the research consortium

# Glasgow City Region Smart & Connected Social Places Pilot Evaluation

# Executive summary

## The brief

Explore attitudes towards two smart tech solutions which are being piloted in Glasgow City Region:

- **Smart home sensors** which monitor energy and home climate data for housing providers
- **Smart speaker-based telecare** using an Alexa device

Exploring barriers that might prevent uptake what could be done to mitigate these if the pilots were rolled out at scale.

## Research solution

- **Quantitative:** online survey of residents covering the entire city region, to establish how familiar these tech solutions were and gauge attitudes around the key benefits and concerns
- **Qualitative:** Depth interviews with pilot participants and potential future users, to build a more nuanced understanding of the barriers to adoption and how to overcome them

## Who we heard from

**141 survey responses** covering both core audiences

- 106 aged 65+ or eligible for telecare*
- 107 eligible for smart home sensors

**20 residents** participated in a depth interview**

- 5 were taking part in the Alexa pilot
- 8 were taking part in the Smart Home Sensor pilot
- 5 were telecare users not taking part in the Alexa pilot

## What we found

- **It's possible to make a compelling case for both tech solutions**. Each had clear benefits which resonate with many residents.
- We identified some concerns with the potential to reduce uptake, but **these could be overcome with the right approach to communications and messaging.**
- Some concerns (like running costs) are **best addressed up front**, but others (such as privacy) are **best dealt with reactively** to avoid prompting residents to worry. Managing expectations is important, especially around improvements to services or reduced household bills
- Choosing a **messenger which has a positive/trustworthy relationship** and giving residents **a place to go for queries** helped considerably in the pilots.

## Alexa telecare

**Benefits:**

- Core function similar to the older system
- Extra features like reminders, access to web search, radio
- Increased confidence with tech
- Reduced feelings of isolation
- Potential to expand with smart plugs

**Barriers/concerns:**

- Privacy / data security
- Running costs
- Reliability vs current system
- Apathy towards extra features

## Smart home sensors

**Benefits:**

- Potential reduction in energy bills
- Helps keep home warm/dry
- Improves repair/maintenance services
- Access to sensor data was valued by residents

**Barriers/concerns:**

- Looks/aesthetics of sensors
- Privacy / data security
- Running costs
- Negative view of housing provider
- Need to manage expectations

*Survey respondents aged 65+ who did not currently use telecare were asked to respond to the idea as a potential future service

**There were 2 interview participants who fit into multiple categories

jrs the research consortium

# Background & Objectives

## Background

The Smart & Connected Social Places (SCSP) programme is running two significant tech innovation trials across Glasgow City Region:

- Alexafication of Telecare – involving 125 individuals who qualify for telecare and are living alone, in supported living and in care homes within the Glasgow City Council area. The project uses an Alexa smart device as the interface for the service.
- Net-Zero Homes – involving around 100 homes within the North Lanarkshire Council area, and 37 in East Renfrewshire. Homes are fitted with sensors and probes to measure climate data and energy use

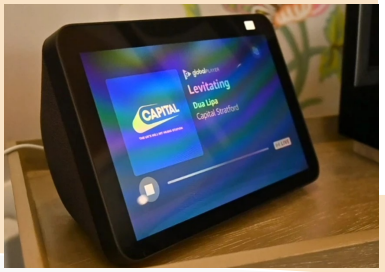
Further insight was needed:

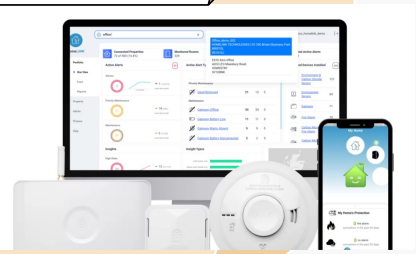
- To help understand barriers
- To identify ways to overcome these
- More generally, to inform development of the business case for a wider roll-out of the technologies.

## Objectives

To provide recommendations for sustainable, large scale adoption of the technologies, the research needs to understand the following:

- Current tenant attitudes towards technology deployed in their homes
- Drivers for these attitudes
- Options for reducing barriers and enhancing positive motivations



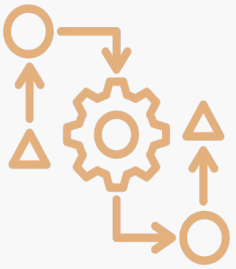
jrs the research consortium

# Methodology & Sample

jrs the research consortium

# Methodology

**Fieldwork dates:** Jan-April 2025



## Quantitative Research

- 28 questions total (approx. 8-10 minutes)
- Sample size: 141
- Residents who were potentially eligible for either pilot project if they were rolled out at scale:
  - Social housing tenants (Smart home sensors)
  - Older residents and those qualifying for home care (Alexa telecare)
  - Those with experience around telecare, e.g. friends/relatives (Alexa Telecare

## Qualitative Research

- 45-minute depth interviews
- Carried out in-person at home, or remotely if preferred
- Sample size: 20
- 4 key sub-groups invited for interviews:
  - Alexa telecare pilot participants
  - Smart home sensors pilot participants
  - Telecare-eligible non pilot participants
  - Smart sensor-eligible non pilot participants

## Incentives

- Survey participants could opt into a prize draw for a £100 shopping voucher
- Each interview participant received £35

## Distribution

- Client contact networks were key to reaching our audience:
  - North Lanarkshire pilot participants invited via letter/email
  - Alexa pilot participants were engaged personally by Barrhead Housing Association (East Renfrewshire) and Glasgow Social Care colleagues
  - Non-pilot participants invited via email by local authority housing teams across Glasgow City Region

jrs the research consortium

# Sample Profile (Quantitative)

**Total participants: 141**

## Ethnicity

**90%** white
**10%** minority ethnic

## Age

**11%** 16-34 years
**21%** 35-44 years
**27%** 45-54 years
**23%** 55-64 years
**17%** 65+ years
**1%** PNTS

## Local Authority

**56%** Glasgow City
**38%** North Lanarkshire
**2%** South Lanarkshire
**2%** East Dunbartonshire
**1%** Inverclyde
**1%** Renfrewshire

## Number of people in household

**31%** live alone
**35%** 2 people
**13%** 3 people
**19%** 4+ people
**1%** PNTS

## Health problem / disability

**24%** A lot
**24%** A little
**58%** No
**4%** PNTS

## Working status

**54%** working
**21%** not working
**15%** retired
**1%** student
**9%** PNTS

PNTS = Prefer not to say

jrs the research consortium

# Sample Profile (Qualitative)

**Total participants: 20**

## Local Authority

**10x** Glasgow City
**7x** East Renfrewshire
**2x** North Lanarkshire
**1x** East Dunbartonshire

## Pilot participation*

**5x** Alexa pilot
**8x** Smart Home sensor pilot
**5x** Alexa eligible (with non-smart Telecare at home)
**4x** Smart home sensor eligible

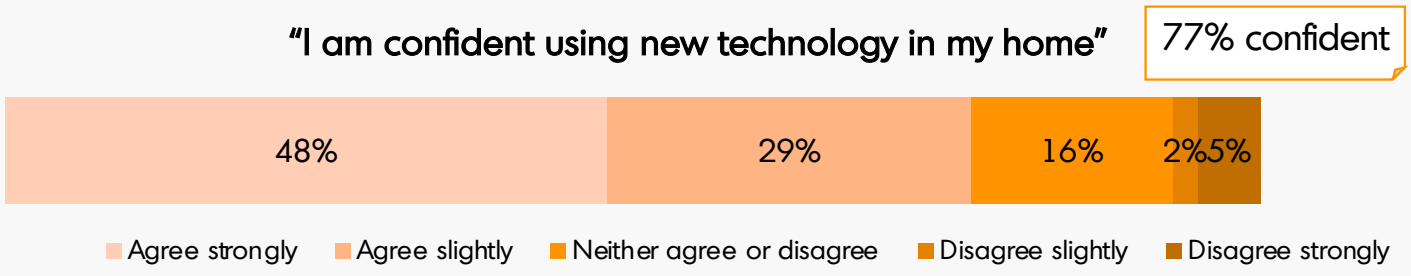
## Recruited via

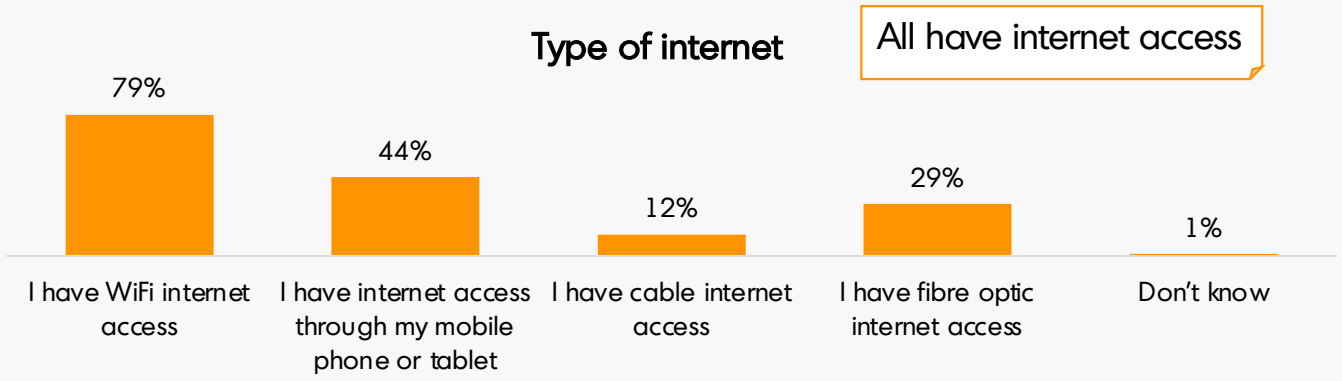
**8x** Glasgow City telecare team
**7x** Barrhead Housing Association
**4x** Survey collector link
**1x** North Lanarkshire

* 2 participants eligible for more than one category

jrs the research consortium

# Technology at home (Older/telecare experience)




- **Survey responses about general ownership/use of new technology and smart devices indicated a high level of familiarity,** including among older respondents and those with telecare experience.
- **Internet access was ubiquitous across this sub-sample** – with many having more than one form of access
- While **over three quarters self-reported as confident with new tech**, it is worth noting that 7% did disagree, with 1 in 20 selecting "disagree strongly"

Q To what extent do you agree with the statement: "I am confident using new technology in my home"? Base: (those who are 65+ or have experience with telecare)126
Q What kind of internet access do you have at home? Base: (those who are 65+ or have experience with telecare) 126

jrs the research consortium

# Technology at home (Older/telecare experience)

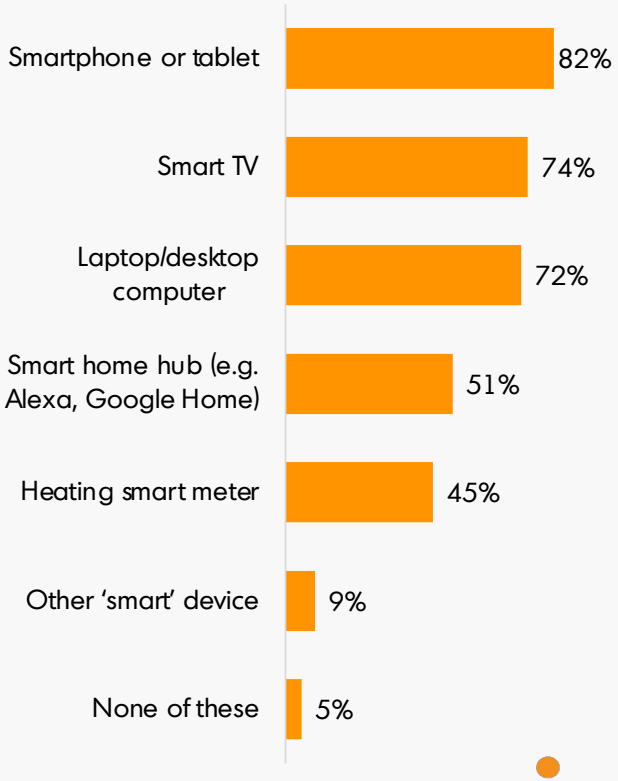
**Residents who weren't taking part in the pilots haven't heard of the exact tech solutions being proposed** – but they are similar to smart meters and voice controlled smart speakers, and both of these are familiar

Describing the two solutions as similar to a smart speaker or smart meter worked for nearly all qual respondents.

**Older respondents may underestimate their digital skills** – even those who own and confidently use smart tech (e.g. smart tv, smart energy meter, smartphone) every day.

For the less confident, having a chance to try out tech with someone else around to support/answer questions helped bridge the gap. Often, family, friends and support services play a role, especially when setting up a new device.

## Technology have at home




Q Which of the following do you have at home? Base: (those who are 65+ or have experience with telecare) 126

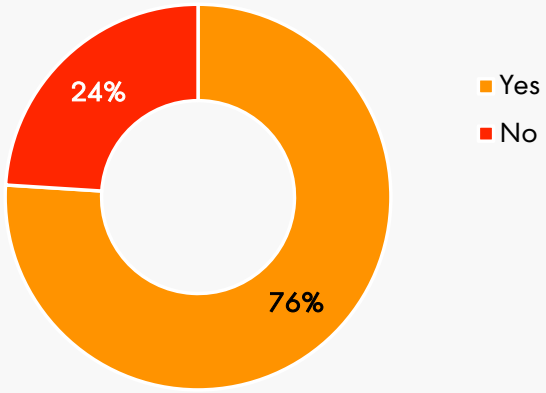
jrs the research consortium

# Profile of home

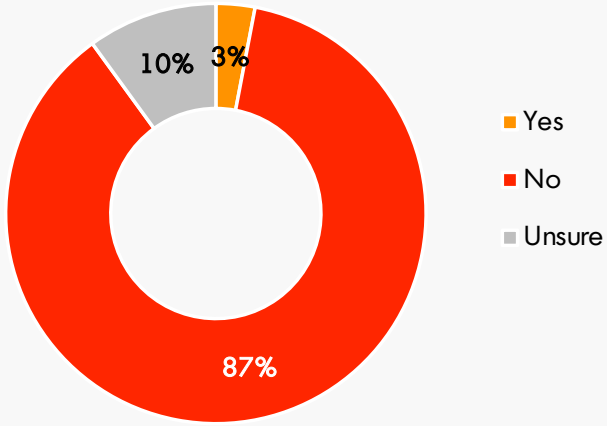
**Survey respondents represent a wide mix of property types.** Just over three quarters lived in social housing.

Only a small proportion (3%) indicated they lived in a Net Zero Home, although 10% were unsure.

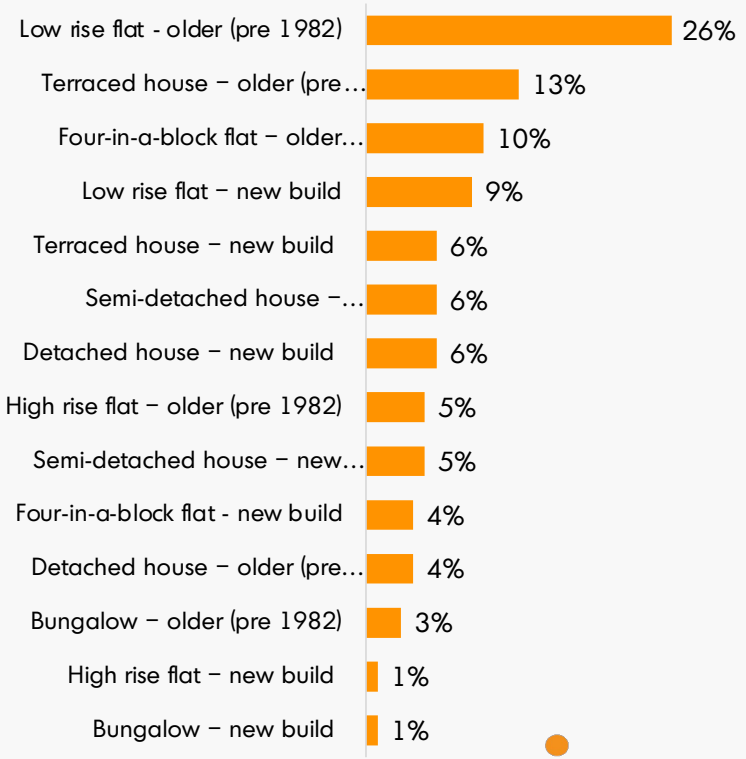
## Live in social housing / council property




## Net zero home




## Property type




Q Do you currently live in a social housing/council property?
Q Do you live in a Net Zero new build home?
Q Which of these best describes the type of property you live in?

jrs the research consortium

# Alexa Telecare

jrs the research consortium

# Pilot project summary & observations

Pilot team get in touch (typically via phone) to offer Alexa system; answer any queries

→

System installed

Encouraged to test and get in touch with any queries

→

Regular contact with the team:
- Feedback surveys x2
- Troubleshooting
- Peripherals

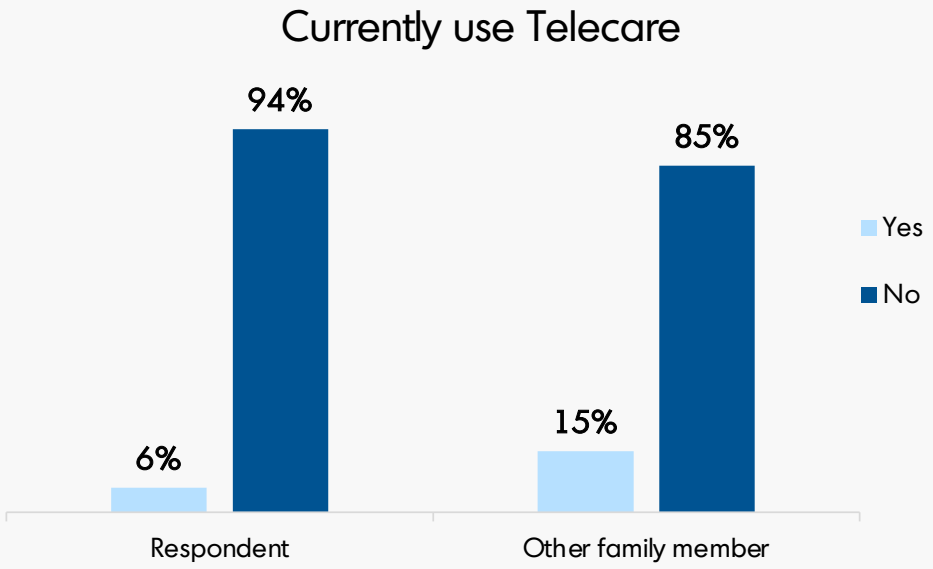
- Installation and onboarding by dedicated team
- Some participants new to telecare entirely
- Some participants are trialling peripherals (e.g. smart plugs) in addition to the core system

**Comms & Messaging**
- Having a small, dedicated team helped to build trust with participants – they were able to offer clarification and reassurance as needed on an individual basis
- Participants clearly valued having a phone number for queries/tech support
- The messaging used to reassure participants around privacy concerns, reliability and running costs was effective

**Practical implementation**
- Offering Alexa system to new telecare users seemed to work as a way to phase in the new system
- Peripherals were a welcome addition – but it was beneficial to make these a later add on, keeping the initial install simple
- Some pilot participants have been hearing/visually impaired - those who took part in the qualitative work found the smart speaker to be useful

jrs the research consortium

# Current Telecare System Usage




The telecare audience can be split according to current usage

**New to telecare**

- Pilot participants were generally new to telecare as a service.
- Messaging was able to major on the benefits of telecare while also introducing co-benefits of having the newer hardware

**Landline telecare users**

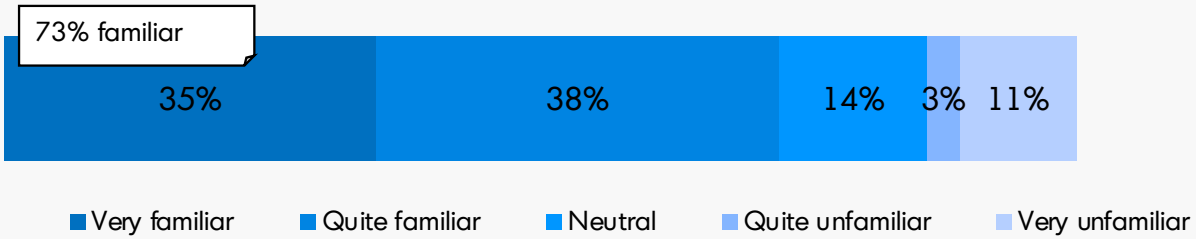
- This group have an existing, robust system they trust to keep them safe.
- Messaging needs to show how the Alexa system compares favourably with what they have already

Q Do you currently have a Telecare system (using your phone and/or an alarm bracelet as an alarm system in your home)?
Q Does anyone in your family, or anyone you help to care for, have a Telecare system

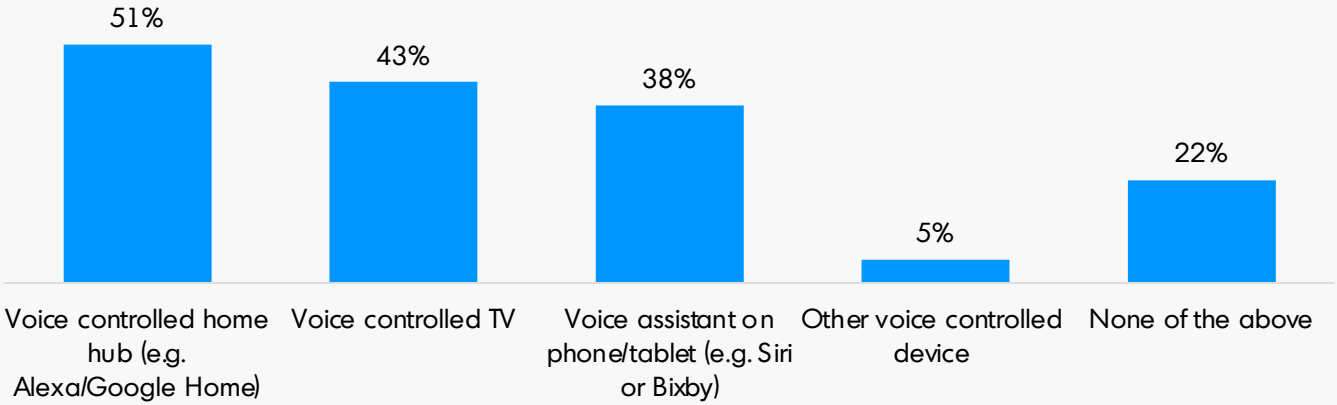
jrs the research consortium

# Voice activated technology - familiarity

## Familiarity with voice activated/controlled technology




## Use of voice activated technology




Alexa as a brand name has high name recognition and most respondents understand what a smart speaker is (often having at least seen one in action at friends or family's homes)

" Some people I know have one of those Alexas, I've had a wee go of theirs before" (Non Alexa pilot participant, Smart Home pilot participant, ERC)

Q How familiar are you with voice activated/voice controlled technology? Base: (those eligible for Alexa Telecare) 37
Q Which, if any, of the following have you used before ? Base: (those eligible for Alexa Telecare) 37

jrs the research consortium

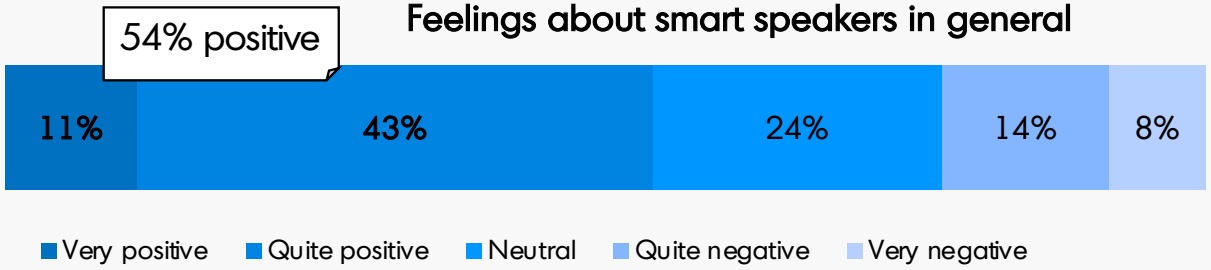
# Alexa telecare - feelings towards

**While survey respondents were mostly positive about smart speakers, around 1 in 5 view them negatively** - this was reflected in the qualitative work with some respondents who had had negative experiences using them in the past

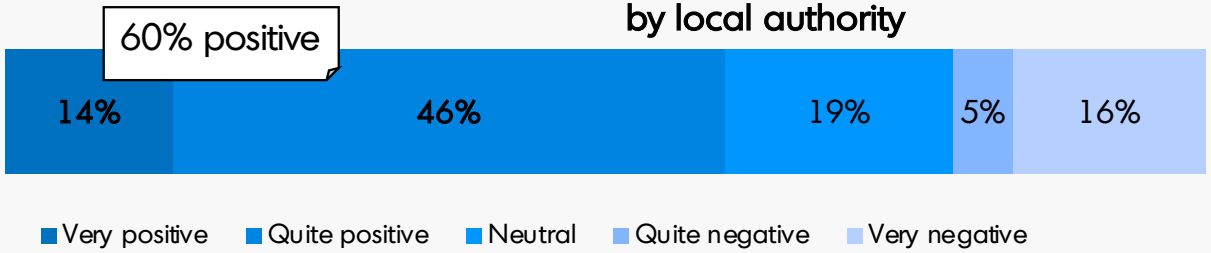
Although a similar number were negative about being given a smart speaker by their LA, twice as many were "very negative".

**However, just over 6 in 10 were likely to agree to have an Alexa system installed** – a good starting point for a wider rollout

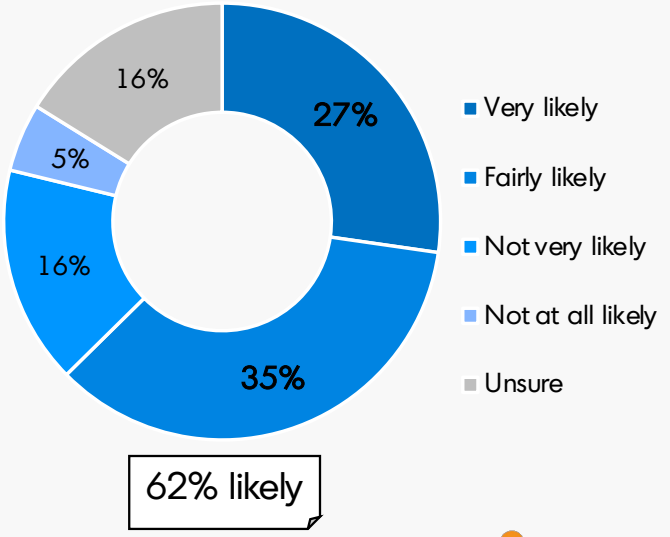
## Feelings about smart speakers in general




## Feelings about the idea of being given a smart speaker by local authority



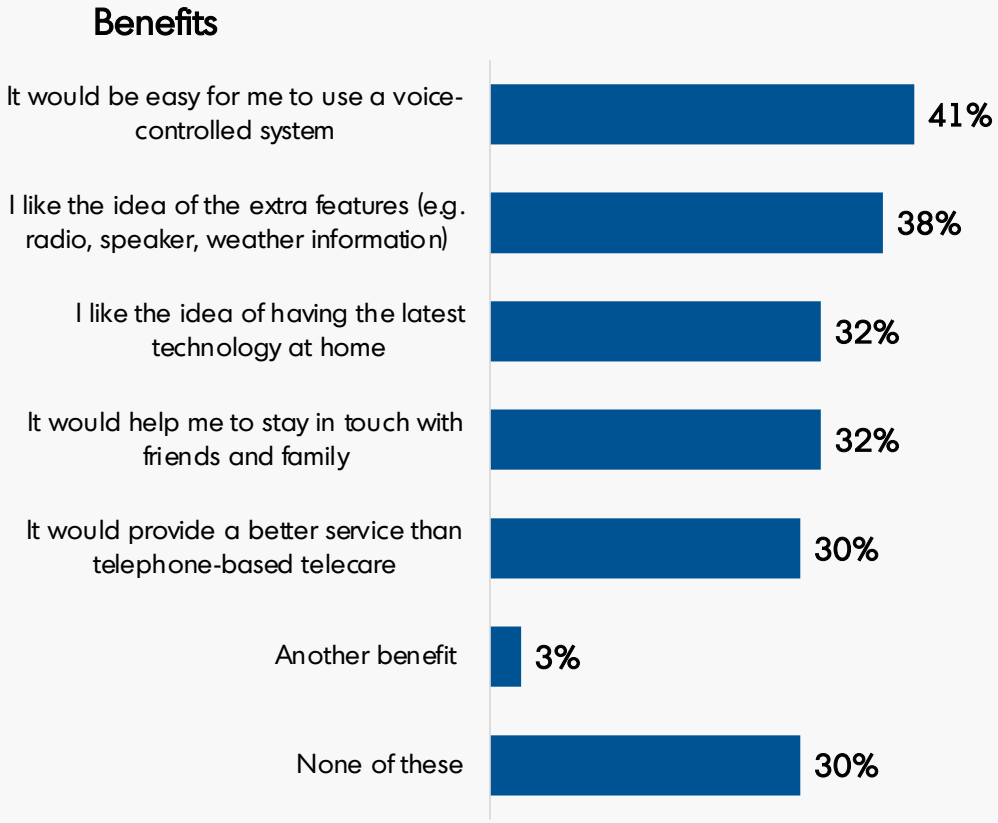

## Likelihood to agree to installation




Q How positively or negatively do you feel about Smart speakers (e.g. Alexa) in general? Base: (those eligible for Alexa Telecare) 37
Q How positively or negatively do you feel about the idea of being given a smart speaker by your local authority for use in your home? Base: (those eligible for Alexa Telecare) 37
Q If you needed a telecare system and you were offered a smart system as described above, how likely would you be to agree to have one installed in your home Base: (those eligible for Alexa Telecare) 37

jrs the research consortium

# Alexa telecare - benefits




"This is my first ever [smartphone] as well. I bought it after I got my Alexa. I didn't think I'd be able to use one before but I've found it quite easy" (Alexa pilot participant, GCC)

**Qual participants reported a range of benefits beyond the core purpose:**

- Overall, voice controls were intuitive to learn
- Ability to set reminders highly valued (especially for daily medication or help remembering things)
- Some reported gaining confidence with technology
- Some participants reported reduced sense of loneliness/isolation
- One survey respondent who ticked "other" mentioned reduced loneliness
- Radio was less of a draw than perhaps anticipated – most had one already
- Visually/hearing impaired participants still found the device fairly easy to use

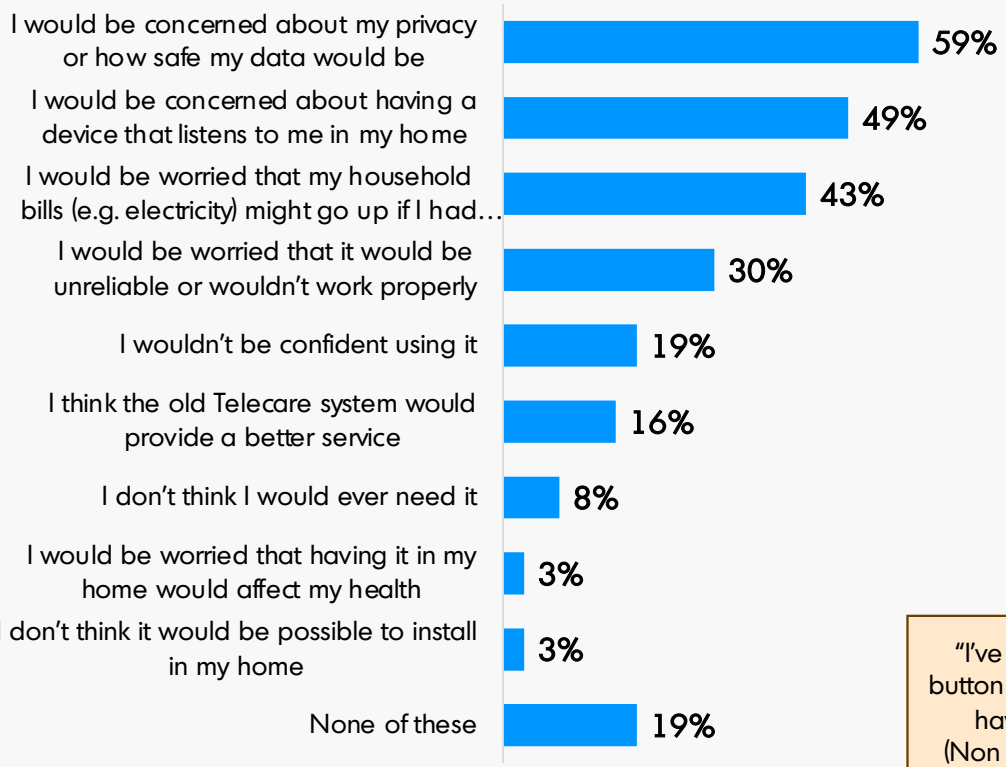
"I know it maybe sounds a bit daft, but it is nice to have another voice about the place." (Alexa pilot participant, GCC)

"If this pilot ends and they take [the smart speakers] back off us, I'll definitely buy one for myself!" (Alexa pilot participant, GCC)

Q These are some potential benefits of having Amazon Alexa Telecare installed in your home. Which, if any, of these would apply to you? Base: (those eligible for Alexa Telecare) 37

jrs the research consortium

# Alexa telecare - potential concerns




**Qual participants identified a similar range of concerns, but often had different priorities**

- Reassurance about reliability and safety was very important
- Landline telecare users may need some convincing that the new system is an improvement
- Running costs came up frequently and often spontaneously – but for those who already have telecare, the service fee is a bigger issue than utility cost
- Privacy concerns were discussed, but often were not front of mind
- Lack of confidence in technology did come up – but pilot participants often reported the Alexa system helped with this issue
- Some simply felt they would be unlikely to use a smart speaker

"I've only had to press the button once, but I know what I have right now works."
(Non pilot participant, GCC)

Q These are some potential concerns or worries people might have about having Amazon Alexa Telecare installed at home. Which, if any, of these would apply to you? Base: (those eligible for Alexa Telecare) 37

jrs the research consortium

# Exploring concerns: Reliability/safety

**For the telecare audience, their number one priority is that the core function (the personal alarm) is reliable, safe and quick to respond.** This is especially important for those who already have a landline system.

**If it's a new system, what happens if there are "teething problems"?**

- Non-pilot participants would be keen to know how any tech issues would be dealt with
- Pilot participants were generally very positive about having a number to call and regular contact with named people for support.

**Compared to safety, other features are "nice to have"**

- However, safety and reliability is a "deal-breaker"
- Often the added functionality sounded like it would be beneficial – however, they needed to be confident that they would get help promptly if they needed it in order to be fully on board.
- Those who raised these concerns were not always totally against the new system

**Fears about "creeping automation" fed into this barrier**

- There may be some confusion with AI chatbots and other digital call handling systems – leading to **worries that the system will be slow or complicated to use when they need it most**
- For some participants, the concern is rooted in negative experiences they had elsewhere with digitisation of key services (like banking)
- Another comparison which came up is voice controlled menus used to manage phone queues – which are widely disliked
- This is also linked to a lack of digital confidence for those who find this type of assistant frustrating
- The fact that the service still has a "human on the other end" is an important point of reassurance

What worked in the pilot:

- Encouraging users to **try out the new system** helped reassure them about the ease of use and speed of response
- Explain up front that the same system sits behind the new device, with a **real person on the other end**

jrs the research consortium

# Exploring concerns: Privacy

**Although concerns around privacy or "listening in" came up often in the survey responses, it was rare to discuss this topic unprompted during the interviews.**

**For qual participants, privacy was less of a concern than perhaps expected**

- Often, privacy concerns were only voiced when prompted, indicating that these were less front-of-mind in comparison to other considerations (e.g. cost, safety/reliability)
- Often this came down to the belief that the device would be unlikely to pick up sensitive/private information
- Giving out too much information up front on privacy may risk creating the sense there is something to be worried about

"I'm not too fussed about the privacy side of it. I don't really care if someone knows how long it takes me to make a pot of pasta or what radio station I listen to."
(Pilot participant, GCC)

**However, those we interviewed who did have concerns, tended to be very focused on the issue**

- Being able to readily answer their questions helped:
  - Is the device "listening in" all the time?
  - Who has access to the data? Is it just the telecare team, or are there 3rd parties involved?
  - If data is being collected - for what purpose?
- There was also a query about whether anything could be done for extra privacy without compromising the helpline function - e.g. a way to turn off the "listening" part of the system while still being able to access help

"It's a tricky subject. When you say "Alexa" to me, I start to think "Wait a minute here, what if I'm on the phone to a doctor, or the bank, and this thing is listening to me?"
(Non-pilot participant, GCC)

Colleagues on the pilot team highlighted how quickly rumours about the device "listening in" can spread, **especially in a supported living setting**.

It was best to avoid encouraging these rumours, but to be prepared to answer questions

jrs the research consortium

# Exploring concerns: Running costs

**Utility bills and service fees are both front-of-mind for this audience – reassurance around financial cost is key**

**Some concern around the running cost of the device, especially for less tech-savvy residents who had less experience using similar devices.**

- Feedback from pilot participants indicated this could be easily mitigated, as the electricity bill for the system is negligible.
- Giving an example of a typical weekly bill (which is in pence) was enough to clear up this worry

"I did wonder if it would be expensive, but [the pilot team] explained that quite well. It's basically pennies."
(Pilot participant, GCC)

**The other sub theme of this concern was around the service fees themselves**

- Telecare is paid for monthly, often along with other home care services.
- Some qual participants were concerned that some of the cost of a mass rollout of Alexa devices might be passed on to them via a fee increase
- While it may be tempting to counter this with messaging about the cost savings associated with the Alexa system, it's best not to focus too much on this.
- Because telecare is a safety lifeline, discussions around cost-cutting in interviews made some participants uneasy.

"If they're giving out brand new kit to everyone [with telecare], does that mean they'll put our fees up to pay for it?"
(Non pilot participant, ERC)

jrs the research consortium

# Exploring concerns: Apathy towards co-benefits

**Very simply, some participants saw little value in the additional features and benefits – making them less enthusiastic about having a smart speaker at home**

**Some participants were generally resistant to new technology**

- This group were typically landline telecare users
- They strongly preferred familiar devices
- They are likely to be less confident with new technology and appreciate more support
- For some of the more tech-skeptical pilot participants, being supported to try out the new system led to an improvement in digital confidence.

"I don't get on well with all these smartphones and things, I can never work them."
(Pilot participant, GCC)

**Others already have a similar device, or had considered getting one and ruled it out**

- Some respondents who had tried out a smart speaker belonging to someone else had decided against getting one – for example, finding it annoying or difficult to use.
- Other respondents already had devices at home which they felt duplicated some of the features (e.g. a smart speaker of their own, a games console, smartphone or tablet). This made them less enthusiastic about the additional benefits

"I've looked into pretty much every home adaptation I could. Believe me, if I thought getting one of these would help I would have done it by now."
(Non pilot participant, GCC)

For the Glasgow City pilot team, **framing the offer as a chance to try out the Alexa system and offering regular check-ins** helped reduce this concern

jrs the research consortium

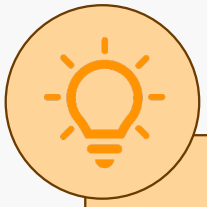
# Reducing the impact of barriers/concerns

**Reassure up front:**

- Extremely low running costs
- Reliability of core function – just as good as current system (examples on response time if possible)
- No need for own WiFi

**Highlight benefits up front**

- Easy to use – just talk to it
- Reminders (e.g. for medication, meeting friends, favourite tv show)
- Web searches for useful info (weather, transport)
- Radio
- (If offered) option to add smart plugs to allow voice control of lights and other devices



Anticipate that people with experience of the "old" landline system have a familiar and reliable product already – **some extra reassurance on reliability and robustness of the system may be needed**

**Be prepared for questions on:**

- Who has access to the data? (If it's just the care team this is ideal)
- Can I ignore or remove the added features and just use it like the old telecare?
- What happens if I think it isn't working?
- Can I test it out?

jrs the research consortium

# Smart Home

jrs the research consortium

# Pilot project summary & observations

**North Lanarkshire:**
Letter sent to randomly selected sample of homes with research invite and description of system → Invite to UoG research → System installed → Monthly surveys and focus groups (research participants only)

**Barrhead Housing Association:**
Supported living residents contacted and provided with info from manufacturer → In-person Q&A → System installed → Residents receive personalised advice and access to data dashboard via HomeLink app

## Comms & Messaging

- The supported living pilot employed a more personalised (but also more resource intensive) approach to comms, with in-person contact and more scope to ask questions
- North Lanarkshire comms used a classic nudge – framing the sensors as opt-out rather than opt-in.
- BHA used a similar framing but leaned more on manufacturers' comms, including messaging about being the latest/high end tech

## Practical implementation

- Both groups of tenants happy with installation process
- A key difference between the two was access to personal data, with BHA residents supported to install and use the HomeLink app
- NLC residents tended to be unsure how to view their data

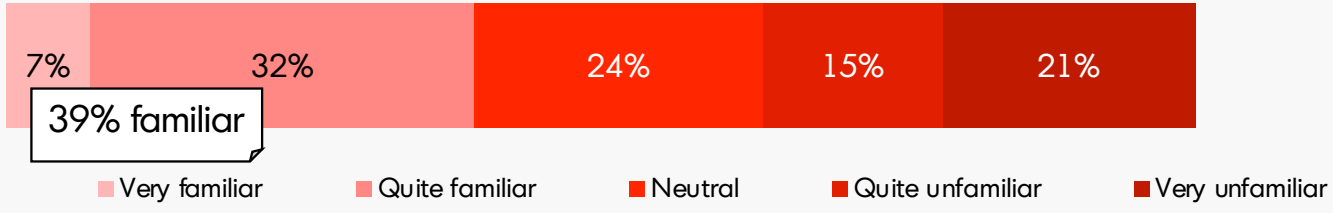
## Impact on participants

- NLC participants reported less of an impact on their day-to-day lives – important to note this was not viewed as inherently a negative thing
- Due to their interaction with the HomeLink app, BHA participants were more likely to report behaviour change or improved awareness/understanding around humidity and energy use

JRS the research consortium

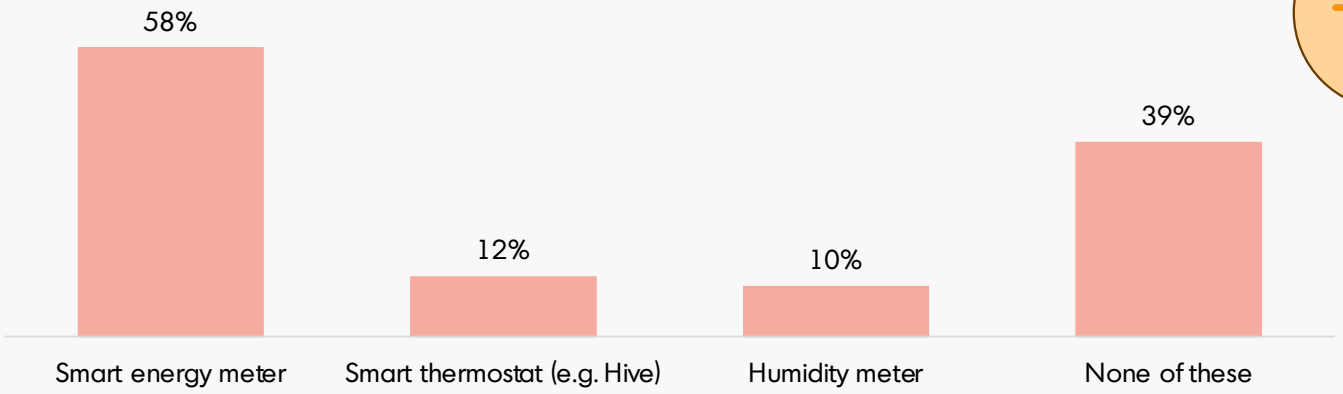
# Smart Heating / Climate Control Technology - familiarity

## Familiarity with smart heating/climate control technology




**Less than half of respondents felt familiar with smart heating / climate control technology in general** – despite almost 6 in 10 owning a smart meter

## Use of smart heating technology




Smart energy meters were by far the most recognisable "Smart" home heating technology.

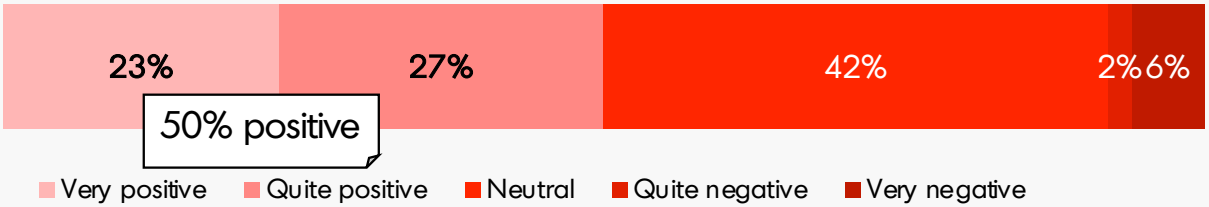
Research participants often compared the sensors to smart meters – making them a useful comparison for comms

Q How familiar are you with smart heating/climate control technology? Base: (those eligible for Smart social housing) 107
Q Do you have any of the following at home? Base: (those eligible for Smart social housing) 107

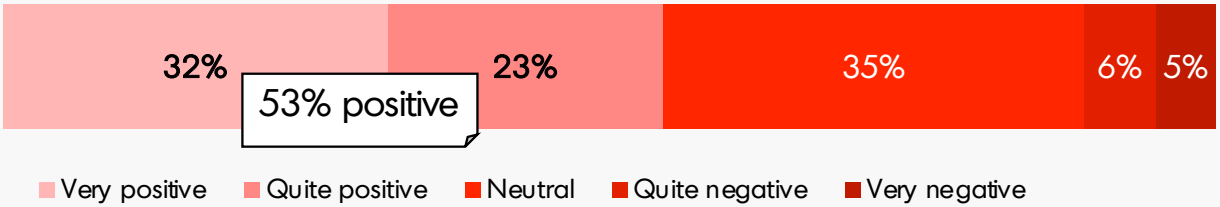
jrs the research consortium

# Smart Heating / Climate Control Technology - feelings towards

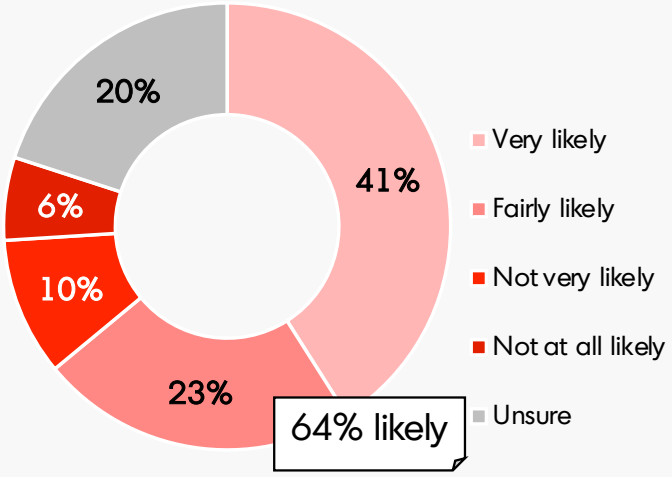
## Feelings about smart social housing in general




## Feelings about having smart social sensors in your home




## Likelihood to agree to installation

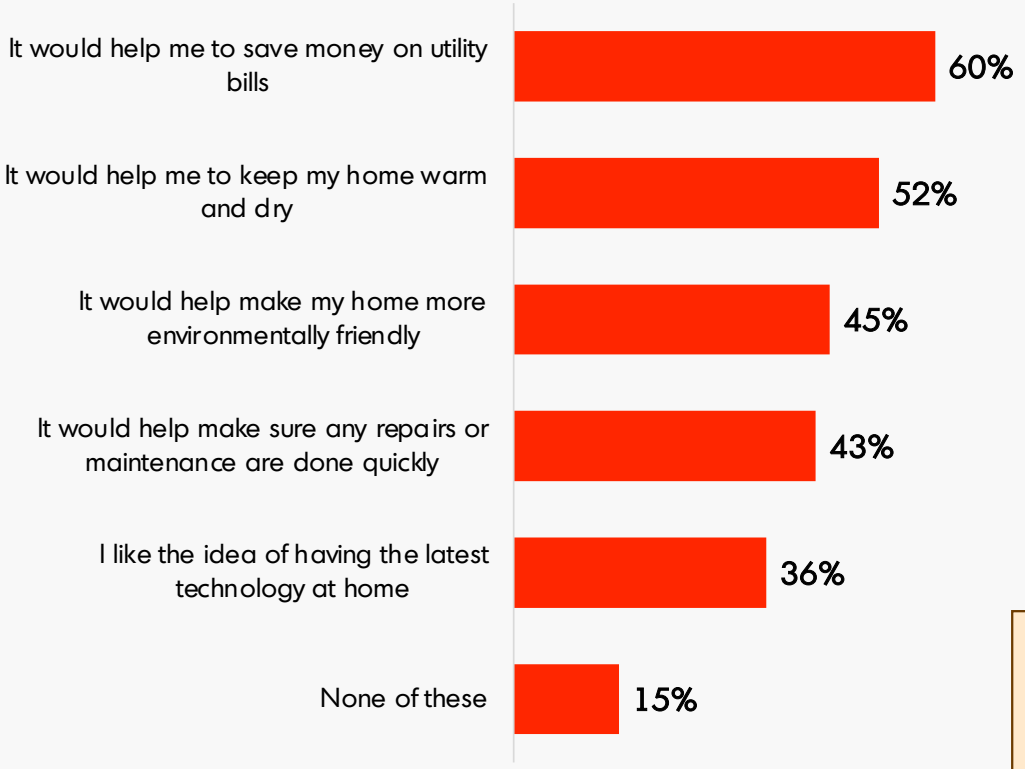



Q How positively or negatively do you feel about Smart social housing in general? Base: (those eligible for Smart social housing) 107
Q How positively or negatively do you feel about the idea of having smart social housing sensors in your home? Base: (those eligible for Smart social housing) 107
Q If you were offered smart social housing sensors as described above, how likely is it that you would agree to have them installed in your home? Base: (those eligible for Smart social housing) 107

jrs the research consortium

# Smart sensors - benefits

**Benefits**




"If it helped me to see if I was wasting money heating up a room that nobody was in that would be brilliant." (Non pilot participant, GCC)

**Qual insight generally reflected the quant:**

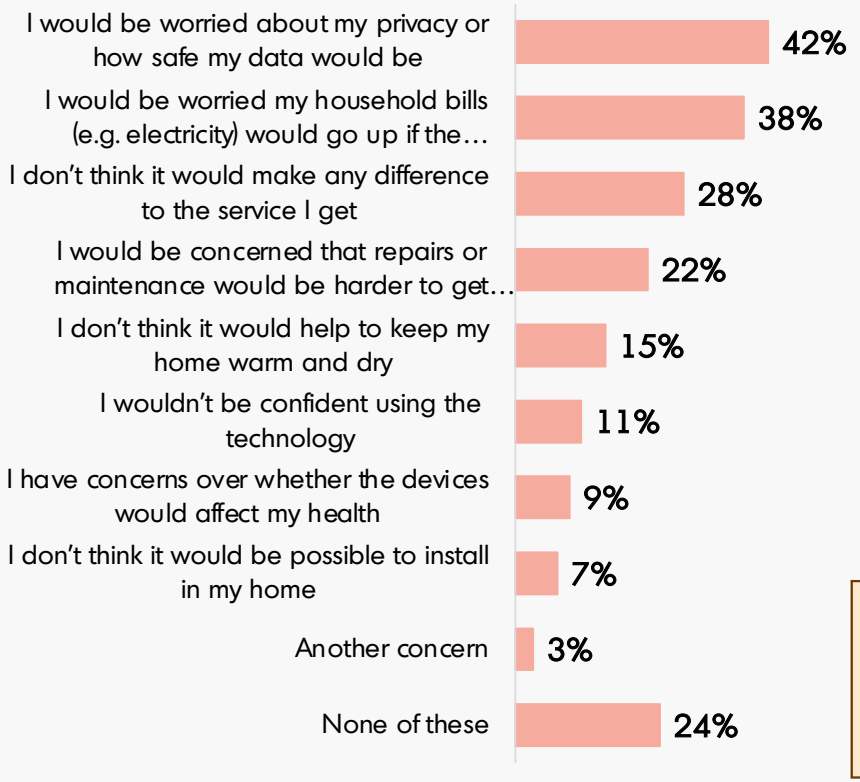
- Energy bills are front-of-mind and a potential saving would often be enough to prompt uptake by itself
- Qualitative participants often considered environmental benefits to be "nice to have" but not a key reason to adopt the new tech
- Residents with the HomeLink app particularly valued the advice on saving energy and keeping their home warm/dry
- Environmental benefits were a positive but not front of mind in the depths
- The positioning of the sensors as "smart" made them sound futuristic to some, which was appealing

"I'd always known you were supposed to open a window if you were having a shower, but never really thought about why. With this [HomeLink App] you actually see the numbers go up and down." (Pilot participant, ERC)

Q These are some potential benefits of having smart social housing sensors installed at home. Which, if any, of these would apply to you? Base: (those eligible for Smart social housing) 107

jrs the research consortium

# Smart sensors - potential concerns




**Qual insight added important context, especially on privacy**

- Privacy concerns were not front of mind – the data is not considered sensitive or personal
- Visual/aesthetic appeal came up in interviews but was not something we asked about in quant
- Reassurance on energy use of the sensors themselves was important
- Residents with negative experiences around maintenance were more cynical about service improvements
- Important to manage expectations around service improvements and reduced bills

"They [housing provider] already know my house is damp – I've been on the phone to them several times trying to get it sorted!"
(Non pilot participant, GCC)

"I didn't see the harm in them seeing whether my house is damp or whether I've got the heating on."
(Pilot participant, NLC)

Q These are some potential concerns or worries people might have about smart social housing. Which, if any, of these would apply to you? Base: (those eligible for Smart social housing) 107

jrs the research consortium

# Exploring concerns: Visual/aesthetic appeal

A frequent theme of questions from non pilot participants was around the aesthetics of the devices and how they would fit into the home environment.

**Participants tended to think in comparative terms with familiar devices, e.g. fire detection systems, smart meters, dehumidifiers**

- Some of these systems do emit light or sound, which they felt would be annoying/distracting, especially in living spaces or bedrooms
- Having visual examples (as seen in pilot project communications) was also useful in explaining how much space they take up and where they will be positioned.

"If it's going to be a big ugly white box right in the middle of the wall I would say no."
(Non pilot participant, GCC)

**Typical questions to answer:**

- How big are they?
- Where will they be on my wall? (e.g. right in the centre considered less appealing)
- Do they make any noise?
- Do they have a blinking light?

"It's not going to make any noise is it? Do the sensors need to pull in air?"
(Non-pilot participant, GCC)

Both pilots **included photos of the sensors,** which helped reduce this concern.

**CO detectors and smoke detectors as an analogy** also worked well – these are unobtrusive, small and people are used to having them around the house

jrs the research consortium

# Exploring concerns: Privacy

**While privacy remains important, it was less of a concern with this type of device – largely because the data being collected seems less sensitive in comparison to a "listening" device.**

**Privacy concerns did not arise spontaneously in the interviews**

- The data being collected here feels less personal to residents, and there is a clear reason why a housing provider would want this data
- While it wasn't a primary reason for taking part, some participants also liked the thought that their data could be helping other residents as well by making maintenance easier to perform
- The key here was to make sure residents knew exactly what is being measured by the sensors.

"I can't really see why anyone would care if it's just there to see if the house is warm and dry."
(Pilot participant, NLC)

**Data was used slightly differently for supported living residents in Barrhead**

- Carbon dioxide data can be used to determine room occupancy – this is used as part of safety measures (e.g. if a resident seems to have been in the same room for a long time this could indicate a fall)
- Supported living residents were ok with this, viewing it as one of several parts of the service where they consent to reduced privacy in return for safety
- This is not something other respondents were aware of. They did not anticipate smart sensor data could be used in this way

"My niece has had a lot of bother with damp and things like that. If [having sensors fitted] would help other people in council housing to get these things sorted out faster, I would say it's worth it."
(Non-pilot participant, GCC)

jrs the research consortium

# Exploring concerns: Running costs

**Given the discussions often turned to the topic of home energy, questions and concerns around running costs were front of mind for many participants**

**The sensors being self-sufficient is a key point of reassurance**

- Given the ask is to place multiple sensors in different rooms, some respondents wondered whether these would need mains power – and whether this would cost a lot to run
- Similarly, it was worth underlining that the sensors do not need to use the resident's Wi-Fi

"I've basically forgotten about them now – they don't need anything from me to keep working"
(Pilot participant, NLC)

**The idea of saving money on bills is always appealing – but expectations need to be managed**

- Some non-pilot participants were very optimistic about the potential to cut their energy bills.
- Others spoke about the use of similar messaging to promote the use of smart energy meters. In this case they tended to be more cynical as they felt rising energy prices had wiped out any potential savings they may have achieved by being more aware of energy use.

Pilot participants with access to their data through an app **tended to be more positive about its role in reducing energy use** – and therefore bills

jrs the research consortium

# Exploring concerns: Negative perception of service

**For some respondents, recent negative experiences or ongoing disputes around maintenance or repairs led to skepticism about the sensors' potential to improve the service they received**

**Some respondents felt their housing provider was slow to act on reports**

- In situations where residents have made their housing provider aware of an issue via existing channels, but haven't received a satisfactory response, there was concern that the installation of a more automated system might give the housing provider a way to avoid direct contact with residents
- It's also important to underline that residents will still be able to report issues through other channels

**There was a sense that this concern could be mitigated through comms, but only to an extent**

- Being able to publicise "success stories" or information from the pilot about improved response times or more proactive service could help to sell the benefits of the smart sensors
- However, some residents will always be tough to convince as their cynicism is linked to deeply held beliefs

Make sure tenants are aware of the connection when any repairs or maintenance linked to the sensor data take place

"I had some guys out to sort out some damp, but I don't know if that was because of these [sensors] or not – they never said."
(Pilot participant, NLC)

jrs the research consortium

# Exploring concerns: Managing expectations

**Some respondents were enthusiastic about the idea of smart sensors, but had low understanding of the sensors' capabilities. As a result their expectations were unrealistic**

**A few pilot participants had expected the sensors to be able to "detect" issues that were outwith its capability, e.g. plumbing or heating issues.**

- This highlighted a lack of understanding around what the sensors are capable of
- Again, it was clear that ensuring residents know they should still report issues "the old fashioned way" is important. Otherwise, some may expect housing providers to be made aware of issues automatically

"We had a water leak in the pipes and had no idea about it until we found a wet patch of floor in the airing cupboard. I would have thought those sensors would pick it up because it must have made the place damp!" (Pilot participant, ERC)

**Some non-pilot participants wondered whether they would be able to choose where to put sensors**

- In some interviews, respondents highlighted existing problems with their homes and queried whether they could ask for sensors to be placed there to monitor the issue
- For example, one asked whether they would get a sensor for the loft if they were concerned about leaks or insulation
- This shows a need to be up front about the scope and limitations of the system

**Some respondents wanted to use their data to resolve disputes with energy or housing providers**

- Given the association with energy use and bills, some non-pilot participants asked if they would be able to use sensor data as a "second opinion" in a dispute
- An example would be an unexpectedly high estimated bill from an energy provider
- If this was possible it was considered to be a useful benefit of having sensors installed

"So if Scottish Power sends you a bill that's too high, can you use this to check if it's right?" (Non-pilot participant, GCC)

jrs the research consortium

# Reducing the impact of barriers/concerns

**Reassure up front:**

- No running costs
- Units are small and inconspicuous (no noise/lights, white box the size of XX)
- No need for own WiFi
- It's there to measure humidity, temperature, C02
- How many sensors and where will they be

**Highlight benefits up front**

- Helps housing provider to anticipate maintenance and spot problems before they get worse
- (If offered) You can use the app to view your data and get personalised advice on keeping your home warm, dry and energy efficient
- Helps other people in your community as it allows the housing provider to understand where people need more help/support

For non-pilot participants, **having access to their own data would be a key benefit.**

This is reinforced by the experiences of pilot participants in Barrhead, who tended to value the sensors much more in comparison to North Lanarkshire participants who did not have the app.

**Be prepared for questions on:**

- Who has access to the data?
- Does this mean I no longer need to report an issue?
- Can I ask for extra sensors or for them to be put in a different room?
- Can I use this data if I have a dispute with my utility company?

jrs the research consortium

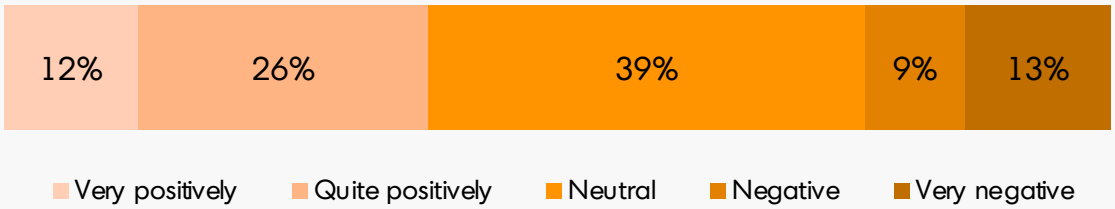
# Local Council & Communications

jrs the research consortium

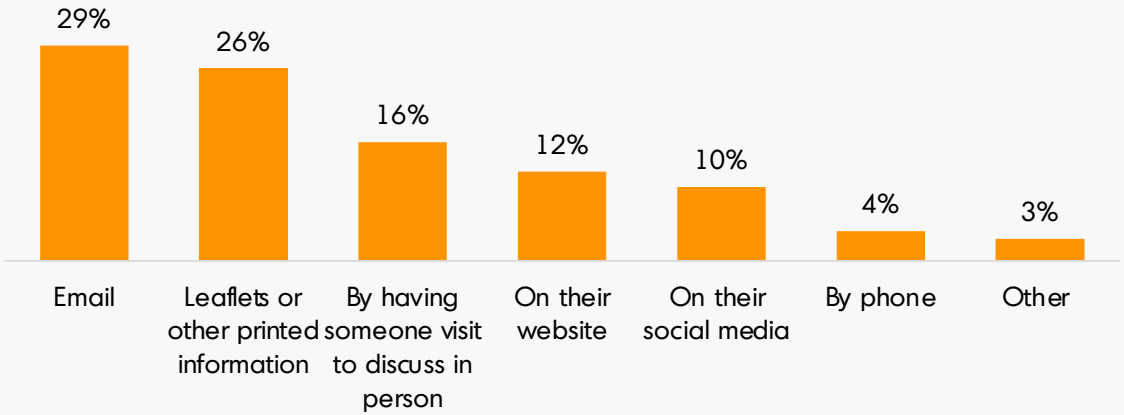
# Local council & communications

38% positive

## Feelings towards local council




## Best way for local council to communicate




**Qual insight reflects the survey findings**

- Qualitative participants were mostly neutral to positive about their local council or housing provider
- Across both pilot projects, a more personal messenger (e.g. a named person) was valued more than mass communications, especially when dealing with questions and concerns.

**Telecare audiences value the personal touch**

- Telecare participants in particular tended to value phone calls and in-person visits, especially when the Alexa system was newly installed
- Ideally the messenger would be their established care provider

**Smart home audiences happy to be contacted**

- The smart home sensor audience would be happy with an email, letter or phone call as an initial contact – and would appreciate signposting to some FAQs or a place to ask questions.
- Housing association tenants preferred their HA as the messenger over a local authority

Q How positively or negatively do you feel about your local council? Base: (those eligible for Smart social housing) 107
Q If your local council wanted to provide you with some information about how smart technology could help in your home, what would be the best way to do this? Base: (those eligible for Smart social housing) 107

jrs the research consortium

# Conclusions

jrs the research consortium

# Conclusions

- Both pilots highlight an offer which is generally appealing to our research participants
- The benefits of either system are genuinely valued by most
- While there are some concerns and reservations, they can be addressed through a mix of proactive comms and anticipating frequently asked questions

## Smart home sensors

- The pilot which made use of a smartphone app saw a greater degree of impact on tenant's understanding of energy use and humidity, and led to some behaviour change. This also reflected the key benefits as seen by non-pilot participants
- Potential utility savings, better repairs and maintenance, and access to information about energy use and dampness are key benefits
- Reassurance needed on visual/aesthetic appeal, energy use of the devices themselves
- Expectations need to be managed, especially around the sensors' abilities to detect maintenance issues, and the potential financial savings

## Alexa telecare

- Important to consider that users of the existing landline-based system are likely to frame the offer as a comparison, and may require extra reassurance to give up a system they see as familiar and reliable
- Safety and reliability as a personal alarm is the one key benefit – others (web search, reminders, smart plugs) are appealing but not the deal breaker
- Pilot participants were generally very positive about the device's ease of use and the support offered by the pilot team
- Reassurance needed on safety, running costs, data and privacy

jrs the research consortium

# Recommendations

**General principles to ensure uptake at scale:**

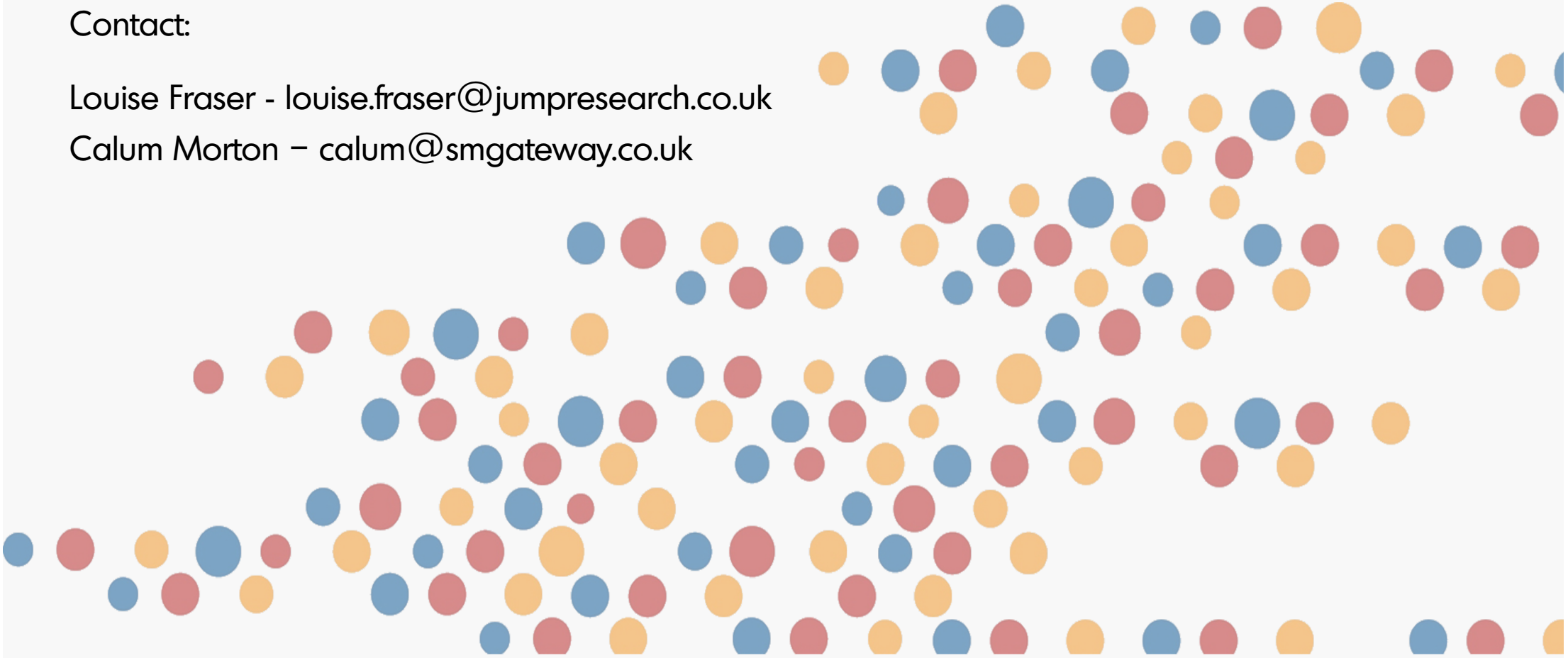
- Wherever possible, make initial contact through a trusted messenger with an existing positive relationship to the audience (housing provider, community care team)
- Reassure key concerns up front, **with the exception of privacy**
- Be prepared for questions on privacy if they come up, but avoid focusing on this issue in up front comms
- Have a point of contact for questions, and consider creating an FAQ to signpost to
- For both systems, **frame as an "opt-out"** for new users (e.g. new to home sensors, new to telecare)
- For smart home sensors in particular, take care not to over-promise on energy bill savings or service improvements
- For Alexa, remember that existing users of the landline system may need more reassurance on the new system's performance vs what they already use

jrs the research consortium

Contact:

Louise Fraser - louise.fraser@jumpresearch.co.uk

Calum Morton – calum@smgateway.co.uk



jrs the research consortium