info on the size of the issue, or the issue it's from.

How long you have been experiencing the problem?

Upload a photo or video of the damage

A clear picture or video of the problem can help us with the repair. The file needs to be a full image of the damage.

Your photo or video must be:

- In colour
- At least 1MB in size
- Not pay for the price to make it for videos
- At least 500x500 pixels in resolution (MPH)

Upload a photo or video

Choose Yes. No I'm chosen
Choose No. No I'm chosen

Booking an appointment

Address:
Flat 1, 123 Victoria Square
London
Greater London
England
Postcode
Change

Report details

Request a repair

Request a repair

Request a repair

When are you available?

A responsible adult must be home for all of the repair appointment slot and during the repair appointment.

The earliest appointment slot for this repair is:

14th February 2019

Please select a time slot

- 08:00 to 12:00pm (Morning)
- 02:00 to 4:00pm (Afternoon)
- 03:30 to 3:00pm (School run)
- 08:00 to 4:00pm (All day)

Please select any other dates that you are free:

17th February 2019

Please select a time slot

- 08:00 to 12:00pm (Morning)
- 02:00 to 4:00pm (Afternoon)
- 03:30 to 3:00pm (School run)
- 08:00 to 4:00pm (All day)

18th February 2019

Please select a time slot

- 08:00 to 12:00pm (Morning)
- 02:00 to 4:00pm (Afternoon)

What we learned



ALPHA LIMITATIONS

Research and design limitations

The development of this alpha service pattern was limited by the following factors :

- The second round of research didn't **test a version of 'check before you start'** to get a better understanding on how to handle eligibility in a way that's useful for councils and intuitive for residents
- We did not focus our research on **leaseholders**
- We did not explore **communal repairs**
- We focused the project on **leak-type repairs** rather than exploring other types of repairs
- Our research participants did not include many **younger and less experienced residents**, or any **males**
- We didn't speak to anyone who would **report a repair on someone else's behalf**
- We did not get to speak to very many **planners/schedulers** or **operatives**
- We did not explore **authentication** or "my account" journeys of reporting repairs

Commonalities

Housing repair services in local authorities are driven by a consistent set of needs and requirements and at a high level the journey for the resident is consistent across the four authorities.

The drivers for change (cost, time, user satisfaction) are also consistent with a fairly standard set of pain points driving failure demand.

Reporting and booking a housing repair is well suited for a common service pattern for authorities to anchor their services around.

- ✓ User and organisational needs
- ✓ Statutory requirements
- ✓ Drivers for change
- ✓ Pain points
- ✓ High level user journey
- ✓ High level system flow

Differences

There are differences in how different local authorities manage and operate the housing repairs service, and some differences in the local contexts.

These differences may constrain the adoption of a complete service pattern (for example technical integration) by an authority, but a modular pattern will allow authorities to adopt parts of a pattern.

The common service pattern should therefore be a ‘suite of patterns’ that can hang and fit together to form the whole journey, but that don’t require an authority to use all of the parts if they are not able to.

- ✖ Existing technology products
- ✖ Resident responsibilities (eg TMOs)
- ✖ Number and type of operatives
- ✖ Local context (eg number of leaseholders)
- ✖ Existing processes and contact points

LONG TERM CHALLENGE

Rebuilding trust in the service will remain the biggest challenge for councils.

Collectively adopting and iterating user-centred service patterns, designing for whole problems together with the GOV.UK design system will enable councils to achieve this.

NO TRUST IN THE SERVICE - WHY

Residents don't trust online reporting and the repairs service as a whole because their experience so far is disjointed.

Even if residents can access and use an online service it doesn't necessarily mean they will.



You go online, fill out the form to report the problem, then nothing.

I'm hoping they'd ring me up as soon as possible but there's no guarantee on that. And you'd have to do it all again if they didn't

NO TRUST IN THE SERVICE - WHY

Online enquiries are unintentionally de-prioritised and can get lost.

Agents receive requests from residents, their representatives and other teams like mobile care takers. They handle emails, online enquiries and paper forms in-between calls.

There's no effective way to track all these enquiries, especially once a job is raised or forwarded to another team or organisation.



Sometimes we hear from people I've sent an email and you've ignored it. And we haven't, we forwarded it on.

~call centre agent

NO TRUST IN THE SERVICE - WHY

'New' and 'completed' repairs mean different things to councils and residents.

Tenants' needs are fulfilled only when all jobs are complete to an acceptable standard. They also expect council to identify and prioritise recurring and more complex problems, and ensure overall continuity.

Councils work mainly from job-to-job and don't have the visibility they need to track and check the quality of end-to-end repairs. Together this makes it difficult for councils to provide good service and keep costs low.



If we've been out and it's been completed before, it's a brand new repair. If they were out-carded, we book it as a brand new repair. If bad job was done the first time around, it's a brand new repair.

~ call centre agent

NO TRUST IN THE SERVICE - WHY

Residents often feel misunderstood and blame agents' lack of experience. Councils should adopt common standards for handling repair enquiries beyond online patterns.

Agents often don't have the technical knowledge, tools or time to diagnose repairs properly, so they do what they can and move on.

It is also accepted that handling repairs effectively needs "personal or expert knowledge". In reality, this is a symptom of institutionalised information and siloed processes. Agents should have access to standardised guidance like call scripts with user-friendly diagnosis questions, easily-accessible information about properties and repositories of common problems and causes.



We can't diagnose over the phone, just raise the jobs. Generally, about repairs, I don't have that much knowledge.

~ call centre agents (composite quote)

We couldn't make [the agent] understand it was inside. They've got young people training [who] don't understand the problems.

~ long-term council tenant

RECOMMENDATION - APPLY SERVICE DESIGN

An online reporting tool needs to work seamlessly with the rest of the service instead of being an add-on.

To drive digital uptake councils will also need to:

- improve and standardise ways of working
- communicate the improvements and benefits to residents linking back to their needs and using their language
- provide assisted digital via libraries or walk-in centres so that residents with access and skill barriers can also use online-first services

Technical discovery



Technical discovery

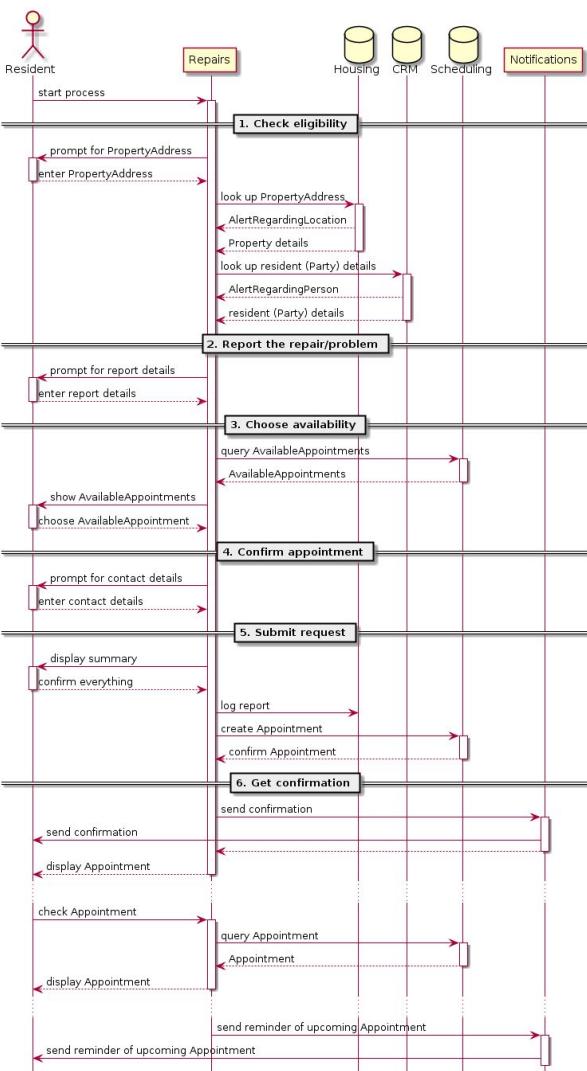
The steps in the common service pattern for reporting a housing repair will involve communication between different major system functions.

A short technical discovery was undertaken during alpha to understand:

- The high level data needs of other systems
- How the HACT data standard could be used

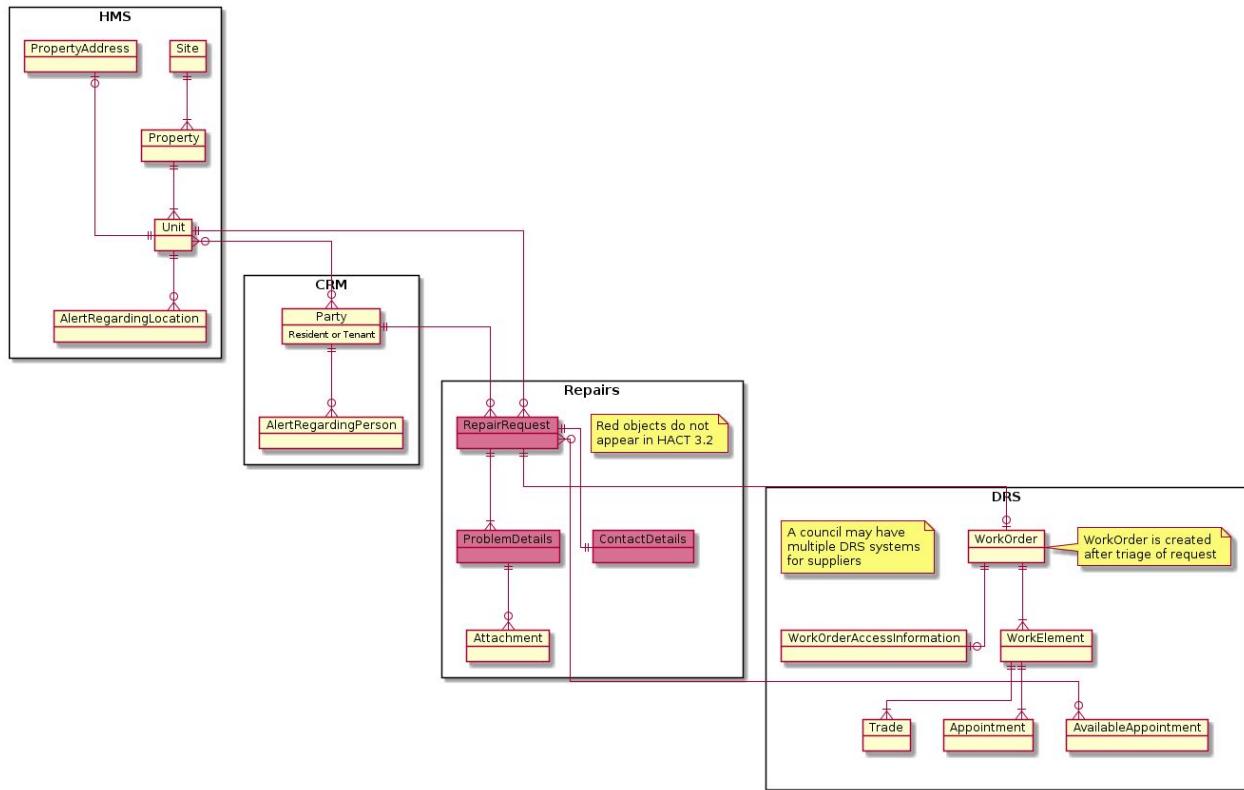
Technical discovery

We produced a [sequence diagram](#), proposing a sequence of interactions between a repair request service and the other major system components. For each stage of the service pattern, data will flow back and forth between these systems.



Technical discovery

We also produced a high-level data model that would represent the information used in the pattern. The components in this model are mostly equivalent to their definition in the HACT 3.2 data standard, except for three components which do not appear in that standard and can be considered extensions for this service pattern.



Cost-benefit analysis



The benefits case

During alpha, we reviewed the assumptions that underpin the benefits case from discovery, and estimates of the level of channel shift achievable have been revised.

Based on our analysis, we expect that quantifiable financial benefits can be realised across two main categories:

- **More accurate diagnosis**
- **Reduction in calls (channel shift)**

We have modelled two scenarios, a high case assuming 37.5% channel shift (to digital) and a low case assuming 18% channel shift. These assumptions are lower than those in discovery and are based on the actual channel shift achieved by local authorities with a digital offering (eg Adur and Worthing and Hackney).

The models prove that delivering this project in collaboration brings significantly greater benefits than for an authority developing a service alone.

The full workings [of the benefits case are available here](#)

Benefits - a single authority

Here we show benefits modelled based on a single authority developing a service. We have modelled this authority based on an 'average' authority

In the high case, a positive return on investment is possible after two years.

In the low case, a positive return on investment is possible after five years.

| For an average authority | | | | | | |
|--------------------------|-------------------------------|-----------|-----------|-----------|----------|----------|
| | Measure | 20/21 | 21/22 | 22/23 | 23/24 | 24/25 |
| High case | Benefit | -£350,000 | £214,197 | £194,197 | £214,197 | £194,197 |
| | Discounted net benefit | -£350,000 | £206,954 | £181,285 | £193,193 | £169,231 |
| | Cumulative | -£350,000 | -£143,046 | £38,239 | £231,432 | £400,663 |
| Low case | Benefit | -£350,000 | £102,815 | £82,815 | £102,815 | £82,815 |
| | Discounted net benefit | -£350,000 | £99,338 | £77,309 | £92,733 | £72,168 |
| | Cumulative | -£350,000 | -£250,662 | -£173,353 | -£80,620 | -£8,451 |



Benefits - the four authorities

Here we show benefits modelled based on the four authorities in alpha adopting the service and realising the benefits of doing so.

In the high case, a positive return on investment is possible after one year.

In the low case, a positive return on investment is possible after two years.

| For the four partner authorities together | | | | | | |
|-------------------------------------------|-------------------------------|-----------|-----------|----------|------------|------------|
| | Measure | 20/21 | 21/22 | 22/23 | 23/24 | 24/25 |
| High case | Benefit | -£500,000 | £816,788 | £736,788 | £816,788 | £736,788 |
| | Discounted net benefit | -£500,000 | £789,167 | £687,799 | £736,696 | £642,068 |
| | Cumulative | -£500,000 | £289,167 | £976,967 | £1,713,663 | £2,355,731 |
| Low case | Benefit | -£500,000 | £371,258 | £291,258 | £371,258 | £291,258 |
| | Discounted net benefit | -£500,000 | £358,703 | £271,892 | £334,853 | £253,815 |
| | Cumulative | -£500,000 | -£141,297 | £130,596 | £465,449 | £719,264 |



Benefits - national roll-out

Here we show benefits modelled based on half of all local authorities who manage at least 1000 homes adopting the service (a total of 80 authorities, with 20 adopting each year).

In the high case, a positive return on investment is possible after one year.

In the low case, a positive return on investment is possible after three years.

| The national case - 80 authorities using with 20 joining per year | | | | | | |
|-------------------------------------------------------------------|-------------------------------|-------------|-------------|------------|-------------|-------------|
| | Measure | 20/21 | 21/22 | 22/23 | 23/24 | 24/25 |
| High case | Benefit | -£1,350,000 | £2,083,940 | £5,167,880 | £8,251,820 | £12,335,760 |
| | Discounted net benefit | -£1,350,000 | £2,013,469 | £4,824,271 | £7,442,669 | £10,749,902 |
| | Cumulative | -£1,350,000 | £663,469 | £5,487,740 | £12,930,409 | £23,680,311 |
| Low case | Benefit | -£1,350,000 | -£143,700 | £712,600 | £1,568,900 | £3,425,200 |
| | Discounted net benefit | -£1,350,000 | -£138,841 | £665,220 | £1,415,058 | £2,984,864 |
| | Cumulative | -£1,350,000 | -£1,488,841 | -£823,621 | £591,437 | £3,576,301 |



Benefits - non quantifiable

The [discovery work](#) identified non financially quantifiable benefits of a common pattern for housing repairs. The assumptions underpinning these benefits remain valid. The non-financial benefits with the greatest potential impact are:

- **Higher levels of user satisfaction**
- **Better management of repairs service through better use of data**
- **Digital capability uplift in authorities**



Service pattern



The pattern has evolved from a **current state, organisational focus** towards **user-centered** components.

We defined six components for the pattern, which are laid out in the following sections of this report. We iterated the patterns taking a user-centered view.

1

Check eligibility

2

Report a repair or a problem

3

Choose availability

4

Confirm appointment

5

Check and submit request

6

Get confirmation

Links to service pattern iterations, and the full pattern

Final pattern images

The original files are too large to include in this report, so the high quality images are here:

https://drive.google.com/open?id=1MbxFexh_qfSsPeZ9WODWo14s9aeqJzo

Initial pattern ideas

https://docs.google.com/document/d/1uhPIJ7wDW0CqfjqwOe7K5abaA8OWjU6WzI_COJMKjz7M/edit?usp=sharing

Alpha pattern first draft

https://miro.com/app/board/o9J_kv6WJzq=/

Alpha pattern final draft

https://miro.com/app/board/o9J_kvO3a2c=/

Housing repairs service pattern "Request a new repair online"

Pattern:
Check eligibility to use the
service



Diverting people who should not be on the online repairs reporting journey

There are many reasons why residents may not always proceed with a repairs reporting journey.

They may be:

- ineligible to use the service
- responsible for the repair themselves
- required to take actions to remedy the problem themselves before the council takes action

We learned that in some councils the rates of this type of unnecessary contact could be as high as 40%

We have included emergencies in this section of determining eligibility. Although it would be possible to report emergencies online, the existing systems and processes would not be able to handle a prompt or satisfactory experience for the resident. With future improvements to the systems and processes, emergencies could also be handled online.

Eligibility

We found that across the councils there were broadly similar eligibility criteria for reporting housing repairs. Additionally, during user research we observed that customer service agents have some discretion in whether or not to create a repair request.

Vulnerabilities

Some repairs would be considered only if the resident was particularly elderly, disabled or vulnerable, even if the repair type would not normally be the council's responsibility.

Rechargeable repairs

If the repair was due to damage by the resident themselves, the repair would still be carried out but would be rechargeable to the resident.

Eligibility factors

- Are they a council tenant (or leaseholder)?
- Are they a leaseholder reporting non-communal repair or something inside of their property?
- Are they reporting a new repair or following up on an existing report?
- Are they reporting a problem that is their own responsibility?
- Are they reporting a problem that is due to intentional damage? If so, do they have a crime reference number?
- Are they reporting repairs about something under warranty (which means the partner company is responsible)?

Check eligibility to use the service

Before residents start: highlight any alternative journeys for **emergencies**

Before residents start: highlight **eligibility requirements**

Before start: highlight alternative journeys for following up **existing repairs**

Before start: have visible links to **self help content**

Before start: offer other **reporting methods**

At start: ask residents address to **verify eligibility**

Request a repair

We provide housing repairs for council tenants through this online service.

Use this service to:

- request a non-emergency, first-time repair
- book a repair appointment

 If you can smell gas, please call [National Grid](#) on 0800 111 999.

▼ Other ways to request a repair

Telephone

Telephone: 020 7946 0101
Monday to Friday, 9am to 4pm

[Find out about call charges](#)

Email

name@example.com

We aim to respond within 2 working days

Follow-up a previous repair request

This service is for requesting first-time repairs. If you would like to follow-up on an existing request, you can [find out the repair status](#) using the unique repair request reference number.

[Start now >](#)

Repair responsibility

You are entitled to some repairs free of charge, but there are others you'll need to pay for. As a tenant, you might be liable for some or all of the cost of:

Related pages

- [Request an emergency repair](#)
- [Request a communal repair](#)
- [Fix it yourself videos](#)

1

Copy explains what the service is for and what the users will be able to do

2

Users are told how to check the status of a previous repair request. This copy should sit within 'Check before you start'

3

Councils should provide other ways for users to request a repair

4

Copy explains that there might be some cost to the user for a repair, which is different to 'repair responsibility'. Copy should be made clearer and should sit within 'Check before you start'

Service landing page should support quick scanning, have an always visible call to action and offer an option to 'check eligibility'.

Overall participants had a hard time with the start page in the final round of testing. All needed a gentle nudge to start reporting partly because the start button wasn't visible without scrolling.

Several people clicked on 'report an emergency repair' link, clicked on 'book a repair appointment' text and questioned what 'start' would allow them to do once they noticed it.

Most dangerously it meant people who don't trust the service and are less confident online would most certainly revert to calling.



The green button calls me but I can't tell if it's what I'm looking for. Is the start now for a follow-up or ...?

Why is there not a section there to say specifically to say what is the repair, what is my address, who are you? I'm trying to get into it!

Check eligibility to use the service

Before residents start: highlight any alternative journeys for **emergencies**

Before residents start: highlight **eligibility requirements**

Before start: highlight alternative journeys for following up existing repairs

Before start: have visible links to **self help content**

Before start: offer other **reporting methods**

At start: ask residents address to **verify eligibility**

Emergencies

Emergencies need to be acted on immediately. Current reporting systems and processes in councils mean that online requests may not be picked up for a few hours, so the repairs with the greatest urgency should be reported over the phone until systems and processes evolve to support this.

Check eligibility to use the service

Before residents start: highlight any alternative journeys for **emergencies**

Before residents start: highlight **eligibility requirements**

Before start: highlight alternative journeys for following up existing repairs

Before start: have visible links to **self help content**

Before start: offer other **reporting methods**

At start: ask residents address to **verify eligibility**

Advise eligibility requirements upfront

Eligibility requirements should be clearly stated before the residents start the reporting journey, so that they can take an appropriate journey from the start.

Check eligibility to use the service

Before residents start: highlight any alternative journeys for **emergencies**

Before residents start: highlight **eligibility requirements**

Before start: **highlight alternative journeys for following up existing repairs**

Before start: have visible links to **self help content**

Before start: offer other **reporting methods**

At start: ask residents address to **verify eligibility**

Divert follow-ups to repairs

The proposed service pattern keeps residents fully up-to-date with their repair status through notifications, and clear processes to allow them to update the council with new information. This should divert a lot of follow-up contact. We propose that a beta could contribute a service pattern for helping users follow up their requests.

Check eligibility to use the service

Before residents start: highlight any alternative journeys for **emergencies**

Before residents start: highlight **eligibility requirements**

Before start: highlight alternative journeys for following up existing repairs

Before start: have visible links to **self help content**

Before start: offer other **reporting methods**

At start: ask residents address to **verify eligibility**

Self-help is visible at the right time and for the right kind of users

Self-help content should be made available at appropriate points throughout the reporting journey, for example through related links on the reporting home page, and also after a repair request has been submitted.

Self-help can take different forms and is not always appropriate.

There are different forms of self-help:

- fix it yourself like deal with a wonky toilet seat or a light-bulb
- do *this* in the meantime because we won't progress your repairs as an emergency like flush a toilet using a bucket of water
- do *this* before we consider this further (specific to condensation-related problems)

It can be effective, if offered at the right time for the right kinds of people and problems. Staff worried about placing too much responsibility on residents and adding to their frustrations. Therefore we recommend doing further design experimentation and testing with users before implementing any self-help in the repairs journey.



I explained at the beginning [of the call] that I'm wheelchair bound, they kept telling me [to] fetch water from the kitchen and pour it down the toilet

~wheelchair-bound resident

If I know the source of the problem I'd probably fix it myself rather than waiting for people

~ long-term resident

Offering “what to do in the meantime” is a form of self-help that can be effective in diffusing tension between resident expectations and councils’ processes.

Emergency, priority and escalations mean something very specific to the council but not to residents. Councils have various process to separate statutory emergencies, high priority and lower priority jobs.

For residents emergency is largely an emotional response, or a feeling. That might be because it is a true [statutory] emergency, or they are fed up with being stuck in the process, not getting the outcome they’re looking for, or worried that the problem will get worse.



It can be frustrating on both sides.. You [agent] know what's an emergency and what isn't. I'll explain it to them and give some advice on how to deal with it. It's about trying to offer a temporary resolution.

That usually works...

~ an experienced call centre agent

Check eligibility to use the service

Before residents start: highlight any alternative journeys for **emergencies**

Before residents start: highlight **eligibility requirements**

Before start: highlight alternative journeys for following up **existing repairs**

Before start: have visible links to **self help content**

Before start: offer other **reporting methods**

At start: ask residents address to **verify eligibility**

Non-digital path available

Many of the residents we spoke to in our research had limited internet access, accessibility problems or low digital literacy which would mean they would be unable to use any fully-digital service.

There should always be a way for people to report their repair in the channel that best suits their needs.

INSIGHT - ASSISTED DIGITAL AND ALTERNATIVE CHANNELS

Residents expected main phone numbers to be visible, and to include a free phone and out of hours numbers. However, they also recognised the benefits of an online service and downsides of calling.

Councils must consider what a digital-first approach truly means and how less confident and excluded residents will continue to access the repair services.



Councils should help [the elderly] learn how to do it. There's someone to help me use it in the library...

During the day it's very expensive [calling], so texting and online is a good option.

INSIGHT - ASSISTED DIGITAL AND ALTERNATIVE CHANNELS

Even the most sceptical, older and digitally-inexperienced residents had an overall positive experience with the prototype (round two).

That means councils must include and iterate services with residents who represent the lower end of digital inclusion scale to avoid pushing them into the 'slow lane'.

It would be wrong to assume that all older or more digitally reluctant residents won't use the service.



It's good [the prototype] as far as it goes but lots of things could be added, vulnerable people, training...

~Older than 65,
extremely sceptical resident
digital inclusion score 4*

I've never tried doing it before but that seems ok to me.

~72 years old
wheelchair-bound resident,
digital inclusion score 6*

* scores approximated based on [GOV.UK digital inclusion scale](#)

Check eligibility to use the service

Before residents start: highlight any alternative journeys for **emergencies**

Before residents start: highlight **eligibility requirements**

Before start: highlight alternative journeys for following up **existing repairs**

Before start: have visible links to **self help content**

Before start: offer other **reporting methods**

At start: ask residents address to **verify eligibility**

Address as verification

An address should be enough to verify whether someone is a council tenant or leaseholder, and what type of property they live in, if the data can be captured in the council's systems. At the moment, council systems find addresses using the first line of an address.

Using an address as verification reduces the resident's data entry burden. However, it could also have a positive side effect of reinforcing the user's trust in the online reporting service.

[◀ Back](#)

What is your address?

Postcode

Enter the postcode for the address where the repair is located.

N1 6NU

1

The user's postcode is used to determine their eligibility and should be part of 'Check before you start'

2

Only addresses the council is responsible for should appear as an option

3

Councils should explain why a user's address might not show as an option and offer alternative ways to get help

[◀ Back](#)

What is your address?

Select an address

Flat 2, Shoreditch House

2

We can only arrange for repairs to property maintained by the council.

[I can't find my address on this list](#)

3

[Continue](#)

RECOMMENDATIONS - ELIGIBILITY AND USING THE SERVICE

- Experiment with separating ‘check before you start’ from the main journey. Apply other patterns that are already available.
- Keep text on landing page to a minimum and highlight the top eligibility criteria.
- Have a clear call to action with a meaningful label (instead of ‘start’) and ensure it’s visible on the landing page without scrolling on all devices.
- Don’t attempt to hide contact numbers. Support channel shift with intuitive online service that is firmly grounded in user needs and speaks the language residents naturally use instead.

Check before you start

[Emergency repairs]

An emergency repair is when there's an immediate danger to you or the structure of the building. In an emergency we'll make the situation safe; we may need to return another day to complete the full repair.

All emergency repairs can be reported 24 hours a day, 7 days a week by calling 0800 952 4444 or 020 7525 2600. You may experience longer waiting times due to a high volume of calls.

Emergency repair outside of office hours

If you have an emergency repair when we are closed, you should phone our Repairs Contact Centre on xxx xxxx xxxx.

[If not emergency]

You can report first-time, non-emergency repairs online using this online reporting service.

Where is the repair located?

In my home
 In a communal area

A draft version of Check before you start a repair request from this work

Prototype

ALPHA This is a new pattern - it needs further testing and your feedback

Pattern

Check before you start

Help users understand whether they should use your service before they start, so that they don't waste time and effort.

If you do this well, you'll improve user satisfaction and reduce unnecessary calls and applications to your service team.

Last updated: 5 July 2016

Meet user needs

Before using a service users might need to know:

- meet user needs
- save time and money
- resolve failures in your service
- try an example of this pattern
- other services using this pattern
- feedback

Save time and money

You may have problems with your service, eg failure demand, including the following:

A working example with documentation of ‘check before you start’ on GOV.UK

Pattern: Report a repair or problem



Helping residents to communicate a problem

Communicating a problem to the council can be especially challenging:

- for residents who have English as an additional language
- for people with speech impediments
- for accessibility reasons
- for people who lack the specific terminology to describe the problem

Residents often expect their repair to be considered a higher priority than the council's systems and processes permit, and there are some challenges around communicating a priority level to the resident. We have not focused on report prioritisation in this phase of work, however it would be interesting to explore this in beta.



How to communicate the problem

Where is the problem?

The location of the repair can narrow down the type of problem that the resident is having.

What is the problem?

It can be useful to first identify the type of problem, and then prompt the user to answer specific questions relating to potential diagnosis.

How long has the problem been happening?

This question needs to be worded carefully to communicate whether this is a new repair or a recurring issue.

The diagnosis processes

- **Repairs are diagnosed by the agents** with additional complex diagnosis assistance offered by the planners/schedulers. Agents use institutional knowledge, shadow systems like paper cheat-sheets or slow diagnosis systems.
- **If a repair cannot be fully diagnosed** based on the information given, a “team lead” will be sent to investigate the repair, and a repair will be scheduled by a planner when they return and feedback their diagnosis at the end of the day. However, this loop isn’t always closed and follow-ups aren’t scheduled so repairs drop out of the system.
- **Physical evidence is useful for diagnosis** but the systems currently used by councils aren’t capable of handling this type of information. The images or videos sent also can’t be forwarded to the operatives.

Report a repair or problem

Use address to determine the **property type** and **location in building**

...
Use address to determine whether the property has any **existing warranties** for newly fitted rooms

Ask the resident **where the problem is** visibly located in their home

Ask the resident the **type** of repair problem they have

Ask the resident for a detailed **problem description**, including the source of the problem

Ask the resident **how long** it's been a problem

Ask the resident for **physical evidence** of problem (such as photos or videos, if available)

Report a repair or problem

Use address to determine the **property type** and **location in building**

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Ask the resident **how long** it's been a problem

Ask the resident for **physical evidence** of problem (such as photos or videos, if available)

Property type

It would be possible to use the resident's address to identify where in the building the property is situated, for example if it is a ground floor flat, or whether it is a detached house with a roof.

This would also reduce the data entry burden on the resident and potentially instill confidence in the service.

Report a repair or problem

Use address to determine the **property type** and location in building

Use address to determine whether the property has any **existing warranties** for newly fitted rooms

Ask the resident **where the problem is** visibly located in their home

Ask the resident the **type** of repair problem they have

Ask the resident for a detailed **problem description**, including the source of the problem

Ask the resident **how long** it's been a problem

Ask the resident for **physical evidence** of problem (such as photos or videos, if available)

Existing warranties

If the resident has recently had a new kitchen fitted, for example, a repair in the kitchen would not be the council's responsibility and instead would be covered by the warranty.

The council could capture this data and forward these repairs to the company managing the warranty to reduce service demand and cost.

Report a repair or problem

Use address to determine the **property type** and **location in building**

...
Use address to determine whether the property has any **existing warranties** for newly fitted rooms

Ask the resident **where the problem is** visibly located in their home

Ask the resident the **type** of repair problem they have

Ask the resident for a detailed **problem description**, including the source of the problem

Ask the resident **how long** it's been a problem

Ask the resident for **physical evidence** of problem (such as photos or videos, if available)

Problem location

The resident should be asked where the problem is located to help narrow down the type of problem that they are reporting.

“Location of the problem” is interpreted differently by residents, some of whom understand this to mean “where the problem is visible in the home”, and some of whom understand this to be “the source of the problem”, so it is important to be clear with residents about what is being asked in this question.

◀ Back

Where is the problem located?

- Kitchen
- Bathroom
- Elsewhere in the property
- External repair
Roofing, chimneys, gutters, drainpipes,
gates, sheds, fences, pathways

Continue

Address

Flat 2,
Shoreditch
House
N1 6NU

Change

1

2

1

Allow users to select the location of the problem using radio buttons. Problem location should inform subsequent questions on problem type

2

Allow users to see and change their answers as they move through the journey

Report a repair or problem

Use address to determine the **property type** and **location in building**

...
Use address to determine whether the property has any **existing warranties** for newly fitted rooms

Ask the resident **where the problem is** visibly located in their home

Ask the resident the **type** of repair problem they have

Ask the resident for a detailed **problem description**, including the source of the problem

Ask the resident **how long** it's been a problem

Ask the resident for **physical evidence** of problem (such as photos or videos, if available)

Type of repair

The resident can select from a list of repair types that are relevant to the location of the problem. For example, if they selected the problem is in the bathroom, they only have to look through problems that might affect a bathroom, or select “other” to skip this stage and proceed to giving a detailed problem description.

This reduces data-entry burden on the resident.

What is the problem?

1

- Heating or hot water
Gas boilers, gas fires, radiators, storage heaters
- Plumbing
Drips or leaks, showers, toilers, sinks and taps
- Cupboards and built-in furniture
Kitchen units, airing cupboards
- Electrical
Lights, sockets, extractor fans, smoke alarms
- Walls, floors and ceilings
Plaster, floor covering, floorboards, tiles, handrails
- Something else

[Continue](#)

Address

Flat 2,
Shoreditch
House
N1 6NU

[Change](#)

Repair details

Location:
Bathroom

[Change](#)

1

Problem types should be grouped thematically, with hint text to provide users with the types of repair under each problem area

INSIGHT - WHERE AND WHAT IS THE PROBLEM

It is hard for users to select the one right option for ‘where’ and ‘what’ is the problem because residents might not know what’s causing the problem, are not familiar with their property or repairs.

It can be especially challenging for bigger leaks as cause can be invisible and hard to troubleshoot. Or because multiple areas can be affected including the exterior.



It's a bit of a trick question (where is the problem). Even though the problem is in the living room [visible], the problem is actually upstairs [source].

The shower leaks all over my floor and then it comes into my kitchen cupboards.

INSIGHT - WHERE AND WHAT IS THE PROBLEM

In round one we offered users a set of options with only one or two keywords.

In round two we experimented with broader categories and included keywords. Users were quicker and more certain about selecting an option. We observed them reading and making a decision based on the visible keywords under each category (based on work done by [Adur and Worthing](#) but using [GOV.UK design system](#)).

This means initial selection is easier for users with broader categories and keywords but further work is needed to optimise the taxonomy and design additional steps to help users describe the problem in a way that's useful for the council and those responsible for fixing the problem.

Neither of the two representations take into account cases where multiple options might be relevant and multiple trades may need to get involved to fully complete a repair.

What is the problem?

- Cupboards or worktop
- Damp or mould
- Electrical
- Heating or Hot water
- Sink
- Drip or leak
- Something else

[Version one](#)

What is the problem?

- Heating or hot water
Gas boilers, gas fires, radiators, storage heaters
- Plumbing
Drips or leaks, showers, toilers, sinks and taps
- Cupboards and built-in furniture
Kitchen units, airing cupboards
- Electrical
Lights, sockets, extractor fans, smoke alarms
- Walls, floors and ceilings
Plaster, floor covering, floorboards, tiles, handrails
- Something else

[Version two](#)

Report a repair or problem

Use address to determine the **property type** and **location in building**

...
Use address to determine whether the property has any **existing warranties** for newly fitted rooms

Ask the resident **where the problem is** visibly located in their home

Ask the resident the **type** of repair problem they have

Ask the resident for a **detailed problem description**, including the **source of the problem**

Ask the resident **how long** it's been a problem

Ask the resident for **physical evidence** of problem (such as photos or videos, if available)

Problem description

The resident is given prompts to enter a detailed problem description.

The prompts should be targeted towards the repair type that they selected, if possible. For example, if a resident says that they have a mould problem, the prompts could ask for the size of the mould patch, and whether it is wet or smells. This section should also ask the resident for information about the potential source of the problem, as opposed to the location in the house.

Report a repair or problem

Use address to determine the **property type** and **location in building**

...
Use address to determine whether the property has any **existing warranties** for newly fitted rooms

Ask the resident **where the problem is** visibly located in their home

Ask the resident the **type** of repair problem they have

Ask the resident for a detailed **problem description**, including the source of the problem

Ask the resident **how long** it's been a problem

Ask the resident for **physical evidence** of problem (such as photos or videos, if available)

Problem duration

The resident is asked how long they've been experiencing a problem.

In user research, residents interpreted this in a number of ways: it could be referring to how long this problem has existed in their home, or if it's a recurring problem, it could mean how long they've had it overall, or on this occasion.

Report a repair or problem

Use address to determine the **property type** and **location in building**

...
Use address to determine whether the property has any **existing warranties** for newly fitted rooms

Ask the resident **where the problem is** visibly located in their home

Ask the resident the **type** of repair problem they have

Ask the resident for a detailed **problem description**, including the source of the problem

Ask the resident **how long** it's been a problem

Ask the resident for **physical evidence** of problem (such as photos or videos, if available)

Evidence of the problem

The resident should be offered the opportunity to submit additional evidence with their repair request. This step should not be compulsory.

It can be helpful for residents who are having difficulty explaining the problem, and it can also help with diagnosis, and potentially in tracking changes over time. This evidence should be shared with planners and trade operatives, however there are currently technology limitations for councils that prevent this.

Describe your problem in more detail

Please report only one problem at a time. You will have a chance to report another repair after this one.

We have short videos on how to [fix some common problems with plumbing](#).

1

Please describe the problem in detail

Add any information on the size of the issue, or the source if known.

2

How long you have been experiencing the problem?

3

Allow users to find self-help videos relating to their problem type or area

1

Allow users to describe the repair problem and provide hints on what information is needed in the description field

2

Ask users for how long the repair problem has been an issue and use this to inform request priority, where possible

3

Upload a photo or video of the damage

A clear picture or video of the problem can help us with the repair. You should include a full image of the problem.

Your photo or video must be:

- in colour
- a jpg or jpeg file for photos and mp4 for videos
- at least 50KB and no more than 10MB

Upload a photo or video

Choose file No file chosen

Choose file No file chosen

4

Continue

5

4

This copy explains how uploading a photo or video can help assess a repair

Explain what makes a good photo or video and provide guidance on accepted formats and size

5

Allow a user to upload multiple images or videos.

Make it clear that this is optional (some users thought this was required)

INSIGHT - DESCRIBING THE PROBLEM

Residents had consistently positive experience with ‘problem details’ page.

From the first testing sessions residents had a positive experience with this page but it needed a little more structure to help users give enough of the right kind of information to help councils and operatives know enough.

We also observed residents wanting to upload multiple pictures and even upload a drawing of the layout of the house with an annotation of the problem area.



The description page should be earlier on (some people want to “just describe the problem” in their own words

I'd like to upload a picture of my drawing and a picture of the actual damp, probably with a ruler next to it so you can see the size of it

RECOMMENDATIONS - REPORT A REPAIR (OR A PROBLEM)

- Support novice and expert users by keeping problem categories broader and include hints.
- Build on the current categories for ‘where’ and ‘what’ by experimenting with follow up questions and doing more interaction and content design.
- Help users give enough of the right kind of information about what the problem is. Balance interactive step by step interactions with static-flexible input fields.
- Include dynamic content that adapts to the problem communicated, for example offer bespoke hints depending on the problem.

This is a new service - [Find out what this means](#)

Let us know any further details you think might help us

Please describe:

- source of damp
- size and location of damp

Please only report one repair at a time. You will have a chance to report another repair after this one.

Problem description

500 characters remaining

Continue

An example of [dynamic content](#) in a housing repairs reporting journey with questions relevant to the repair request.

Pattern: Choose availability



AVAILABILITY

Offering flexibility, choice and control to reduce missed appointments

By setting clear expectations about the repair appointment (how long it will take, the trade of the repair operative, etc.) residents will feel more informed about the repair process and also be able to make better decisions when scheduling the repair.

Residents should be offered the ability to choose their appointment online, make any changes and cancel their appointment without any difficulty or penalty.

These changes would contribute towards fewer missed appointments and save the council resources.



“

When I get an appointment I'd like it to be restricted to about two hours, not between 7 in the morning and 7 in the evening; I have a life!



Availability

Flexibility

The current booking process feels inflexible to residents. In research, people said repairs were booked without confirming their availability first.

Appointments are missed due to conflicting prior commitments like doctors appointments or the school run.

Confirmation

Residents receive SMS confirmations, however they are not able to choose a preferred channel. Email addresses are not currently stored on council systems.

Control

Some residents said they were penalised when they tried to cancel or change their repair, or told that they would not be able to rebook it.

Prioritisation of requests

- Councils prioritise the requests according to the SOR (schedule of rates) codes.
- Residents often want their problem treated urgently. It is at the stage of selecting from available appointments that they'll discover their priority is lower than they hoped.
- There should be somewhere for residents to go at this point to find out why there are no appointments available sooner. This information should explain what priority levels there are and why their problem hasn't been addressed urgently.

Choose availability

Ask the resident for any **vulnerabilities** or **access issues** that operatives should know about

Communicate that someone **over 18 has to be at home** for the duration of the repair

Confirm the trade that will be able to help the resident

Confirm the timeframe for this type of repair

Ask resident to confirm **dates/times** that they are available

Provide information about why earlier appointments are not available and the **priority of the repair**

Offer the ability to **avoid appointments** being scheduled at inconvenient times

Offer the ability to book a **series of appointments** with different trades for a multi-phase repair

Choose availability

Ask the resident for any **vulnerabilities or access issues** that operatives should know about

Communicate that someone **over 18 has to be at home** for the duration of the repair

Confirm the trade that will be able to help the resident

Confirm the timeframe for this type of repair

Ask resident to confirm **dates/times** that they are available

Provide information about why earlier appointments are not available and the **priority of the repair**

Offer the ability to **avoid appointments** being scheduled at inconvenient times

Offer the ability to book a **series of appointments** with different trades for a multi-phase repair

Vulnerabilities

The resident should be offered the chance to share any vulnerabilities that affect the repair report in any way (e.g. the prioritisation of the repair request).

The operatives may also need to know some information about vulnerabilities or access issues so that they are able to complete the repair on the day.

Recording and structuring vulnerabilities beyond official disability will help councils and make the resident's experience better.

Vulnerabilities was a big theme through our work. From talking and observing staff we know there are inconsistencies and inefficiencies in the current systems. Some councils have official flags but other information that could be useful is not always structured or easily available. This information is often hard to find and is captured in various places like description fields. Agents often 'make a judgment' from the conversation and the resident's age.



If someone does have a relevant vulnerability you can't put what it is, just that it's a vulnerability, so the trades don't know exactly..

~call centre agent

Tenants say: I have a disability, it should be in your system. It's not obvious right away and it'd be helpful.

~call centre agent

INSIGHT - VULNERABILITIES

We tested a flexible vulnerabilities page in round two. We received positive feedback overall, but participants to whom this was relevant didn't enter enough information.

One resident didn't have vulnerabilities but their wife was blind so in this case they didn't use it, but acknowledged that it'd be useful in cases where their partner might be home alone during the appointment.

One resident had a medical condition affecting their legs and another person was wheelchair-bound. Both tried to click the static bullet points and weren't sure what to enter in the free-text field. More testing with check boxes, better questions or more guidance should be considered.

Ultimately, councils knowing about vulnerabilities would help the experience feel more personal.

than one repair appointment needed, we will arrange it

Before we visit

Before we visit, we need to know if anyone with a medical condition or mobility difficulties lives in the home. We will be present at the repair appointment, and any information on access restrictions to the property.

Things we need to know include:

- If anyone with a medical condition or mobility difficulties lives in the home.
- If you are a carer reporting on behalf of someone else.
- If there are any access restrictions to the property we need to be aware of.

Enter any information on access restrictions or resident disability



This is relevant to me because of my legs. I'm trying to click on the top one.



I don't quite understand the question.

Choose availability

Ask the resident for any **vulnerabilities** or **access issues** that operatives should know about

Communicate that someone **over 18 has to be at home** for the duration of the repair

Confirm the trade that will be able to help the resident

Confirm the timeframe for this type of repair

Ask resident to confirm **dates/times** that they are available

Provide information about why earlier appointments are not available and the **priority of the repair**

Offer the ability to **avoid appointments** being scheduled at inconvenient times

Offer the ability to book a **series of appointments** with different trades for a multi-phase repair

Responsible adult

Most councils require an adult to be at home for the duration of the repair. The council should communicate this when the resident is choosing a appointment slot, as this could influence their availability.

This step will reduce the number of missed appointments where the operative was not able to go ahead with the appointment.

Choose availability

Ask the resident for any **vulnerabilities** or **access issues** that operatives should know about

Communicate that someone **over 18 has to be at home** for the duration of the repair

Confirm the trade that will be able to help the resident

Confirm the timeframe for this type of repair

Ask resident to confirm **dates/times** that they are available

Provide information about why earlier appointments are not available and the **priority of the repair**

Offer the ability to **avoid appointments** being scheduled at inconvenient times

Offer the ability to book a **series of appointments** with different trades for a multi-phase repair

Trade

The resident needs to know what trade operative they should expect at their home, to have clearer expectations of what will happen next and why.

Choose availability

Ask the resident for any **vulnerabilities** or **access issues** that operatives should know about

Communicate that someone **over 18 has to be at home** for the duration of the repair

Confirm the trade that will be able to help the resident

Confirm the timeframe for this type of repair

Ask resident to confirm **dates/times** that they are available

Provide information about why earlier appointments are not available and the **priority of the repair**

Offer the ability to **avoid appointments** being scheduled at inconvenient times

Offer the ability to book a **series of appointments** with different trades for a multi-phase repair

Timeframe

The resident should understand roughly how long their repair may be expected to take, as this may affect their availability for the repair.

However, this information could give a false sense of certainty which may create a worse experience for the resident if their expectations are not met.

Booking an appointment

Your repair will be assessed and fixed by a trade operative. If your repair is complex, it may need more than one repair appointment. If another appointment is needed, we will arrange it after the first one.

Before we visit

Before we visit, we need to know if any vulnerable people will be present at the repair appointment, and any information on access restrictions to the property.

Things we need to know include:

- If anyone with a medical condition or mobility difficulties lives in the home.
- If you are a carer reporting on behalf of someone else.
- If there are any access restrictions to the property we need to be aware of.

Enter any information on access restrictions or resident disability

1

Copy to help the user understand that a repair might not be fixed first-time or that other appointments may be needed

2

Copy to explain what operatives need to know ahead of their visit; any information on vulnerability as helps to inform repair priority

Choose availability

Ask the resident for any **vulnerabilities** or **access issues** that operatives should know about

Communicate that someone **over 18 has to be at home** for the duration of the repair

Confirm the trade that will be able to help the resident

Confirm the timeframe for this type of repair

Ask resident to confirm **dates/times** that they are available

Provide information about why earlier appointments are not available and the **priority of the repair**

Offer the ability to **avoid appointments** being scheduled at inconvenient times

Offer the ability to book a **series of appointments** with different trades for a multi-phase repair

Select availability

The resident should be offered a selection of flexible appointment times, and they can choose a preferred time alongside some back-up times in case their appointment is dynamically rescheduled.

Choose availability

Ask the resident for any **vulnerabilities** or **access issues** that operatives should know about

Communicate that someone **over 18 has to be at home** for the duration of the repair

Confirm the trade that will be able to help the resident

Confirm the timeframe for this type of repair

Ask resident to confirm **dates/times** that they are available

Provide information about why earlier **appointments** are not available and the **priority of the repair**

Offer the ability to **avoid appointments** being scheduled at inconvenient times

Offer the ability to **book a series of appointments** with different trades for a multi-phase repair

Priority

There should be information that a resident can view to understand the priority of their repair if there isn't an appointment that feels soon enough for them.

Customer service agents said that they felt that this was not an easy message to communicate and that if the service covered this, it would be very helpful.

Choose availability

Ask the resident for any **vulnerabilities** or **access issues** that operatives should know about

Communicate that someone **over 18 has to be at home** for the duration of the repair

Confirm the trade that will be able to help the resident

Confirm the timeframe for this type of repair

Ask resident to confirm **dates/times** that they are available

Provide information about why earlier appointments are not available and the **priority of the repair**

Offer the ability to **avoid appointments** being scheduled at inconvenient times

Offer the ability to book a **series of appointments** with different trades for a multi-phase repair

Avoid inconvenient times

When appointments are scheduled, it should be possible to avoid the school run and other commitments.

Residents should be given the chance to change an appointment without any penalty. In research we heard that residents who were not offered a chance to confirm their availability before appointments were assigned, would often end up having to start the reporting journey again, wasting council resources.

◀ Back

When are you available?

A responsible adult must be home for all of the repair appointment slot and during the repair appointment.

The earliest appointment slot for this repair is:

14th February 2019

Please select a time slot

- 8:00am to 12:00pm (Morning)
- 12:00pm to 4:00pm (Afternoon)
- 9:30am to 3:00pm (School run)
- 8:00am to 4:00pm (All day)

Please select any other dates that you are free:

17th February 2019

Please select a time slot

- 8:00am to 12:00pm (Morning)

1

Copy to tell user who should be home during a repair visit

2

Allow the user to select an appointment slot that works for them, across multiple days.

The earliest day should be considered the chosen appointment slot

18th February 2019

Please select a time slot

- 8:00am to 12:00pm (Morning)
- 12:00pm to 4:00pm (Afternoon)
- 9:30am to 3:00pm (School run)
- 8:00am to 4:00pm (All day)

► [Why isn't there an earlier appointment?](#)

3

Continue

3

Copy to explain how repair
timeframes work

INSIGHT - AVAILABILITY AND BOOKING

During testing, residents had very few negative experiences when booking an appointment.

All residents were able to book an appointment for various repairs, moving through the steps quickly. They were able to select a time that worked for them and that felt soon enough for them.

The booking options available concerned one resident who had previously had a negative experience with a genuine emergency leak. But they used the '*why isn't there an earlier appointment*' to attempt to let the council know about the emergency.

Users who were more flexible attempted to select multiple times but the prototype which could be useful for councils when trying to meet high demands and attend to priorities.



...[this] feels independent of the office, you can book a slot. I like that it's all in one and not disjointed as it is at the moment. You can choose when the appointment is yourself, and it's done!

Choose availability

Ask the resident for any **vulnerabilities** or **access issues** that operatives should know about

Communicate that someone **over 18 has to be at home** for the duration of the repair

Confirm the trade that will be able to help the resident

Confirm the timeframe for this type of repair

Ask resident to confirm **dates/times** that they are available

Provide information about why earlier appointments are not available and the **priority of the repair**

Offer the ability to **avoid appointments** being scheduled at inconvenient times

Offer the ability to **book a series of appointments** with different trades for a multi-phase repair

Booking a series of appointments

Residents should be able to book a series of appointments if their repair requires multiple trades or repeat visits.

If the diagnosis indicates that further appointments would be needed, such as if there is a damp patch that will need to be treated first, and then painted over, then those appointments could be scheduled at the same time rather than relying on follow-up actions by the resident.

RECOMMENDATIONS - CHOSE AVAILABILITY

- Residents should be able to choose specific dates rather than general dates (available Wednesday 29th, rather than available every Wednesday).
- Residents should be able to make a number of selections of their availability, with the earliest being their “preferred” time slot.
- Residents should be able to book a series of appointments if their repair requires multiple trades or repeat visits.
- There should be information that a resident can view to understand the priority of their repair.
- There should be a way of reporting an emergency via the “Why isn’t there an earlier appointment?” section, as residents expected to be able to tell the council if their repair was urgent.

Pattern: Confirm appointment



CONFIRM APPOINTMENT

Adapting for changes in availability

Currently, council systems ask residents about general availability on weekdays.

If a resident selects that they are free on Thursday, it is assumed that they're always free every Thursday, which may not be the case. This inflexibility when asking for availability is likely to have an effect on residents and contribute to missed appointments.

Residents are also not offered a simple way to change appointments. Once they have given their availability, there is no way for them to change it other than by calling the councils. Some appointments that are not cancelled before the appointment time and are missed, wasting council resources.

There should be a simple way for residents to specify their availability, any times to avoid, and easily change or cancel their appointments.

Confirm appointment

Recognising reports from non-residents

In research and observations we saw that some residents ask their family or carers to submit their repair request on their behalf, often because of low digital literacy, vulnerabilities or disabilities. The service should accommodate for non-residents making the report.

Digital inclusion

For some people, reporting online is easier and better than attempting to use the phone; it may be more convenient, or they may find it difficult to use the phone to report.

It should be possible to fully complete the repair request journey online, and it should also be possible to change or cancel the appointment digitally.

Summary of the appointment

- **Date**
A long-form date of the preferred repair appointment
- **Time slot**
(can be narrowed down on the day of the repair)

Confirm appointment

Ask for an **on-the-day contact number** of resident (or person who will be at home for the repair)

Offer a **summary of the appointment** date and time selections and allow the resident to change selections

Confirm appointment

Ask for an **on-the-day contact number** of resident (or person who will be at home for the repair)

Offer a **summary of the appointment date** and time selections and allow the resident to change selections

Right contact details

Some of the residents we spoke to in research would not be handling the repair appointment themselves on the day. For example, some had carers or others who would be helping them to deal with the operative on the day of the repair.

For these people, it's important to offer the opportunity to capture the details of the point-of-contact rather than the resident, who may not be able to take the calls.

◀ Back

What is your phone number?

We will need your phone number to contact you on the day of your appointment. This can be a landline or mobile number.

If someone else will be present for the appointment you can enter their phone number instead.

Phone number

For example, 07771 900 900 or 020 7946 0000

Continue

1

Ask users for a contact phone number, this is needed to contact the user on the day of their repair

Confirm appointment

Ask for an **on-the-day contact number** of resident (or person who will be at home for the repair)

Offer a **summary of the appointment date** and time selections and allow the resident to change selections

Summary of appointment

The resident should see all of their selections before they proceed to the next step, as this gives them a chance to correct any errors before the appointment is booked.

◀ Back

Appointment details

Your preferred appointment date is
14th February 2019 at 12:00pm to
4:00pm

[Change preferred appointment](#)

Continue

1

Playback the appointment details
and allow the user to change their
appointment timeslot

RECOMMENDATIONS - CONFIRM APPOINTMENT

- Offer the opportunity to capture the details of the point-of-contact for the day of the repair, rather than the resident, who may not be able to take the calls.
- Allow the resident to check and amend any appointment preferences, so they can confirm that they have entered the information in correctly.

Pattern: Check and submit request



SUBMIT REQUEST

Enabling residents to review, edit and submit the repair request

The majority of residents across the councils report their repairs on the phone, and this experience gives them the chance to ask questions or and seek clarification if it is needed. An online service isn't able to provide that level of feedback, however it should be able to play back what you have entered throughout.

In the prototype for this work, this feedback loop can be seen throughout the reporting journey as there is a side panel that summarises the data entered so far. And similarly to the repair appointment selection stage, the final submission of the request should offer residents an opportunity to review the full repair and make changes before submitting.

Submitting a request

Reducing incorrect submissions

Offering the opportunity to review information before submitting it will give residents an overview of all the information they have entered.

This “playback” of entered data can be reassuring for residents who can see that their request has been captured fully, and also spot any errors that have been made.

Submitting the request

- There is a risk that after a preferred appointment has been selected, residents will think that they have already reported the repair and not actually complete the process. The service should make it clear where you are in the journey so that you know when the report is completed.
- Some residents may start the reporting journey, pause to do something else, and return to it to complete the journey. It should be possible for the service to save the report at each step.

Submit request

Ask for **contact information and preferences** for appointment updates and changes

Offer a **summary** of the whole repair request

Allow the resident to make any changes before **submitting the request**

Submit request

Ask for **contact information and preferences** for appointment updates and changes

Offer a **summary** of the whole repair request

Allow the resident to make any changes before **submitting the request**

Contact information

The resident should be allowed to choose a preferred contact method for any changes or notifications about their appointment. This may or may not be the same information as the contact details for the on-the-day point of contact.

These preferences could be saved for the future against the resident's account.

◀ Back

Contact details

How should we contact you to confirm the details of your repair request?



Email

Email address

user@example.com



Text message



Post

Continue

[GOV.UK Prototype Kit v9.4.0](#) [Clear data](#)

OGL

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1

Ask users how they like to be contacted by the council, this may be different to the phone contact details needed to contact the user on the day of their repair

INSIGHT - CONTACT DETAILS

There was some confusion between testers about contact details and phone number separation. Further work should consider re-grouping all contact details and be clearer about how these will be used.

Offer the opportunity to send a copy of a confirmation via post, email or text message.

Submit request

Ask for **contact** information and preferences for appointment updates and changes

Offer a **summary** of the whole repair request

Allow the resident to make any changes before **submitting the request**

Summary of whole request

The resident is offered a summary at the end of the journey before they submit the whole repair request so that they can review all the information they have entered throughout the journey.

[◀ Back](#)

Repair request summary

Personal details

| | | |
|----------------------|--------------------------|------------------------|
| Repair address | Flat 2, Shoreditch House | Change |
| Contact details | user@example.com | Change |
| Contact phone number | 07771 900 900 | Change |

Repair details

| | | |
|-------------|-----------------------------------------------------|------------------------|
| Problem | Plumbing | Change |
| Description | A leaking and blocked toilet. About two days | Change |

Appointment details

| | | |
|------|--------------------------------------------|------------------------|
| Date | 14th February 2019 at 12:00pm to 4:00pm | Change |
|------|--------------------------------------------|------------------------|

1

Summarise the details of the repair, using labels to correctly show how the information given by is used

INSIGHT - SUMMARY

All testers spent a bit of time checking the information before clicking confirm.

They reviewed all sections checking that “their address and phone number was correct” and found it reassuring to “know what they’d agreed to”.

Submit request

Ask for **contact information and preferences** for appointment updates and changes

Offer a **summary** of the whole repair request

Allow the resident to make any changes before **submitting the request**

Submit request

The resident can submit the request, and review the report request, correct mistakes and add relevant information before the request is submitted.

This is likely to reduce the errors, missed appointments, and misdiagnosis.

RECOMMENDATIONS - CHECK AND SUBMIT REQUEST

- The resident should be able to see what they've entered throughout the reporting process, and change anything as they go.
- The resident should also be able to review the report request, correct mistakes and add relevant information before the request is submitted.
- The service should offer the opportunity to send a copy of a confirmation via post, email or text message, or other channels in the future.

Pattern: Get confirmation



[GET CONFIRMATION](#)

Making it clear that the report has been submitted and what will happen next

At this stage, residents wanted to know that their report was submitted, that it has been received and any actions that will happen next on the council's part. It is also a good opportunity to let residents know what they should do next themselves, for example introduce any self-help material that may be useful to them in their problem until their repair appointment.

In research, residents often expected that the council would call them after this repair request had been received. If the aim is to have a fully digital reporting experience, it is important to really highlight that the appointment is booked at this stage and the council is unlikely to call before the appointment date unless something significant changes.

Clear confirmation

Reference numbers

Reference numbers for each report are offered at the end of the reporting journey, and also communicated to the resident in a confirmation email, SMS or letter, depending on their preferences.

In the future, the reference number given to the resident could be used similarly to a tracking number for most online services:

- Allowing the resident to check on the progress of their repair without needing to call up and speak to an agent
- Allowing the resident to update any changes to their appointment
- Allowing the resident to update the council about changes to the severity of the problem

Ongoing/recurring problems

- Residents who have problems that have been ongoing have reported feeling that each time they have to call up they speak to a different person and get a different operative each time.
- Problems which are ongoing also tend to be given a new reference number each time a report is submitted to the council.
- A beta of this service should consider how to link ongoing problem reference numbers, so that prior repair histories are visible when operatives attempt to fix the problem.
- A beta could also explore how the information in these services is lost throughout the process, for example how the operatives don't have sight of the same information that the customer services teams see.

Get confirmation

Offer a **confirmation number** once the request has been submitted

Tell the resident **what will happen next**, e.g. a narrower timeframe will be texted on the day of the repair

Tell the resident how to **change, cancel or update** their appointment if they need to

Tell the resident **what they should do** in the meantime and point to relevant self-help information

Allow the resident to **report another repair**

Get confirmation

Offer a **confirmation number** once the request has been submitted

Tell the resident **what will happen next**, e.g. a narrower timeframe will be texted on the day of the repair

Tell the resident how to **change, cancel or update** their appointment if they need to

Tell the resident **what they should do** in the meantime and point to relevant self-help information

Allow the resident to **report another repair**

Confirmation number

The resident should receive a confirmation number which reassures them that their case has been logged on the system.

Get confirmation

Offer a **confirmation number** once the request has been submitted

Tell the resident **what will happen next**, e.g. a narrower timeframe will be texted on the day of the repair

Tell the resident how to **change, cancel or update** their appointment if they need to

Tell the resident **what they should do** in the meantime and point to relevant self-help information

Allow the resident to **report another repair**

What happens next

The resident should always be aware of where they are in the repair journey, and what will happen next. This will reduce unnecessary contact by residents who are not sure about the status of their repair, or whether the request has been received.

The resident should also be updated as soon as additional information is available, for example when a narrower window for the repair appointment becomes confirmed.

Get confirmation

Offer a **confirmation number** once the request has been submitted

Tell the resident **what will happen next**, e.g. a narrower timeframe will be texted on the day of the repair

Tell the resident **how to change, cancel or update** their appointment if they need to

Tell the resident **what they should do** in the meantime and point to relevant self-help information

Allow the resident to **report another repair**

Change appointment

The resident should be told at the end of the journey how to change their appointment or cancel if they need to. This will reduce the number of missed appointments and unnecessary contact.

It also gives the resident the control to manage the repair and therefore improves their experience of the service.

Get confirmation

Offer a **confirmation number** once the request has been submitted

Tell the resident **what will happen next**, e.g. a narrower timeframe will be texted on the day of the repair

Tell the resident how to **change, cancel or update** their appointment if they need to

Tell the resident **what they should do** in the meantime and point to relevant self-help information

Allow the resident to **report another repair**

What to do in the meantime

For some repairs, there are actions that the user could be doing while they wait for their repair appointment to temporarily manage the problem. These steps should be communicated to the resident after they have submitted their repair request.

Get confirmation

Offer a **confirmation number** once the request has been submitted

Tell the resident **what will happen next**, e.g. a narrower timeframe will be texted on the day of the repair

Tell the resident how to **change, cancel or update** their appointment if they need to

Tell the resident **what they should do** in the meantime and point to relevant self-help information

Allow the resident to **report another repair**

Report another repair

Residents sometimes “save up” repairs and report them all at once, for example if they work full-time and aren’t able to take many days off work. This means that the reporting journey should make it easy to immediately report another repair when the first repair is booked.

If possible, the service could offer to schedule additional appointments close to the resident’s existing appointments, so that they are not inconvenienced by staying at home on multiple days.

Repair request complete

Your reference number
is
HDJ2123F

We have sent you a [confirmation of your request by email](#).

What happens next

We will be in touch to ask any follow-up questions ahead of the scheduled visit by an operative.

If you have a council account a record of your report can be viewed there.

[Report another issue](#)

1

2

3

1

Provide the user with a reference number to allow them to follow-up with their repair request at a later stage

2

Copy that tells the user what to expect next

3

Allow the user to request a new repair; a new request should only include questions that are relevant to a new repair and should avoid asking for details the user has already provided (like addresses)

[◀ Back](#)

We have received your repair request

Thank you for telling us about a problem you're having. We have received your request. Your reference number is **HDJ2123F**.

[Repair location] and [Repair description]

Your appointment

Your appointment is booked for [appointment date] at [appointment slot].

We will text you a two-hour window on the day of your appointment and will let you know when our operative is on the way.

We can't enter the property unless someone over 18 is at home. The same person will need to let us in, be able to show us where the problem is and answer some questions about the problem.

[You can change or cancel your appointment](#) if you need to.

Who to expect

An operative will visit you at home and may have another colleague with them. We work with many different companies but an operative will have an official identification card either from the council or the company they work for.

If you are worried about letting the wrong person in you can [set up a safe word](#).

1

This copy is a confirmation of the user's repair request and should be clear and concise and should help them better understand what happens next

It should provide a summary of the information the user provided during the request journey and should explain how they can update or cancel their request

RECOMMENDATIONS - GET CONFIRMATION

- Residents should be given the chance to change an appointment easily, in any channel, and without any penalty.
- Experiment with ways to allow a resident to easily change or cancel their appointment without calling.
- Allow the resident to add details to a repair request once it has been submitted, but before the operative visits. This is useful in developing problems such as damp.
- Allow the resident to request an additional repair.
- Offer to schedule additional appointments close to the resident's existing appointments, so that they are not inconvenienced by staying at home on multiple days.
- Design the flows of booking and releasing multiple appointments; this may work in reality but should avoid introducing unintended inefficiencies.

Link to the prototype

<https://report-a-repair.herokuapp.com/>

Recommendations



Beta

The alpha phase has validated that there is value in continuing this project into a beta phase, with the additional scope of building working software in the form of an online service.

Four broad options were considered for continuing this work in beta.

Option 1 - pattern development

Continue the development of the common service pattern, with the output being a complete and detailed common service pattern that has been tested and can be adopted by authorities as a best practice guide



Pros

A detailed common service pattern would be produced that authorities can use as a blueprint for building a service



Cons

A working service for residents will not be built in beta



Risks

Lack of pattern adoption could result in benefits not being realised

Option 2 - build a working service

Build the service for real in the lead authority, using the partner authorities to challenge and confirm what is common, while iterating a design pattern in tandem



Pros

A working service will be delivered in beta in the lead authority

A detailed common service pattern would be produced that authorities can use as a blueprint for building a service



Cons

The build of a service during beta will be focussed on a single authority



Risks

Without strong controls and governance, the service build may not be common enough for wider adoption

Option 3 - build multiple services

Build the service for real in multiple authorities



Pros

Working services are built in multiple authorities during beta



Cons

Costs for multiple builds will be high

Services may diverge and the objective of a common pattern wouldn't be realised



Risks

Multiple authorities undertaking simultaneous builds could increase costs significantly without delivering a common pattern

Option 4 - build in a phased approach

Build in a phased approach: start building the service for real in a lead authority and start sharing and implementing at the partner authorities during the lifetime of the project.



Pros

A single multidisciplinary team can learn from building, bringing actual value and a new user experience to residents in as short a timescale as possible.

A virtual co-creation team can ensure all partners can move ahead at the same pace.



Cons

Increased governance and direction to ensure the success of the co-creation approach.



Risks

Without strong coordination and leadership from the lead authority, the partners may not be able to achieve a build.

Without development capability in the partner authorities, they may not be able to achieve a build.

Recommended option

Developing and maintaining a pattern

Who should own and maintain a common service pattern?

During alpha and beta, the common service pattern will be iterated and updated by councils involved in the work.

During beta, a decision needs to be taken about who should own the pattern, where it should live, and how it should be updated and maintained.

BETA RECOMMENDATIONS

Expand the service pattern

The service pattern currently doesn't explore the experience of a resident beyond the booking stage. In beta the service pattern should be expanded to cover the repair appointment and beyond:

- Repair appointments
- Following-up on a request/re-report a previous repair that was not fully resolved
- Council conducting follow-ons
- Adding compensation for when repairs miss the Right to Repair window

and

- Create a pattern for an optimum experience across other channels

Iterate the existing service pattern

There were aspects of the pattern that could be more deeply investigated and are ripe for experimentation:

- Further exploration into how best to introduce self-help (where appropriate) into the journey
- Building the eligibility steps into the reporting journey, instead of expecting residents to read the "Before you start" information
- Exploring reporting journeys via resident council online accounts
- Use of [gov.uk/notify](#) as a common component for notifications at points in the journey

BETA RECOMMENDATIONS

Evolve the service

The service pattern reflects what is feasible within the current service, however as the underlying technology improves and the service evolves, so should the pattern:

- Repairs emergencies could become capable of being handled digitally and would not need a separate reporting journey on the phone
- Allow residents to abandon the reporting journey and speak to an agent if the online journey isn't working out for them, communicating what was captured to the agents
- Allow residents to track their repair and track their operative in real-time

Engage more authorities

In beta, we should publicise our work more broadly and seek feedback from other local authorities, to explore, validate and iterate the service pattern.

Links to Show & Tells

- **Slides**
 - [Sprint 1](#)
 - [Sprint 2](#)
 - [Sprint 3](#)
- **Videos**
 - [Sprint 1](#)
 - [Sprint 2](#)
 - [Sprint 3](#)

Thanks!

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