Healthy Homes (South Tyneside Council) Evaluation

NHS North East and North Cumbria

South Tyneside Alliance
Adding years to life and life to years

Northumbria University NEWCASTLE

South Tyneside Council

Executive summary

Background

The home, and housing itself, remain key determinants of health. Poor housing conditions are often experienced by the most vulnerable in society and can exacerbate the problems they face. Such damaging relationships can take many forms, but are particularly related to housing hazards and issues such as fuel poverty. The Healthy Homes service is an advice and signposting-based programme that attempts to address people's home-related health needs.

Research aims and methodology

The research aimed to explore the benefits of the Healthy Homes services via the following objectives: 1) The creation of a data capture tool to highlight financial benefits of the advice and interventions given 2) The completion of qualitative interviews to explore service user experiences, and 3) The development of a strategy and potential outcome measures for future, larger-scale evaluations of housing advice services. A mixed methods evaluation was undertaken.

Key findings

The key findings of the project were:

- Analysis of records relating to 48 service users found that they were likely to be experiencing a combination of complex needs related to health conditions, low household income and age.
- High levels of service users were concerned about fuel poverty (48%), assessed as being at risk because of a housing need (31%) or experiencing signs of excessive condensation (43%).
- Aside from these concerns, service users also highlighted additional issues they felt were impacting their home-related health, notably social inclusion and reduced mobility.
- Qualitative data revealed the complex relationship between participants' home and health, particularly where health-related issues were being exacerbated by poor housing (either through risk of safety or worry about housing issues).
- Beyond the home environment, participants cited concerns about anti-social behaviour and a perceived decline in their wider environment.
- The service itself was well received by participants, particularly the approachable staff and home visit, which made them feel heard and cared for (and was a positive outcome in itself).
- Changes to or help within the home were also well received, both in keeping the home supportive, reducing risk of unsuitable coping strategies and reducing worry about problems.
- The service was also found to be proactive and preventative as, without it, participants felt they would wait until problems reached crisis point before accessing help, particularly for

older residents (who did not want to be seen as losing independence) and homeowners (who felt they were not eligible).

- Although points of development were identified, particularly in the low levels of awareness of the service and the need for ongoing support, its impact for many was significant. Even small changes like lightbulbs were felt to be significant for some, while another participant referred to the service as giving them "hope".

Recommendations

1) **Ongoing support for cases through to a resolution and increased service navigation**

Currently the service provides signposting and advice to a range of services to address housing-related health needs. Longer-term ongoing support can ensure health outcomes are achieved, address arising issues and capture more rigorous outcomes data.

2) **Accurate longer-term data collection for outcomes and downstream costs**

Similar to the above, capturing longer-term data will allow the service to more accurately understand outcomes, and also potentially support a future health economics evaluation.

3) **Awareness raising about the Healthy Homes service**

Participants had a low level of awareness of the service, and felt that others who would benefit were not currently able to access support because of this. Increased awareness of the service provision and eligibility could help ensure those that require support are able to access it.

4) **Targeting future service delivery on key groups**

Several groups of participants at risk of housing issues, particularly older people and homeowners, discussed a previous belief that they were not eligible for support or an unwillingness to access it. Effort should be made to target these groups to ensure they are not overlooked in the future.

5) **Potential collection of quality of life, wellbeing and stress / anxiety measures**

Outside of outcomes directly related to housing, participants discussed wellbeing and mental health-related benefits. This could be explored further with measures capturing these issues.

6) **Sharing of best practice concerning face-to-face and accessible advice**

Multiple benefits of the provision of face-to-face, accessible advice were found in providing outcomes and making people feel cared for. The use of this approach elsewhere should be considered.

7) **Understanding of complexity of housing and health issues across all services**

The project found further evidence of the complex relationship people have with their homes, and how this can contribute to / exacerbate health issues. However, there was a general lack of awareness of this, which meant it was often overlooked by participants. It should therefore be addressed across multiple services where possible.

8) **Alignment with a broad range of programmes and services**

Due to the complexity of issues people were facing, the service had to address a wide range of concerns unrelated to housing (e.g. social isolation, anti-social behaviour). Ensuring these links are within signposting systems is important to meet the needs of future service users.

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1. Background and literature

1.1 Home as a determinant of health

According to the World Health Organisation (WHO), the world urban population in both developed and developing countries will double by 2050, and the demand for housing will grow exponentially along with it (WHO, 2018). It is widely acknowledged within the literature that housing plays an integral role as a social determinant of health and wellbeing (WHO, 2018; Swope & Hernandez, 2019; Rolfe *et al.*, 2020). Thus, improving housing conditions and reducing health risks within them is critically important to enhancing the health and wellbeing of the occupants. There is a tangible relationship between physical housing defects, such as overcrowding, poor insulation, damp and mould, and poor physical and mental health outcomes (WHO, 2007; Fisk *et al.*, 2010; Braubach *et al.*, 2011; Liddell & Guiney, 2015; WHO, 2018). Indeed as Rolfe *et al* (2020) articulate, tenant's experiences of property quality were significantly correlated with measures of health and wellbeing.

In the United Kingdom, fuel poverty (the inability to keep the house sufficiently warm due to the inadequate energy efficiency of properties such as heat loss caused by poor insulation and unaffordable energy prices) is a growing problem (Tu *et al.*, 2022). It is estimated that around 2.53 million UK households are affected (DBEIS, 2019; Tu *et al.*, 2022). Many studies, across the world, have linked cold homes to poor mental and physical health and wellbeing outcomes (Hills, 2012; Lacroix & Chanton, 2015; Sharpe *et al.*, 2018; Zhang *et al*, 2019; Tu *et al.*, 2022). An increasingly complex social issue, fuel poverty could be described as a considerable burden to society which has pushed national policy initiatives to allow greater flexibility for local governments to target and support fuel poor households (Sharpe *et al.*, 2022). This might include the implementation of healthy homes initiatives and widening the role of existing housing officers to encompass a more holistic approach outside of the usual remit of housing repairs and rent arrears to look at the health and wellbeing of both the home and occupants (Blank *et al.*, 2020)

Within the literature, a lot of the research conducted has focused on the physical attributes of the home, such as housing quality, dampness, mold, and indoor air pollution (Grant *et al.,* 1989; Jones, 1999; Bornehag *et al.,* 2001; Taske *et al.,* 2005; Fisk *et al.,* 2007; Fisk *et al.,* 2010; Kim *et al.,* 2013; Mould & Baker, 2017). In the United Kingdom, lower income households are most heavily affected, and a large percentage of fuel impoverished households live in conditions which are cold and damp (Liddell, 2008; Liddell & Morris, 2010; Barlow *et al.,* 2023). Living in these environments for prolonged periods of time is likely to have significant health risks and even increased rates of cold-related deaths (Healy, 2003; Liddell & Morris, 2010).

1.2 Creating healthy homes

Given this issue, many local authorities have introduced initiatives to specifically support health-related housing issues. The UK's 2014 Care Act placed a duty of care on local authorities to integrate services, such as housing, using prevention to improve overall health and wellbeing while reducing or delaying care needs (LGA, 2015; Aitken *et al.,* 2017). Many studies have looked at the impact of housing and health-related services on the occupant's health (Blank *et al*, 2020). Previous research has tended to be concerned with the evaluation of specific and isolated housing enhancements which are facilitated through a certain scheme or intervention (Basham *et al.*, 2004; Gilbertson *et al.,* 2006; Kearns *et al.,* 2008; Clark & Kearns, 2012). Aitken et al. (2017) examined service user's experiences of an information and advice team developed to implement health-related housing improvements on an ongoing basis. Participants found the service was able to improve their living conditions and, in turn, their health and wellbeing. A more specific finding from this study was the emphasis and importance of a person-fronted service and how much value participants placed upon this aspect (Aitken *et al.,* 2017). The literature on the efficacy of health-related housing intervention services is thin and further investigation is needed to gain a better understanding of the impact of these services on residents' health and wellbeing.

1.3 An overview of the Healthy Homes service

To address these issues, the South Tyneside Council Healthy Homes service initially worked with households in postcodes NE33 5 or NE34 9, to represent indices of multiple deprivation 1 and 2, before being expanded to NE31-3 1/2/5/9 sand NE34 8/9 in December 2023. It identified households requiring support in terms of issues such home improvements, and money and debt advice, and carried out baseline assessments and signposting to necessary agencies. Households were originally targeted on the grounds of meeting three key eligibility criteria (low household income, having long-term health conditions, and being aged over 65/under 5 or pregnant), and identified using GP registers. It aimed to deliver both health and housing improvements for the residents involved.

The service is made up of two key components. The first is a home visit by a social prescribing link worker (trained in motivational interviewing) to explore resident housing concerns and assess their housing-related health needs. This is then followed by a signposting service to provide the support required to address these needs. Service users are also provided with contact details and are free to return to the service if additional support is required. Staff are not only trained in the availability of services, but also in skills such as motivational interviewing to help support residents in identifying their own needs.

2. Research approach

An evaluation approach was taken to explore the benefits of the Healthy Homes service. As such, it addressed the following objectives:

- The creation of a data capture tool allowing the service to highlight financial benefits of the advice and interventions given.
- The completion of qualitative interviews to explore service user experiences, including accessibility issues, expectations, and perceived outcomes.
- The development of a strategy and potential outcome measures for future, larger-scale evaluations of housing advice services.

3. Methodology and methods

3.1 Evaluation approach

A mixed methods evaluation utilising a concurrent triangulation design (Creswell et al., 2003) was undertaken. This approach allowed both qualitative and quantitative data to inform a holistic understanding of the service's strengths and areas for development. The project was made up of two work packages (WP), which are described here in turn.

3.2 Work package one: Quantitative data

Given the early stage of the Healthy Homes service and the scale of the evaluation, it was not possible to carry out a full health economic evaluation. As such, a quantitative evaluation approach was used to better understand the contexts and issues experienced by those in receipt of the service, give indicative cost benefits of the service and inform outputs for a future evaluation. Descriptive analysis was carried out to show potential cost benefits (proposed savings from the BRE (2023) report mapped against costs to the service) to be explored by a future full health economics analysis, and correlate outcomes against demographic, location and tenure-related factors.

The table below shows how cost savings to the NHS per annum per case were calculated using the BRE (2023) report.

Hazard	Number of Category 1 hazards	Savings to the NHS per annum if hazard mitigated	Savings to the NHS per annum per case
Hot surfaces	31820	£ 72,878,988.00	£ 2,290.35
Excess cold	518168	£ 857,196,218.00	£ 1,654.28
Dampness	13243	£ 6,899,558.00	£ 521.00
Noise	1653	£ 822,717.00	£ 497.71
Entry by intruders	4510	£ 2,241,873.00	£ 497.09
Collision and entrapment	11102	£ 4,816,089.00	£ 433.80
Falls on the level	259669	£ 77,567,256.00	£ 298.72
Falls between levels	150785	£ 43,227,978.00	£ 286.69
Lead	56879	£ 12,334,847.00	£ 216.86
Ergonomics	9403	£ 2,021,809.00	£ 215.01
Electrical problems	1011	£ 215,552.00	£ 213.21
Falls on stairs	682763	£ 145,118,074.00	£ 212.55
Sanitation	9403	£ 1,993,854.00	£ 212.04
Food safety	17963	£ 3,806,365.00	£ 211.90
Pests	11121	£ 2,304,415.00	£ 207.21
Carbon monoxide	5403	£ 1,029,125.00	£ 190.47
Fire	77356	£ 12,376,709.00	£ 160.00

Structural collapse	9199	£	1,449,700.00	£	157.59
Overcrowding	2405	£	330,075.00	£	137.25
Excess heat	2439	£	326,546.00	£	133.89
Radon	66595	£	7,855,429.00	£	117.96

Table 1: Calculation of cost savings to the NHS per annum per Category 1 hazard case using the BRE Report (2023)

3.2.1 Data collection

Anonymised data were provided by the service on 48 cases for the period between May and November 2023.

3.2.2 Data analysis

Data were exported from Microsoft Excel into IBM SPSS Version 26 for analysis. Descriptive analysis was carried out to provide an overview of the issues in the home experienced by clients of the Healthy Homes service, show potential cost benefits (proposed savings from the BRE report mapped against costs to the service) which can be explored by a future full health economics analysis, and correlate outcomes against demographic or location factors.

3.3 Work package two: Qualitative data

To fully understand the potential impacts of the service, as well as resident expectations and accessibility factors, the quantitative work package was accompanied by in-depth qualitative interviews with Healthy Homes clients.

3.3.1 Recruitment and sampling

Clients were initially approached by the service to assess their interest in taking part, before their details were shared with the research team, who arranged interviews and ensured informed consent procedures were followed.

In total, 18 participants from 15 different households took part in the evaluation, with three interviews involving both the client and an additional family member who was present. We were successful in recruiting clients from a range of backgrounds to explore a breadth of experiences, including some diversity according to age, gender, and tenure. While all participants had been in receipt of the service, they differed according to stage of follow up and outcomes received, thereby enabling insight into client expectations and experiences at differing points along the service journey.

3.3.2 Data collection

Given the project focus, 14 interviews were carried out in participants own homes wherever possible, in order to help facilitate discussion and enable insights and data to be anchored in participants'

contexts. Indeed, participants often illustrated their points by physically showing researchers aspects of their homes and environments. However, in order to facilitate accessibility, participants were also offered the opportunity to take part by phone or online platforms such as Microsoft Teams. Due to illness, one interview was carried out via telephone, however it was deemed comparable to the other interviews following analysis of the content.

Interviews lasted between 9 and 83 minutes, with a mean duration of 32 minutes, and were semi-structured in order that participants had sufficient flexibility to voice what was important to them, while also exploring specific issues of relevance to the evaluation. The interview covered participants' understandings of health impacts of their home environment; their expectations of the service; their experiences of accessing and receiving the service; and the perceived benefits (both in relation to health and wellbeing as well as broader issues such as future service use).

3.3.3   Data analysis

With participant's permission, interviews were audio-recorded and transcribed verbatim. Thematic analysis (Braun and Clarke, 2006) was then undertaken to identify key issues for the service, and understandings of issues of home and health in general. This involved looking across the data set as a whole to identify overarching themes and sub-themes, with codes and illustrative data regularly shared and discussed amongst the research team to arrive at a consensus in interpretation. Interviews were originally coded by one member of the research team, before being discussed, confirmed and refined by other members of the research team. When analysis was completed, a data analysis clinic was completed to share provisional findings with wider stakeholders as a process of member checking.

3.4 Data synthesis

Following completion of both work packages, data were synthesized using the following-a-thread method (O'Cathain et al., 2010) to address the research aims and objectives. This includes both an understanding of the impacts of the service, but also acts as a pilot which could inform subsequent, related evaluations. Quantitative data gives both an overview of potential economic benefits of the service, but will also inform a future health economics evaluation of the service. Qualitative data explores the mechanisms of how the service is experienced by service users and considers potential outcomes to be captured in further evaluations. The synthesis of both data sets provides a holistic overview of how the service has impacted service users' lives, and how it can be developed further in the future.

4. Work package one findings: Quantitative data and cost analysis

4.1 Introduction

Data for a total of 48 cases were analysed as having accessed the service in the period between May and November 2023. Routinely collected service data included in this analysis featured the following domains:

- Eligibility criteria met (on benefits or annual income below £31,500; long-term condition or at risk of poor health; resident in the household over 65 years, under 5 years or pregnant).
- Self-assessed difficulty to heat the home, particularly in colder months.
- Whether the home currently has a faulty / not working heating system.
- Self-assessed ability to afford heating costs.
- Healthy Homes staff assessment of risk to residents due to living conditions.
- Requests for advice / guidance on financial support required.
- Healthy Homes staff assessment of the home suffering from condensation.
- Self-reported falls in the last 12 months.
- Awareness of home safety checks carried out by local fire services.
- Assessment of other factors being experienced by service users that are impacting on their health and wellbeing.

Descriptive analysis of these issues is included below in relation to the following factors: service user contexts, fuel poverty, risks due to living conditions, other factors impacting service users and potential cost benefits.

4.2 Service user contexts

Service users were screened for eligibility for the service against three core criteria: on benefits of annual income below £31,500; long-term condition or at risk of poor health; resident in the household over 65 years, under 5 years or pregnant. However, it was noticeable that only 14.6% (n=7) of those in receipt of the service met just one of these criteria. Meanwhile, over half (58.3% n=28) met all three of these criteria.

Total number of eligibility criteria met	Frequency	Percent
1	7	14.6%
2	13	27.1%
3	28	58.3%

Table 2: Total number of eligibility criteria met

The most frequently occurring of these criteria was those service users with a long-term condition or poor health (91.7% n=44). Meanwhile, the least frequently occurring was eligibility related to age (68.8% n=33).

Eligibility criteria	Frequency	Percent
Low income / on benefits	40	83.3%
Age over 65 / under 5 / pregnant	33	68.8%
Long-term condition / poor health	44	91.7%

Table 3: Eligibility criteria met

This highlights two key elements within the overall service user context. The first is the high levels of long-term conditions and poor health levels in the service users at the point of access. The second is the high levels of complexity that were in evidence within these contexts, as most of the service users met multiple criteria for eligibility and therefore brought more varied and interrelated issues that needed to be addressed.

4.3 Fuel poverty

Issues related to fuel poverty, such as the ability to heat the home, having a functional heating system and difficulty paying for heating costs, were all a focus of the data. Primary concerns were found over the ability to heat the home (58.3% n=28) and pay for these heating costs (43.8% n=21). Although levels without a functional heating system were low (10.4% n=5), it is noticeable that such an experience could be having a significant impact in these cases.

Fuel poverty criteria	Frequency	Percent
Difficulty heating own home	28	58.3%
Struggling to pay for heating costs	21	43.8%
Heating system faulty / not working	5	10.4%

Table 4: Fuel poverty criteria

It was also found that concerns over fuel poverty were higher in service users with low income levels and long-term health conditions than those eligible on the grounds of age. This was particularly the case when related to concerns over paying for heating costs.

Eligibility criteria	Difficulty heating own home	Struggling to pay for heating costs
Low income / on benefits (n=40)	60% (n=24)	47% (n=19)
Age over 65 / under 5 / pregnant (n=33)	51% (n=17)	24% (n=8)
Long-term condition / poor health (n=44)	61% (n=27)	45% (n=20)

Table 5: Fuel poverty criteria by eligibility criteria

This highlights the recurring concern of issues related to fuel poverty found throughout service users, particularly related to difficulties in heating the home. Although these issues were found throughout the group, it was noticeable that they were particularly in evidence for those with long-term conditions and low levels of household income.

4.4 Risks due to living conditions

A total of 47 service users were assessed for health risks due to health conditions, with missing data in one case. It was found that 31.3% of the sample (n=15) met the criteria of being at risk. When compared to eligibility, it was found that this risk was spread across the criteria.

Eligibility criteria	Assessed as at risk due to living conditions
Low income / on benefits (n=39)	28% (n=11)
Age over 65 / under 5 / pregnant (n=32)	31% (n=10)
Long-term condition / poor health (n=43)	32% (n=14)

Table 6: At risk due to living conditions by eligibility criteria

Meanwhile a total of 21 (43.8%) homes included in the service user population displayed signs of condensation, with 8 (16.7%) homes displaying multiple signs. 2 homes (4.2%) displayed five signs of condensation, including mould, droplets on the walls, discoloured patches, excessive condensation on windows and rotting woodwork.

Number of condensation signs per household	Frequency	Percent
0	27	56.3%
1	13	27.1%
2	5	10.4%
3	1	2.1%
4	0	0.0%
5	2	4.2%

Table 7: Number of condensation signs per household

The most commonly found sign of condensation was mould (27.1% n=13), followed by excessive condensation (22.9% n=11) on windows and discoloured patches (12.5% n=6).
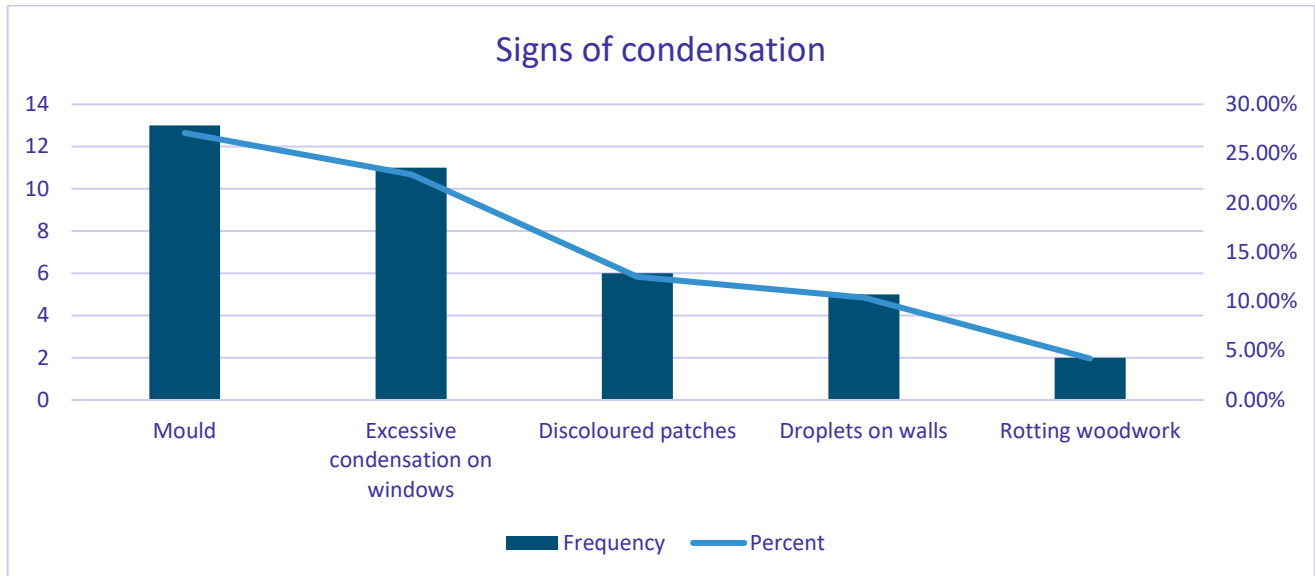

Figure 1: Signs of condensation

Another common health risk which was assessed was falls, and 33.3% (n=16) of the sample stated they had experienced a fall in the home in the last 12 months. Despite this, there was also low levels of awareness of health and safety checks provided through the fire service, with more than half the population (52.1% n= 25) stating they did not know these services were available.

Thus, there was evidence of a range of hazards in many of the homes contacted by the service. The health impacts of these could be significant, as they feature issues such as falls and condensation.

4.5 Other factors impacting service users

Service users were also offered to be signposted to other forms of advice related to their financial situation (e.g. benefit, housing benefits, energy tariffs, warm homes discount, debt advice, home adaptations, winter fuel allowance and environmental health). 37.5% (n=18) of those in receipt of the service took this offer. When compared to eligibility criteria, it is perhaps unsurprising that the group with the highest proportion to do this was those on benefits / with low income.

Eligibility criteria	Requested financial support advice
Low income / on benefits (n=40)	40% (n=16)
Age over 65 / under 5 / pregnant (n=33)	24% (n=8)
Long-term condition / poor health (n=44)	36% (n=16)

Table 8: Requested financial support advice by eligibility criteria

The most common form of advice requested related to benefit advice (n=8), followed by housing finance (n=6), energy tariff (n=3), warm homes discount (n=3), with debt advice, home adaptations and winter fuel payments and environmental health all signposted on one occasion.

More than half of the households (60.4% n=29) included in the service highlighted another issue that they felt was impacting their health within the home, with 20.8% (n=10) outlining multiple (up to 4) other issues. These were most often related to other health concerns not identified in the eligibility criteria (20.8% n=10) or the condition of the home having a negative impact on mobility (20.8% n=10). However, another important recurring issue was social isolation, which appeared in 18.8% (n=9) of the service user households.
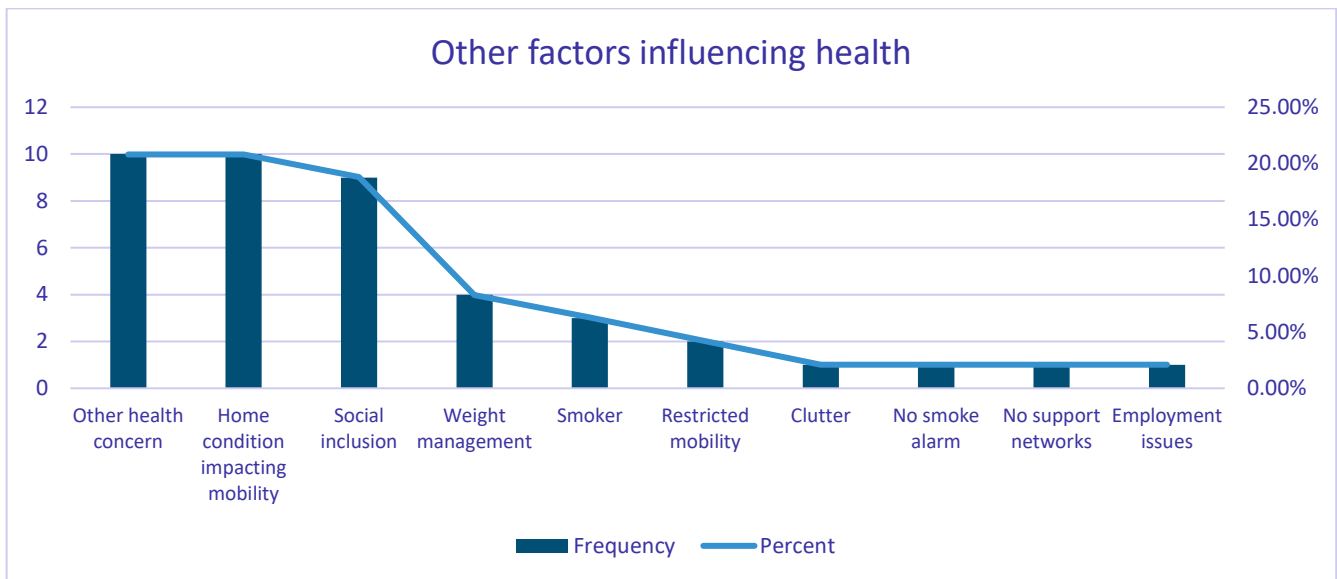

Figure 2: Other factors influencing health

This highlights the multiple and potentially complex issues that service users felt were impacting their home-related health. These encompassed issues of financial support, physical health, mental health and the suitability of their home environment.

4.6 Potential cost benefits

Potential outcomes from each case within the service data were identified. Each of these were aligned to Category 1 housing hazards, as indicated by the BRE report on the Cost of Poor Housing (2023). This allowed a potential cost-saving benefit per annum for each outcome to be estimated if the service could successfully address each issue. A full breakdown of the Category 1 hazards identified within the data are highlighted below, alongside their potential cost saving per annum in each case. This allows a total potential cost saving for the service to be calculated.

Category 1 hazard	Total cases	Saving per annum per case	Total potential saving per annum to health services
Excess cold	33	£1654.28	£54,591.32
Dampness	21	£521.00	£10,940.93
Falls on level	15	£298.72	£4480.74
Falls between levels	3	£286.69	£860.06
Falls on stairs	1	£212.55	£212.55
Fire	1	£160.00	£160.00
Total saving			**£71,245.59**

Table 9: Potential health savings per annum provided by the service

As a result, an estimated potential saving of £71,245.59 per annum was identified from the service provision for 48 households. However, it should be noted that these saving are only related Category 1 housing hazards and NHS savings. Further impacts related to psychological issues such as social isolation, stress and anxiety or mental health were not calculated at this stage.

4.7 Conclusion

The quantitative analysis of service data revealed the range of diverse and complex issues households were facing in relation to their home-related health. This was highlighted by the high number of households who met multiple eligibility criteria, and were experiencing issues such as fuel poverty, poor housing conditions and falls. The data also outlined a number of additional issues impacting the service users, such as social isolation and financial insecurity. Although these issues were experienced across the service user group, it is noticeable that financial insecurity and fuel poverty were more likely to be experienced by those with poor health and low household income than those who met the age criteria alone. A number of potential cost savings for health services were identified, particularly relating to excess cold, dampness and falls, with an estimated saving of £71,245.59 per annum to the NHS being outlined for the 48 participating households to date.

5. Work package two findings: Participant experiences

5.1 Introduction

Qualitative interviews were conducted alongside the quantitative data collection to explore the participants' experiences of and outcomes from the service. Analysis of the qualitative data produced five key themes: person-housing fit (physical and mental health impacts of unhealthy housing, place-based impacts and psychological connections to home), service experience (experience of staff, experience of home visit and experience of ongoing advice), service impacts (including changes to home, psychological impacts, prevention and personalisation), accessibility (perception of needing help, impacts on older people, impacts on tenure and awareness of the service), and future direction long-term support (perception of limited resources / fairness, timing of the service and difference the service). Each theme will now be outlined, along with illustrative quotations from the participants.

5.2 Theme one: Person-housing fit

A key element within each interview was the illustration of the difficulties participants were currently experiencing in living well in their own home. These factors were made up of the physical and mental health impacts of living in unsuitable housing, the impacts of wider, place-based factors such as deprivation and anti-social behaviour, and the mixed impacts of the participants' psychological connection to their home. It is apparent across this theme that many participants felt that their home environment was having a negative impact on their health, and/or exacerbating their ongoing health concerns.

5.2.1 The physical health impacts of unhealthy housing

Participants highlighted a number of factors which they felt were challenging to their physical health status. These included design factors such as a lack of space or difficulty climbing the stairs, alongside issues connected to fuel poverty, such as an inability to heat their own home.

> *"Too confined now, yeah. If they put a stairlift in, it blocks the passage in the door [...] My scooter is down at my friend's. My wheelchair is down at my friend's. I've got to wait for him to be in before I can go out." (P17)*

"Then you've got to open the doors because you feel like you're getting suffocated. It's only this room that's red hot. With these doors closed. But if the doors are open, you get a wind tunnel in there. And then you get the draft from the back door." (P37)

As many participants had existing health conditions, it was felt that these negative impacts placed them at greater risk of exacerbation. Conditions such as COPD raised concerns via issues such as excessive cold, mould and damp, whilst also posing dangers of risks of falls on stairs or in the bathroom. Similarly, those with varying levels of mobility issues highlighted that their homes were no longer adequate in providing them with a supportive environment.

"They got me an extra rail on my stairs, on the banister, but I couldn't... I used to come down the stairs backwards, and they were terrified... I couldn't manage, you know." (P23)

"it's impacting because I can't get rid of the chest infection. And I've had three lots of antibiotics in the last six weeks." (P42)

In some instances, participants spoke of the need to adapt their own homes to meet their needs using their own personal finances, which was particularly challenging for those on lower incomes / benefits. Similarly, there were those who knew their housing was unsuitable for their health needs, but felt they did not have the financial resources to move somewhere more appropriate.

"You go in the shower, no clothes on, it's flipping freezing. I can't stand it. So, I've had to buy two Calor gasses. One in the bathroom, one in here, to keep me warm." (P42)

"It's very dangerous – like steps everywhere. So, they said, are you considering moving into a bungalow – but I've paid this off. This is my livelihood now. So, this is... I haven't got anything else […] We can't afford to move anywhere." (P6)

In most cases, this negative relationship between health status and appropriateness of housing meant that each situation exacerbated the other. For example, those with physical difficulties felt less able to address their housing issues, and therefore each continued to worsen the other.

"It's health-wise more than everything now. It not like anything is falling down, it's just that mould. Because I'm not as mobile as I can... It's a lot more of a struggle to keep on top of the... Getting rid of it. Because I can't stand long, so it's like... Right – how far can I do? I've got half a window done." (P39)

As a result, physical difficulties and the impact of the home ran throughout the data. Each participating home highlighted at least one difficulty that was impacting their physical health, and also identified that they were not able to address this before being contacted by the service.

5.2.2 The mental health impacts of unhealthy housing

Alongside physical health concerns, a number of participants highlighted how their housing situation was exacerbating mental health concerns. This included those who felt a negative mental health impact worrying about their home environment, but particularly featured those who felt stress and anxiety about heating their own homes and paying for rising heating costs.

> *"But that, I find, I'm really struggling with, and that does affect my mental health, because when you've always been the kind of person that gets off their bum and does it themselves... You know, it's horrible to think that you're living... You're living like this and there's nothing you can physically do about it." (P32)*

> *"It really triggers my mental health, uh-huh. It's very hard - I won't open my gas and electric bills. I won't open them." (P7)*

Echoing the findings related to physical health, there were also participants who felt that their poor home environment was creating negative mental health impacts which previously had not existed. This was notable in its impact on social connections and social isolation. Several participants spoke of their embarrassment about the state of their home, and this would make them less likely to allow friends and neighbours to visit them. Meanwhile, others spoke of being trapped in their own home, and how this meant that they were becoming increasingly social isolated.

> *"Because it's just a waste of money. Because it looks unsightly, and anybody comes in and you're thinking… They must think, you know, it's that." (P39)*

> *"So, you're depressed wherever you look. And it's just... It's just a constant frustration. You have visitors around and you're literally ashamed of your home. […] You see, I'm reluctant to invite people back, because I don't want them thinking, oh, you know, she lives in a shit tip." (P32)*

A key issue here was that multiple participants described their home as being trapped in a bubble. This metaphor was particularly poignant as it conveyed both the image of being isolated from the world outside, and also a sense of delicacy and vulnerability if this bubble is burst. As such, these participants were not only experiencing physical and mental health challenges living in their home, they were also worried about the possibility that the situation could suddenly worsen.

"And like I said to the anti-social behaviour, this is my bubble. This is where I live." (P3)

"Like I say, when you're living it, you're in the inside of the bubble. You can't see what's going on in the inside of the bubble. It's only when you get people to come in…" (P17)

5.2.3 Place-based impacts

It was noticeable that a number of participants had strong personal and historical connections to the area. Many had lived in their current properties for an extended period of time, and even those who had moved had previously had often been based in the region before this. This brought with it many connections, including residents who lived close to their childhood home or near other family members.

"It is a good estate. I mean, I practically know a hell of a lot of people on this estate. Because I've lived here practically all my life. So, it suits me." (P11)

"But when I moved round here, I found out two of my friends lives around here. […] I hadn't seen them for years. The one that lives there is my… My childhood friend. Well, I was over the moon when I found out she was there." (P37)

However, the impacts of this connection varied. There were many for whom this was positive, and they spoke fondly of the benefits of the region, particularly the closeness with neighbours or quiet and supportive neighbourhoods. This was seen as providing additional support resources for those with such connections.

"Touch wood – my mother always used to say you can buy your house, you can't buy your neighbours. And we've all… All the sixteen years I've been here, I've had nothing but good neighbours." (P11)

"The neighbour I've got next door, although she's a lot older than me, she was superb through COVID. She did… You know, she brought me food parcels. She did shopping for me. Like I say, it's a lovely little community area where I am." (P32)

However, this was not the case for all participants. Others spoke at length about the negative influence of place-based factors on their home and their physical / mental health. Without connections to their neighbours or a supportive environment, they felt not only that their existing issues were being exacerbated, but also that they were desperate to move to a more friendly area.

"I just couldn't stand… It's not the location, I just couldn't stand the people. Drunks and druggies, and letting their mates in and roaming around. I never felt safe." (P26)

"The crime rate is really, really bad. And then there's like stab… People… My sons have witnessed it. […] And they have to phone the police. And then people come and, like, kicked our door. And they just… Some drunk people just come into the porch and just sleep there." (P6)

A recurring issue here was that of anti-social behaviour. When asked what problems they faced in their homes, multiple participants identified problems with their neighbours as their primary concern, rather than issues related directly to housing. These disputes were often long running and an intense source of stress and anxiety, ultimately resulting in highly negative perceptions of their home environment and the wider resources available to them.

"I've had a lot of trouble with my neighbour upstairs, before she moved. I've had my windows put out. I've had graffiti written on my windows. With the boards on my door." (P3)

"I don't need to see junkies dropping their drawers. I don't need to see police manhandling people. And booting doors in and… Haway, man. Yeah, it's… It's… It's alright if you can tolerate it, but if you're not well and you're trapped in it all the time. Yeah, it gets to you." (P17)

As a result of this, participants displayed quite contradictory perceptions of the region in relation to their home. For those in supportive neighbourhoods, this was a clear source of reassurance and provided them with extra resources when faced with difficulties. However, those in more challenging neighbourhoods felt this was often a greater source of difficulty for them than the problems caused by their housing.

5.2.4 Psychological connection to home

Perceptions of how the home environment was influencing participants' health was also impacted by their psychological connection to their own home. For many participants, but particularly those who had lived in their houses or the region for an extended period, there was no consideration given to moving. Regardless of their housing needs, they felt they benefited more from being in their family home and near their family members and friends.

"She [Daughter] lives around the corner, yes. […] And my grandson's girlfriend just lives further up the bank. […] They're all, like, around me." (P16)

"That's a friend I've had for sixty years. And his wife. And they always say, how are you doing? But they pop in and see you. And it's good… We've got a good network of people." (P11)

However, there were also negative connotations to this perception. In some cases, the unsuitability of their housing meant that the normality of their home life was now no longer possible. For others, the prospect of facing the stress of moving house was just too great to consider.

"Try and have some kind of normal life, aye. Just to sleep in bed next to my wife would be great." (P17)

"It's that small, you know. I had to get rid of a lot of stuff. It broke my heart to get it all removed, you know." (P23)

These factors often combined, lead to participants speaking at length about the decline they felt they were experiencing of the region. This could take the form of increased problems with neighbours via a perception of increased crime and anti-social behaviour, or a decline in environmental factors such as fly tipping or graffiti. Thus, any negative issues were felt to be more acute because participants compared them to more positive perceptions of the past.

"It didn't used to be like this. This is what they're changing. It didn't used to be like this. It didn't used to be all that rubbish flying about. You know? I can't remember any fly tipping." (P12)

"Nobody seems to care now, you know. When I moved here people would be sweeping their font and cleaning their steps and everything – you never see anybody doing that. Never. The lady across the road […] she comes out and sweeps hers. I sweep mine. But nobody else bothers." (P27)

Therefore, it was evident that the participants' connection to their wider environment was another contradictory influence. For some it was both a source of support and pride, while for others perceptions of decline were used as illustrations of how unsuitable their homes and the region in general had become.

5.3 Theme two: Participant experience of the service

Another key element of the participants' data was their experience of the service itself. This primarily focused on four areas: their experience of interaction with service staff, their experience of the home visit, their experience of ongoing advice, and their potential return to the service if they required further support. While these experiences were almost universally positive, the most crucial

discussions focused on how they felt this service worked for them. In many instances the key factors were both the approachability of the staff and also the personalised service received as a result of the home visit.

5.3.1 Experience of staff

The most commonly used language by participants when referring to the staff interactions centred on the terms "lovely" and "nice". While this may seem a straightforward concept, further discussion highlighted that such support was underpinned by a number of key elements within the interaction. These included not only being approachable, but also being informed and informative about available support and ensuring that participants felt heard and valued.

> *"She was lovely, mind. She knew her job inside out." (P11)*

> *"She was really nice. Well, I couldn't complain about her. She was really nice. And she tried her best. And her best was good enough for me." (P27)*

In relation to the issue of social isolation, as discussed above, the interaction with a named and approachable individual also had benefits in itself. Even for those participants who could not find a resolution to their housing issues within the service, the process of "having a chat" was also highlighted as a positive and welcome impact. This was sometimes placed in contrast to their experience of other services which were unapproachable and purely functional.

> *"Yeah, chatting on like we are. And it really meant a lot, that. Because, I mean, that's not their job. It's not their job." (P7)*

> *"It was like... The company was nice, like. It's just nice to see people." (P29)*

The impact of this approachability was highlighted as a positive impact by many. Participants spoke of feeling heard and valued, and in some instances felt that this process ensured their involvement in the service, where without it they would potentially have disengaged. As a result, the experience of interacting with the staff was seen as universally positive, regardless of the outcomes that followed.

> *"A lot of difference. It makes a difference. It's been a difference between getting help and not getting help. Yeah." (P17)*

> *"Really understanding and caring. I think, once you see, like... Because not everyone understands people like me [with mental health issues], and some people are frightened of us.*

Which is sad, because we're not violent people. You know, but people are sometimes a bit weary of you... " (P7)

As such, the participants' experience with staff was seen as wholly positive. While it can be easy to overlook the importance of these interactions, and their loveliness, in this instance they had multiple positive impacts. Participants felt reassured, welcomed, heard and more likely to engage with the service and the advice it provided.

5.3.2   Experience of home visit

Alongside the general reflections on their experience with service staff, the participants also highlighted the benefit given to them by the home visit to assess their housing-related health needs. As opposed to other services, which may be reliant on telephone consultations or online assessments, the fact that this service came to visit them in their home was seen as showing that they were cared for. While this links to some of the previous discussion related to combatting social isolation and the approachability of staff, the visit itself was also discussed as a key facilitator of accessing the service.

"When you've got some personal... Someone coming in your home, you feel like people care." (P17)

"Yeah, it makes you feel special, doesn't it? You know, if somebody comes to see you." (P12)

The importance of this interaction in the participants' home was also extended to their experience with subsequent services. Participants also particularly valued the approachability of staff in these instances, both in providing a helpful service but also in being friendly and communicative during their work. They reported that their homes were left clean and tidy following adaptations, and that any further queries they had were addressed to facilitate further support. Crucially, they also felt these changes were carried out in a timely manner.

"Well, they talked to you while they were doing the bits, but no… That was alright, you know. But they were nice people." (P26)

"She was lovely, and everything moved up over after she came. Everything took a turn for the better. Through her, things started to move." (P11)

Meanwhile, from a service perspective, what this visit also appeared to add was the ability to assess the participants' health needs within the context of how they were influenced by the home. For example, while participants were able to identify some of their own housing-related health needs,

how these were impacted by their environment was only identified through the home visit. This showed the extent to which unsustainable coping strategies and taken-for-granted behaviours were potentially leading to further and more significant health issues.

"I didn't know until they came and explained and... They got me an extra rail on my stairs, on the banister, but I couldn't... I used to come down the stairs backwards, and they were terrified... I couldn't manage, you know. And I was getting worried about my garden - because I love my gardens." (P23)

"So, you can't get them dry and you have to put the heating on. I bought an electric airer, but the cat jumped on it, and it... It's taped together. I'm frightened in case I set the house on fire." (P7)

Therefore, it appeared that participants valued not only the approachable service of staff, but how this was facilitated via a home visit. This not only reassured them that their needs were both recognised and being addressed, but also allowed the service to assess potentially overlooked health needs. A combination of these approaches seemed to be particularly beneficial in ensuring that unaddressed needs could be identified and subsequently met.

5.3.3   Experience of ongoing advice

Participants were also asked to discuss sources of information and services they had previously accessed in relation to their housing-related health issues. In some instances, this highlighted a dependence on informal support through family members, or through accessing other services such as Age UK. However, most often, participants were unsure who to approach, and did not consider the use of council services unless they felt it related directly to an issue such as repairs.

"Age Concern – they've helped […] They helped me with the power of attorney. They helped me fill the forms in for that. And they helped me with my blue badge for my car. But, no, I've done… With me owning my house I think… Well, from my point of view, I've got to sort it out." (P16)

"Yeah, I've got all their numbers in my... But my daughter phones. You know, she... Because she knows what's what." (P23)

A number of participants, however, stated they would be comfortable returning to the service to ask for help. Crucially, however, this was closely attached to the positive experience of the staff discussed previously. Participants identified that they would be happy to return to a named worker who they felt they could now trust to keep their best interests at the centre of future services. When reflecting on sources of advice, participants both used the service worker's name and stressed the importance of their previous approachability.

"I think I would phone [Name] and ask her advice, yeah. And I think she would point me… If she couldn't help, she would point me in the direction that would give me help. Yeah." (P17)

"Oh, I would ring [service worker], and I think if he couldn't help he would... Just because of the kind of person he is, I think he would probably make enquiries and put me in the right direction if he could. Even if it didn't relate to what he's actually, personally dealing with, within his job - if you know what I mean? I just got the impression from him that he would go above and beyond." (P32)

This view of prioritising future support that was proven to be personalised through their previous experience was often contrasted with use of other services, particularly those provided by the council. While some participants felt they had had good support from the council in the past, others sometimes placed such services in direct contrast to the approachability they experienced here. Rather than a named person who had taken an interest in their needs, council services were defined as a faceless and, at times, inflexible other.

"The only time I really asked the council was through the wheelie bins. […] And the girl that answered – she had a bit of an attitude. And she said, well, how do you expect them to know where to put your wheelie bin, if you haven't got your numbers on?" (P27)

"And you get in touch with them again – oh yes, you're on a… We've got a backlog of this, and a backlog of that. But somebody… They will be in touch with you when they're ready to call. And I'm still waiting, so… Nothing… Nothing is getting done." (P37)

As such, the service was not only seen as a future source of support and information because it had facilitated a previous outcome. It was also seen in a more beneficial light because the mechanisms underpinning their previous experience (e.g. approachability of staff and the home visit) had made participants feel heard and valued in the first instance. Although this was not universal, there were several participants who contrasted this service with their experiences of council services elsewhere.

5.4 Theme three: Healthy Homes service impacts

5.4.1 Changes to the home

Participants discussed a range of changes to their home environment that had either been carried out by the service, or were in the process of being investigated. These most frequently related to issues of fuel poverty (such as heating advice), and damp or mould within the home. However, in some

cases minor adaptations / modifications to the home (such as extra banisters or stair lifts) had been carried out. These changes were often seen as helpful by participants.

"Oh, she made a massive difference. That stairlift, it's… It's… It's a gift." (P11)

"And the fact that they've tried to make my house a warmer house, and not having to put the put the heating on full blast." (P7)

Such changes were not only received positively by the participants, but they also had a number of subsidiary impacts on their experiences of daily living. Many of these related to their ability to use their home environments in a safer and more supportive way, particularly in relation to their personal care. Examples of this included those with mobility problems and COPD being able to go upstairs to use the bathroom, or those with mobility issues being able to use the toilet without being reliant on dangerous coping mechanisms.

"That's a bonus. That is a bonus, that. Getting up and down the stairs for… We've only got a toilet upstairs. Otherwise, I've had to go up on my backside and it takes me… You've got to go before you want to go." (P11)

"Oh, that's helped me. Uh-huh. Just so I can get up. Because there's nowhere… You see, I used the thing in the sink, and I was thinking I could fall, you know. Because it's tiny. But that helps a lot." (P23)

Once again, this echoes the discussion earlier whereby the problems within the home were having multiple interconnected negative impacts on participants' experience. Therefore, the potential that these issues could be addressed not only alleviated the direct impacts, but had several knock-on effects throughout the person's lives.

5.4.2 Psychological impact

Addressing people's concerns not only impacted the housing issue itself, but also helped to combat issues such as stress, anxiety and social isolation which related to it. As stated previously, the participants valued the personal visit, and felt this in itself had a positive psychological impact, but also feeling like their issues were being addressed gave them increased peace of mind.

"People like me need emotional support. […] And by talking to her, sort of… Like, even if she couldn't do anything, by talking to her it was like… Somebody is there for you. For you. By yourself – somebody is there. And, you know, it's not like letting it all out – because she's not going

to pass it on to somebody else as well. So, you're just letting it all out, and it sort of takes the pressure away from inside you." (P6)

"And she went, right-ho, I'll... It's all in hand now. I'll see to this - don't you worry. And off she went. And I was, aye, I'll bet - it'll be weeks. The next day... You know what I mean? You could've knocked me down with a feather." (P17)

This was particularly important in relation to issues such as stress and anxiety and their impact on fuel poverty. Those experiencing particularly cold homes felt that adaptations and modifications both helped maintain a warmer, healthier environment and reduced their concerns over rising fuel costs. Throughout the participants there was evidence that a reduction in worrying about their home issues was an outcome for many.

"The gas. So, you don't... You don't worry. You can leave it on all the time." (P23)

It was also particularly noticeable that changes made by the service did not need to be significant to have a significant impact on people's lives. One participant, who discussed their mental health issues, highlighted that something as small as a change to a light bulb and light fitting could have a massive impact on their on their daily life. Without it, they felt that every time they turned on the light resulted in a spike in stress and anxiety about energy costs.

"And the anxiety through those light fittings was a nightmare. Every time I flicked the light on I was, like, oh, my God - those lightbulbs, those lightbulbs." (P7)

"Like I say, even to get free lightbulbs - people might think, oh, that's not a lot. But it is. Lightbulbs aren't cheap now." (P7)

Thus, this highlights the multiple positive impacts the service had for some participants. It not only addressed the housing needs that were assessed as having a negative impact of people's lives, but also helped to combat the subsidiary psychological impacts discussed previously. This could be seen as helping combat the stress and anxiety people were experiencing over their home condition, and as a result even produced significant impacts from small changes.

5.4.3 Prevention

A crucial impact from the service was also its preventative impact. None of the participants discussed having made pre-emptive changes to their home environment to address issues such as declining health status or age-related adaptations. In fact, as discussed earlier, most post participants showed a lack of awareness of home needs and the services that support them.

"I: …if you had some mould, if you had, you know, draught issues… Who would you get in contact with to sort that out?
R: Just some professional of some sort." (P29)

"Sort it out myself. Go on the internet. […] And I'll do my research and find out who's the better builders." (P16)

As a result, when asked what would happen if they were not contacted by the Healthy Homes service, most participants highlighted that they would only address health-related housing needs when they reached a crisis point. Most would wait for a significant health issue, such as a fall or heart attack, before even feeling that their home environment should be addressed. The fact that the service accessed these participants, and the issues impacting them, was therefore a crucial outcome.

"With having to go into hospital. It brought things to a head." (P11)

"That's what my daughter said. You've got to stop all, you know, getting on your high horse. You know, you are getting very fragile." (P12)

Although an extreme example, one participant even felt that, without this service, they would probably have "dropped down dead" before making any changes.

"Until I dropped down dead, aye. Yeah. Which probably wouldn't have been very long - keep dragging myself up the stairs. My… I've got aggressive heart disease as well as COPD… And my chest is working overtime. So, to add extra stress to it, dragging myself up the stairs all the time, I'm putting myself at risk. Yeah, I'm putting myself at risk of a rupture. Yeah? I am. It's not safe for me to do it. But a simple thing like going to bed with your partner, a nice cuddle..." (P17)

As such, these participants illustrated the lack of preventative awareness people have of their home environments, and that without a similar service they would allow problems to progress to crisis point before addressing them.

5.4.4 Personalised service

A final outcome identified in the data, and one alluded to earlier, is the value participants placed on feeling heard and included by the service itself. With this in place, participants spoke of the benefits of feeling "in good hands" and, as a result, were more reassured that problems (no matter how complex or challenging) were being investigated and likely to be resolved.

"It's like a personal service, yeah. […] If you're assessing people like that to make... Because it's a big decision to make. Where you're going to live and that. It's quite a responsibility she's got. To get it right. And she'll only get one crack at getting it right, I bet. Yeah. So, it's a hard job for her. It is. But I felt in good hands." (P17)

These benefits even extended beyond the service and housing issues themselves, and included an overall view of support in general. Feeling that their individual needs were being identified and attended to, for some, meant that they developed increasing trust in the council and individual services moving forward.

"I would probably be very upset and, you know… And, you know, lose trust in things. Yeah, if that hadn't happened. I would definitely lose trust and say, well, there's… The help… I would think to myself, they help everybody else, but I'm here and they don't help me." (P12)

Thus, while there were many housing and home-related outcomes within the service, their impact on people's perceptions of the support available was also important. By feeling heard and valued by such a service, the participants appeared to be more reassured that support was available and were, thus, potentially more likely to use it if required.

5.5 Theme four: Accessibility

5.5.1 Perceptions of needing help

Perceptions around help seeking emerged as a strong theme in the data which helped to underline the value of the Healthy Homes model. Participants reported finding it difficult to ask for help for a number of different reasons and emphasised their stoic and self-reliant outlook. Difficulty approaching for help was associated with feelings of pride, a desire to remain independent, and embarrassment about not coping or needing to rely on others for financial support.

"[If adaptations hadn't been put in] I would've just got up and got on with it, like I do with everything else. […] It's what I do – I struggle through. You know, I'm not one for sitting, stewing about things. I get up and get on with it, you know." (P26)

"I'm fiercely trying to be as independent as I can. I don't want to ask for help. " (P12)

As such, participants often minimised their own problems as insignificant in comparison to those experienced by others and expressed a reluctance to accept resources that could benefit people urgently in need of support.

"Like, he didn't want to ask for help because he thinks there's old people suffering. There's ill people worse than me. But he is suffering." (P17)

A tendency not to seek out assistance was not only connected with a 'keep calm and carry on' mentality or embarrassment about relying on others, but also participants described a lack of awareness about their entitlements to available services or support. Many held assumptions about a lack of eligibility which acted as a further barrier.

"Yeah, because I don't think I would get it anyway. So, what's the point in asking?" (P27)

Similarly, prior negative experiences with the council and bureaucratic processes had sometimes led to a lack of confidence in regards to the ability to navigate systems, and despondency around whether requests for help would be acted upon.

"Before they made me very unwell. Mentally. Yeah? Because everything I was producing was getting kicked to the curb. They said... We want an expenditure... Income and expenditure. Right? So, I filled in the income and expenditure for our house. Handed it in. [...] Little obstacles like that might be nothing to someone, but to someone like me it's a big... It took me all my time to get that piece of paper to you, and now you're telling me it's no good." (P17)

"I mean, I... I'm not being awful – I laugh at the council. You report a repair and it's still sitting months later for them to get in touch with you." (P37)

All of these factors discouraged people from initiating requests for support and meant that, without contact with the Healthy Homes service, participants were likely to 'struggle through' with issues in the home remaining unaddressed and continuing to impact their health. Indeed, the Healthy Homes team were noted to play a key role in addressing these barriers to help seeking, not just through their assistance with navigating services, but also by emphasising people's rights to support on offer and helping people feel comfortable in taking this up.

"He didn't make me feel so much like I was... Getting something for nothing or, you know, taking advantage of something. He... He very much made me feel like, no, you have worked. No, this is your entitlement, you know. You do need help. Which was very nice." (P32)

5.5.2 Older people

Within these perceptions of asking for help, it was noticeable that certain demographic factors were potentially influencing a reluctance to utilise services, even when need had been identified. A key area which related to this was age, where older participants spoke of their previous refusal to

proactively use services because they did not want to appear needy, be lacking independence or asking for something they were not entitled to (even though they acknowledged that they were).

> *"Our generation don't ask for a lot of things, unless we've got to. And we're at the stage… Having to fill these forms in. It's like begging for stuff. You worked all your life, you paid your taxes, you paid everything... And you feel as if you're asking for something you're not entitled to." (P11)*

> *"My generation - you tend to think you're sponging. You know, when you've always worked and you've always... You know, when you've acquired everything yourself through hard work, and then you can't... " (P32)*

This was seen by some as a key issue for the service moving forward. This was because, having been in receipt of the service, participants could see its value, but also understood that they would not have proactively utilised it. As a result, they stressed the importance of targeting this population to ensure they were no longer overlooked.

> *"To survey older people who won't ask for the help. I know a lot of people won't ask for help. They're proud and they think… They think you should earn your way. And you shouldn't ask for things. You feel like you're asking for something you're not entitled to. It's… I know it's wrong." (P11)*

5.5.3 Tenure

Differences were also apparent in regard to perceptions of accessibility and access to services and support depending on participant's tenure. In the face of long waiting and limits in the housing repairs or adaptations that are possible, council tenants suggested that the onus had often fallen to them to try and address issues in their homes.

> *"I'll just try and save some money up to get the bathroom… The bathroom altered... I don't think I've even applied for a wet room, or a walk-in shower. He more or less put me off by saying that you probably won't get one." (P11)*

Meanwhile, homeowners often saw maintenance and improvements to the home as entirely their own responsibility, and viewed themselves as unlikely to be eligible for any assistance with issues relating to their home.

> *"With me owning my house I think… Well, from my point of view, I've got to sort it out […] Because I own my property – the property is mine. I've got to sort everything out." (P16)*

"You know, I don't expect to have things done because... It's my own property. So... It's up to me, isn't it? You know." (P27)

Indeed, there was some perception of inequality here in regards to decision making about entitlements.

"he said, oh, you're not entitled to one [a grant for a new roof]. So… Yet other people got one in the street. But we didn't." (P27)

Findings on tenure point to a potentially hidden population who may be missed within interventions which relate to the home (or use this as an entry point for other forms of support), where these are reliant on self-referral. It also highlights a key strength of the Healthy Homes service, which, in initiating a discussion about home environment for people regardless of tenure, is able to identify the support needs of those who own their homes but may be living in isolation and / or in housing that is ill suited or adapted to their needs.

5.5.4 Awareness of the service

During the research process it became apparent that some participants were unclear about which arm of the council had contacted them and found it difficult to distinguish between members of staff from the Healthy Homes team and other professionals. This is likely to be due, in part, to the signposting nature of the service, which works alongside and refers clients into a range of other services to address client needs holistically. It is also likely to result from the complexity of client circumstances, which can mean that they receive support from a number of different professionals and teams.

"I think it was her. I don't know. Or the Age Concern. I can't.." (P29).

"No, they just... They must be from the occupational therapists or... Some has got, like, a nurse's uniform on, you know. And... Oh aye, they come now and again. Or they phone. To see if I'm okay. Especially in the winter. The winter months." (P23)

As such, some clients suggested that they would have appreciated more information about the service, what it does and what is on offer. This was also felt to enable greater targeting of the service and resource in cases where people didn't need a home visit.

"I would've liked to have known more what it was all about, because I could've saved her the time coming around. Saying, look, I don't need any help. Somebody else could've had that hour she came." (P16)

Relatedly, others suggested that there was potential for greater education and awareness raising of the service through additional channels, in order to reach those who could benefit.

"More accessible. Yeah, it needs to be not so much advertised, but people need to be made aware that there's a service there. I was only made aware because of a health and wellbeing coach from the doctors. If I didn't get that from the doctors, then I would never have known about that service, and nobody would've told me." (P17)

Confusion distinguishing between Healthy Homes and other services may simply indicate that these boundaries between council departments and other services are of less concern to clients than providers. That said, it does have some potential implications in regards to ensuring clarity of understanding in relation to client journeys and who they can contact in case of any need for follow-up support. It also has implications for approaches to evaluation in order that we can fully capture and demonstrate the benefits and impacts of the Healthy Homes services for clients.

5.6 Theme five: Future direction

It was clear from interviews that the Healthy Homes service was highly valued by participants. Positive impacts included not only physical improvements to homes, but also helping participants to identify and feel more comfortable taking up their entitlements. The service often instilled a sense of hope among participants that (sometimes longstanding) issues would be addressed, which in turn, was reported to improve wellbeing. As such, in many cases participants simply reiterated their satisfaction when asked what would improve the service overall. However some insights were nevertheless evident to help inform future service development, as detailed below.

5.6.1 Ongoing support

Participants often described unresolved issues with their homes, ongoing efforts to resolve housing issues, or having endured lengthy waits for repairs or referral outcomes when dealing directly with the council.

"Next door – she said they were supposed to be changed to… Something had to be done. Like, wooden or laid with something – they were going to do something. And they didn't get around to it – the council." (P6)

Involvement of the Healthy Homes team was described by participants as having kick started and accelerated assessments or processes for obtaining repairs, with this providing hope that longstanding housing issues would be addressed.

"because they got in touch with the council. If I got in touch with the council it would've probably been, oh, it'll be two or three weeks. And it was only last week, and here they're coming this week" *(P38)*

Conversations as part of the Healthy Homes assessment not only helped to identify and signpost clients to available support for housing issues (the 'bricks and mortar' of the house itself), but also broader issues such as social isolation, which - in some cases - participants had not identified themselves.

"She said, do you go out very much? I said, I go out with my friends for a bit lunch once a week – and she said about her grandmother… She went out, but she joined an over-60s club. And she said there's a good one down in [place name]. They've got loads of leaflets. And she advised me to go there to have a look. Up to now, I haven't been. But I will." *(P27)*

However, given the nature of referrals and signposting timeframes, at the point of their involvement in the research, some participants were still awaiting outcomes following the initial assessment or felt issues were left outstanding.

"There is a few things that they could do in here. Like more sockets and the likes of, like… The passage lights here – but you've got to come… To go to your bedroom, turn that bedroom light to come back and turn… Because there's no switch at the other end. That's one of the big things." *(P26)*

"He did assess the house. The radiators. And he saw the mould and that, but nothing was done about it. He hasn't got anything to do anything about it." *(P6)*

In some cases, pragmatic considerations also prevented identified solutions from being actioned, leaving issues potentially unresolved.

"They suggested putting an extra banister on, but when they came and examined it, the walls weren't right for it. So, I didn't get it." *(P29)*

In conjunction with these findings, participants suggested that they would have appreciated ongoing communication and support while awaiting the outcomes of referrals for repairs or other services in order to stay informed of any progress, developments or roadblocks.

"I think it was only two. I've had about three phone calls off her." *(P29)*

"the key message is ... I would have [staff member] seeing it right through to the end. Yeah, you start the journey and you see it through. And then it gives… We get a sense of achievement and she does as well." (P17)

Ongoing communication was also important, not only in ensuring clients were informed throughout the process, but also in providing staff and clients with a shared sense of accomplishment, and enabling clients to show their gratitude to service staff when issues were addressed.

"Instead of just setting up jobs, and then leaving to set up more jobs. It would be nice to see a job through to the end and be able to thank them for their help and that. Yeah. That would be good." (P17)

Connected with findings explored above regarding service awareness, some participants were unclear about if and how they could approach the Healthy Homes team for further support where needed. For others, this ability to re-initiate contact was more apparent and was greatly valued.

"I had one point of contact and then, when she was leaving, she went, any problems arise or you feel you need to chat, I'm always there. Just phone. Which sealed the reassurance that, eh, well, if I've got a question later, I could just ask her, and this and that." (P17)

5.6.2 Perception of limited resources / fairness

While participants recognised and valued the role of the Healthy Homes service in helping facilitate timely access to support, they also appreciated the broader context within which the service was operating, with limits in council resources and the availability of housing stock readily acknowledged.

"Councils are…short of money." (P11)

"Well, they've done what they can and... You know, they can't do any more. I suppose they've got a budget too, haven't they? So they've got to stick to their budget - do you know what I mean? No matter what they really want to do for you, they can only do what they've got the money for.'' (P7)

Indeed, participants expressed empathy for Healthy Homes staff, who were described as doing everything they can, but inevitably restricted in the changes, repairs and improvements they could access for people.

"I know the funding is really, really horrible for these people. And I feel sorry for them because they feel helpless when they come here." (P6)

As such, clients often tempered their expectations in regards to the outcomes that they could receive, distinguishing between repairs or changes that could be made in an ideal world, and those that could realistically be obtained in this climate.

"Well, I'd like the council to give me a bungalow […] You know. But I know that's like asking for gold." (P27)

In some cases, council protocols as opposed (or in addition) to financial constraints appeared to limit changes that could be made to people's homes in order to protect and support their wellbeing. For example, the following participant reported that they were not permitted to have a ramp removed from outside their home, despite this posing some risks to their safety.

''They won't take that ramp out because, when I signed the agreement, that goes with the bungalow. Well, I didn't know. I should've asked them to move it there and then, before I signed it, you know. Because I keep getting… I'm a shuffler when I walk, you know. And my feet keep getting caught on it, and I fell down a few times – haven't I? And it's because with the spikes on the bottom for to grip the wheelchairs." (P37)

Indeed, participants suggested a need for individually-tailored forms of support and allocations of funding in order to accommodate variation in personal circumstances and expressed caution about the application of standardised protocols, decisions or assessments.

"Repairs and things like that – it's like… They're already doing things like handrails and… What's it called? Lifts and things like that. But it has to be individualised. It has to be, like, look this funding has to be for this person, because this person needs it in a different way. I think it has to be like that, because it can't be just generalised, like, oh, you get that for that. That for that. And that's it… Like, if that person needs that much more, it gives them that much more… I've got a completely different problem to other people. And there'll be a person which is more worse off than me, that would need a lot more help. Which… Which… They'll need a lot more funding. So, you can't just generalise. I think if I had an unlimited amount of money to improve, it'll be… It'll be like, individually helping people." (P6)

On the other hand, some participants perceived an element of unfairness in regards to methods of assessing housing needs or entitlements, with those who are employed or living on private pensions seen as lacking support in particular.

"I think you've got to either be on pension credit or some sort of pension or... For to get help. And I'm not on anything - I've got my private pension and my old-age pension. And I just manage on them. But if you got this pension credit thing, you seem to get everything that's going. My friend is on it, and she gets everything." (P27)

"But I just feel like sometimes I think they forget the people that work. Because everyone needs helps. Everybody needs help with their insulation. Everyone needs help with their lightbulbs. I mean, lightbulbs are so expensive now." (P7)

As such, while participants understood that the council and Healthy Homes team were limited in their ability to address problems in their homes, the data also demonstrates a degree of resignation in regards to changes or improvements to the home that could be negotiated.

5.6.3 Timing

Given the challenges participants identified in regards to asking for help and long waiting lists for repairs to the home, approaching clients earlier was another key recommendation identified.

"It's get in touch with people sooner. Especially pensioners. Get in touch sooner." (P11)

As seen here, this was particularly important for older generations, who were felt to be less comfortable recognising and taking up their support entitlements. However, this more preventative approach was also thought to be important in cases where participants were living with health issues that are exacerbated by issues in the home.

"The only thing I would say that South Tyneside Council need to do is a little bit more towards, like, people like us. Genuine people like us. Who have got the problem. And my doctor has certified me blind, and my health issues… Everything is on record. And if they can help us with things like mould and keep our home healthy and things like that – it would be really good." (P6)

5.6.4 Difference the service made

However, the final reflection on the future direction of the service is the overall consideration of the impact it had on participants' lives. As was discussed throughout the qualitative data, participants spoke at length about the positives of their experience. This included, but was not limited to, the approachability of the staff, the personalised nature of the home visit, and the physical and psychological benefits of the ensuing changes that were made. While these outcomes are multifaceted and sometimes difficult to quantify, the overarching experience was one of feeling reassured that their current difficulties were being acknowledged and addressed. As such, because

the participants had many contradictory and complex relationships with the health impacts of their home, the service allowed some of this burden to be alleviated. As the partner of one participant stated, the primary impact the service had given him was "hope".

"He's got hope […] Hope. Yeah, he had no hope. Like, he was just suffering. And it's very closed in - when you're feeling claustrophobic and you're closed in, it's not good for him. It's not nice to watch." (partner of P17)

6. Synthesis, conclusions and recommendations

6.1 Synthesis

A high level of correlation was found between the quantitative and qualitative data strands during the synthesis phase. The key elements of the quantitative findings (participant complexity, fuel poverty, housing risks, condensation / mould, and other factors) were all found throughout the qualitative data. Meanwhile, not only did the qualitative data elaborate on these themes, they also provided an understanding of the participant experience of the service which illustrated how these issues were addressed. A key additional finding within the qualitative data, therefore, was the importance of the approachability and personalised nature of the service in both facilitating outcomes, but also as an outcome in itself. There were no key gaps or negative cases within the synthesis of the data to be discussed.

The table below illustrates the key findings of both strands, and how each enhance an understanding of the other.

Key thread	Quantitative data	Qualitative data
Participant complexity	Service users were experiencing multiple health issues / risks and multiple housing issues	The participants highlighted a range of complex concerns related to their home as both housing and environment. These often exacerbated existing health concerns and created high levels of stress and anxiety.
Fuel poverty	A large proportion of service users were worried about the ability to heat their homes and pay for rising heating costs.	Fuel poverty issues impacted many participants. This included both problems in heating their own home, exacerbation of health conditions (e.g. COPD) and worries about meeting the costs of bills.
Housing risks	A large number of service users were identified as being assessed as having housing risks.	Participants spoke of discrepancies in their housing-person fit, whereby their homes no longer supported their health needs. This included physical issues (mobility impacting the ability to climb the stairs) and mental health issues (worries about costs, home issues, social isolation and neighbours).
Condensation / mould	A large proportion of services users were assessed as having signs of condensation / mould.	Participants spoke of the difficulty of living in housing conditions which were difficult to heat or showing signs of mould. This both

		exacerbated health conditions, and also increased social isolation for those embarrassed to have visible signs of mould.
Other factors	Service data highlighted significant levels of additional concerns, such as social isolation and anti-social behaviour.	Issues of social isolation were found throughout the data, and these were often exacerbated by poor housing conditions. Anti-social behaviour was also discussed, particularly in relation to the view of the home within the wider neighbourhood environment.
Impact of the service	Not captured.	Participants valued the service and its personalised, accessible delivery both as a preventative facilitator of good outcomes, and also as an outcome in itself.

Table 10: Synthesis between quantitative and qualitative data

6.2 Conclusions

This evaluation adds to the weight of literature suggesting that those who are most vulnerable in society continue to be the most at risk of experiencing poor housing, and that this risk can create or exacerbate poor health conditions (Daniel et al. 2021). This creates a cyclical relationship in which poor housing impacts on health, and further increases people's dependency on a home environment which is increasingly no longer meeting their needs. This is particularly challenging for services for a number of reasons, but most notably because these interrelated factors are often complex and difficult to address. Meanwhile people themselves continue to think of their housing-related health in a solely reactive way, and continue to try and cope in unhealthy home conditions due to their psychological connection to the environment (Adekpedjou et al. 2018). This can create a series of negative impacts related to physical health (e.g. poor mobility and risks of falls, exacerbation of COPD) and mental health (e.g. stress and anxiety about fuel bills and poor housing conditions). Addressing these home-related issues must be a clear priority for services and individuals.

The quantitative data provided by the service reveals the extent of this problem. It illustrates both the factors such as Category 1 housing hazards and fuel poverty, but also the complexity of the issues people face at home. These relate to the poor standard of their home environment, but are also aligned closely to psychological issues such as social isolation and place-based concerns like deprivation and anti-social behaviour. The data also highlights the close relationship between these issues and vulnerable populations, and reflects ongoing concerns that those experiencing financial difficulties are more likely to be struggling with heating costs, and those experiencing health concerns / ageing are more likely to be experiencing a lack of supportive housing (English Housing Survey, 2021). However, the quantitative data also supports the potential benefits for addressing these

concerns, and future evaluations should consider the cost savings of a service which can help resolve these issues. Even within the period of this evaluation, it is estimated that a saving of £71,245.59 per annum for the NHS could already be achieved by supporting those included in the service. Wellbeing outcomes and reduction in stress and anxiety may also be found.

Qualitative data in the study also reinforces the multiple benefits of face-to-face housing advice that is personalised and provided by approachable staff (Aitken et al. 2017, Blank et al. 2021). This not only allows the service to fully understand and assess the difficulties that people are facing, but also provides a positive impact in itself by making service users feel valued, heard and cared for. This, in turn, makes them more likely to engage with services in the future. What is particularly crucial here is the extent to which this support could be seen as preventative. Participants themselves spoke of their low levels of awareness of how housing issues could be resolved, and also stated that, for some groups, they would be reluctant to approach services and ask for help (particularly older people and homeowners – two groups which are particularly vulnerable in this area). Without a housing service that proactively approaches these residents, they highlighted that they would wait until a crisis point before addressing their needs.

However, the development of the service, and those similar to it, also requires high-quality and clear data to support it. There is evidence here that a full health economics evaluation could highlight high levels of savings, and the discussion of the qualitative impacts also illustrates potential wellbeing, quality of life and stress / anxiety / mental health benefits. The challenge, however, remains in capturing the less quantifiable impacts, even though these were particularly strong within the data. As stated above, the participants valued being heard and feeling that services cared for their need. This meant that even small changes like a lightbulb could have a significant impact, and that even a simple visit from a service could give a person hope that their situation could change.

6.3 Evaluation limitations

There are several key limitations to be considered when reviewing these conclusions. Firstly, in relation to the quantitative data, it is important to note issues within the data provided and analysed. This includes the limited number of cases discussed (n=48) and the service's focus on three primary eligibility criteria, which means that the data are not representative of the general population. Similarly, key information specific to each service user (e.g. tenure / age) was unavailable, and is not discussed within the analysis. Most significantly, however, although potential health-related costs are discussed, it should be noted that outcome data is currently limited and maybe be unreliable. Without this, it is difficult to ensure high levels of rigour in terms of outcomes, and the costs provided are purely illustrative of potential savings at this point. As such, caution is recommended when utilising the findings.

Within the qualitative data collection it was noticeable that several participants were unclear about their previous use of the service, and its impacts. This low level of awareness means that, at times, it was unclear whether the service experience or outcomes being discussed were specific to Healthy Homes or another service. Although this point was clarified where possible, it may have impacted the discussion of outcomes. Similarly, several participants in interviews either could not remember the full details of the service, or had only recently been in receipt of a visit, and therefore could only talk theoretically about impacts. However, it has been ensured that this was accounted for in the analysis process and presentation of the findings.

6.4 Recommendations

As a result of this discussion, the following recommendations are provided from the evaluation. These are not presented in any hierarchical order, but are instead provided to give an overview of future development.

1) Ongoing support to support cases through to a resolution and increase service navigation

As highlighted in the findings, although many participants outlined positive outcomes from the service, there were also those who felt they did not receive support to address their issues or had subsequent issues that required attention. Although some participants also stated that they were comfortable with contacting / returning to the service, others did not mention this as a possibility. Ensuring that ongoing support is available will allow sustainable changes to be made, future needs to be addressed and impact other recommendations such as long-term data collection and awareness raising (see below).

2) Accurate longer-term data collection for outcomes and downstream costs

Linked to the above, longer-term data collection will allow the service to understand what outcomes their service users achieve. Currently, data collection only relates to the advice and signposting given, whereas participant experience here highlighted that this was occasionally unavailable or currently unresolved. Ongoing involvement and longer-term data collection will allow the service to continue to support people in these scenarios, and potentially facilitate subsequent positive outcomes. Also, from an evaluation perspective, it will allow both clearer capture of outcomes and downstream use of services which may facilitate a full health economics evaluation.

3) Awareness raising about the Healthy Homes service

There was limited awareness of the Healthy Homes service within the participant group, and this sometimes resulted in a lack of clarity over which services had been received. Participants also

illustrated that this could be a barrier to future use of the service for groups who needed it most. They felt that with greater knowledge that the service was available, more people in need of support would come forward sooner and address their issues before crisis point. Clearer information about what the service involves, what it provides, and who it is eligible for could greatly increase its impact.

4) Targeting future service delivery on key groups

Related to the above, a key finding in the qualitative data was that certain populations were viewed as less likely to see themselves as eligible for Healthy Homes support and approach the service. This was particularly the case for older people (who were reluctant to come forward to ask for help) and homeowners (who were likely to see themselves and ineligible and try and source / pay for support themselves), despite both of these groups being at greater risk of experiencing hazard and risks at home (English Housing Survey, 2021). Ensuring that these groups are targeted in raising awareness of the service is likely to have a significant impact in terms of identifying and supporting those most at risk of housing-related health issues.

5) Potential collection of quality of life, wellbeing and stress / anxiety measures for future evaluation

While longer-term data collection on housing-related impacts will provide a stronger overview of the outcomes from the service, this study highlighted that there were several subsidiary issues which were addressed alongside this. Not only were many participants experiencing mental health issues which were exacerbated by their home environment, even those who were not spoke often of the stress and anxiety caused by housing issues. In addition, they also highlighted the positive mental health support given by the service itself. To fully capture the overall impact of the service, measures related to these issues could be required. Even without these, it is crucial to note that the positive impacts for participants were not always identified as relating to housing improvement, they were also from feeling valued, heard and supported by the service.

6) Sharing of best practice concerning face-to-face and accessible advice

The benefits of providing advice via face-to-face consultation with a named individual are found throughout the literature (Aitken et al. 2017). This service provides further evidence to support this position. While the advice and service provision itself was clearly important, much of the participant experience was defined by the approachable nature of the staff, and the home visit which both assessed their need and made them feel valued by the council. Although this model may not be available in every service, its positive impacts should be shared wherever possible. For some participants this approach was crucial in their overall experience, both in terms of identifying their need, but also in influencing their continued and future engagement with services in general.

7) **Understanding of complexity of housing and health issues across all services**

The issues faced by service users in both the quantitative and qualitative data highlighted the complex and multi-faceted problems people face in terms of their housing-related health. This is because not only are people often experiencing complex health issues in general, but these are often impacted by both people's living situation and their contradictory relationship with their homes (both in terms of their housing, but also their wider view of the area). While this service illustrates these concerns due to its focus on the home as a broader context, it is important that other non-home-focused programmes consider the impact of these factors. Healthy housing, and the lack thereof, is a constant in the vast majority of people's lives, but not always considered as such within services.

8) **Alignment with a broad range of programmes and services**

The quantitative and qualitative data highlighted that services users were often experiencing a range of issues within their homes that were not directly related to their housing needs (such as social isolation, and anti-social behaviour). Due to people's complex relationships with their home environments, this is not surprising, particularly in the fact that they can often have a reciprocal relationship with people's declining or changing health status. It is crucial, therefore, for the service to continue to develop links with a range of services beyond the home to address this (debt advice, emotional support, anti-social behaviour, befriending, etc.). Just as people bring with them complex problems, it is important for the service to continue to grow a complex set of services to help them navigate these.

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