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Greater Manchester Social Housing Quality Fund: Tenant Research

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SUSTAINABLE HOUSING & URBAN STUDIES UNIT

The Sustainable Housing & Urban Studies Unit (SHUSU) is a dedicated multi-disciplinary research and consultancy centre in the School of Health and Society at the University of Salford. It brings together researchers drawn from a range of disciplines including social policy, housing, mobility, urban geography, environmental management, psychology, social care, and social work.

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The **Greater Manchester Combined Authority (GMCA)** is made up of the ten Greater Manchester councils and Mayor of Greater Manchester, who work with other local services, businesses, communities and other partners to improve the city-region.

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The independent analysis and conclusions of the report are those of the academic team and do not necessarily represent the views or policies of GMCA or the housing providers.

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Executive summary

The Social Housing Quality Fund

The University of Salford have conducted social research in order to provide insights on the implementation and impact of the Greater Manchester Social Housing Quality Fund (SHQF). With a particular focus on damp, mould and condensation, this fund provided £15 million grant funding to social housing providers in order to facilitate improvements in housing quality. Culminating in April 2024, the programme covered 16,177 properties across 17 housing providers in Greater Manchester and saw the implementation of 22,155 measures including ventilation systems, mould eradication, smart sensors, replacement of doors and windows, and new bathrooms.

This study

The research comprised an online survey and a set of qualitative semi-structured interviews. The survey was distributed on behalf of the research team by the housing providers to all homes in receipt of support through SHQF. Responses were received from 582 tenants. Taken from this sample, 41 interviews were conducted, recorded, and transcribed. Summary statistics were produced from the online survey responses and are available as charts throughout this report. We also explored statistical relationships in order to understand how experiences of housing quality and the SHQF programme differed across social groups, and people's prior experiences of damp, mould and condensation. Significant findings are presented throughout the analysis in our findings (chapters 4-9), and a detailed account is provided in Appendix C. The interview transcripts were analysed thematically, and this evidence is presented in the form of quotations.

Prevalence of damp, mould and condensation

Our survey demonstrates that issues with damp, mould and condensation were prevalent in the homes of our survey respondents before SHQF (Chapter 4). To some extent this reflects the nature of the programme, in which housing providers targeted those homes most in need and likely to be vulnerable to these issues. It is unlikely, however, that our sample is atypical, and the extent of damp, mould and condensation therefore demonstrates the need for programmes such as SHQF.

The majority of respondents experienced these issues throughout the year, whilst a minority noticed them in the winter only. Tenants were aware of the possible causes of these issues and tried to address them but often felt that they were limited in what they could do. This related to issues with the design, condition and suitability of their home and well as their own situations and resources: for example, struggling to afford heating or needing to dry clothes indoors in small properties, especially for larger families.

Experiences of damp, mould and condensation

Given these conditions and the prevalence of damp, mould and condensation in particular, respondents shared with us their experiences and coping strategies (Chapter 5). The most common of these involved ventilation, whether using fans or opening windows and some used heating to try to mitigate the issues. Some responded with behavioural changes such as avoiding drying clothes indoors, changing cooking patterns and having shorter showers. Others bought a dehumidifier, or actively cleaned away mould. Levels of satisfaction in the effectiveness of these strategies were fairly low.

Health impacts

These experiences with damp, mould and condensation had direct and indirect impacts upon health and quality of life (Chapter 6). Nearly two thirds (63%) of survey respondents reported that damp, mould and/or condensation affected their health and/or the health of others in the home with vulnerable groups including young children, older adults, and people with long-term health conditions affected.

Approximately one-third of respondents indicated that they had talked to a doctor or other health care professional about this health impact. Interviewees gave examples of impacts upon physical health, particularly for those with asthma, and in some cases health professionals had told them that these conditions were highly likely to be caused or aggravated by damp, mould and condensation. These impacts related not only to the damp, mould and/or condensation itself, but also sometimes to the cleaning products used to address them. Mental health was also affected, not only by the experience of living in poor housing conditions but also the way this impacted upon home and social life: examples included not feeling comfortable to invite family and friends to visit, worrying about smelling of damp, and sleeping in the living room to avoid a damp bedroom.

Communication, advice and support

One of the challenges for tenants related to seeking assistance from their housing providers (Chapter 7). Frustrating experiences often added to the mental health impact of housing quality issues. This is not necessarily a reflection of time-limited programmes such as SHQF, but rather of the ongoing relationships with housing providers. Experiences were clearly mixed: individuals were willing to compliment their housing provider in one area of work and be critical in another.

This wide range of experiences notwithstanding, some of these experiences have created a legacy of confusion and scepticism and this affects the willingness of individuals to engage constructively with their housing provider, which in turn affects the delivery of programmes such as SHQF (Chapter 8). Responses suggest that tenants did not have a good understanding of SHQF, its purpose, or the value of particular interventions. It was sometimes the case that communications about the programme became entangled with ongoing issues with their housing provider. The interviews suggest that contractors played an important role in keeping tenants informed about the programme and their respective measures.

Impacts on homes and tenants

The evidence on the impact of SHQF on homes is somewhat mixed (Chapter 9). Around half of the sample reported their home to be 'about the same' after SHQF in relation temperature, feeling damp, how much they spend on energy, and how often they do anything to try to reduce damp, mould and/or condensation.

Digging a little deeper indicated variance between measures. Compared to those in receipt of other interventions, those who received work on the fabric of the building were more likely to say their home was now warmer and less damp; those who received improvements to their heating system were more likely to say their home was warmer; and those who had mould removal were more likely to say their home was less damp. It was also the case the people who had first noticed their issues around four years ago, or more, were more likely to report the home being warmer after SHQF, potentially reflecting the length of time they had had to become accustomed to colder conditions.

There is an indication that measures led to positive change in health (Chapter 9), with 60% of respondents stating their health had improved and 62% of those who used an asthma inhaler reported using it less often after the measures. Some interviewees reported transformative impacts with reduced occurrence of symptoms, less need for medicines, and improved mood. . However, these impacts varied, and the longer damp, mould and/or condensation issues had been experienced in the home, the less likely that positive health outcomes were reported.

In considering these impacts, it is important to be aware of timescales. The SHQF programme was completed over a relatively short period, and the research was conducted soon after interventions were completed and before tenants experienced another winter. It is therefore important to continue to monitor tenant experience, to ascertain both the extent to which improvements we identified endure and whether any issues with damp, mould and condensation have been resolved in the long term, or return and persist.

Abbreviations used in this report

AGMA	Association of Greater Manchester Authorities
DLUHC	Department for Levelling Up, Housing & Communities
DHS	Decent Homes Standard
EHS	English Housing Survey
GMCA	Greater Manchester Combined Authority
HHSRS	Housing Health and Safety Rating System
MHCLG	Ministry of Housing, Communities and Local Government
IoT	Internet of Things
RSH	Regulator of Social Housing
RSL	Registered Social Landlord
SHQF	Social Housing Quality Fund

1. Introduction

In January 2023, Michael Gove, Secretary of State for Levelling Up, Housing and Communities, announced the allocation of £30 million funding to improve social housing in Greater Manchester and the West Midlands, with a particular focus on damp and mould (DLUHC, 2023a)[1]. He mentioned the importance of responding to the tragic death of two-year-old Awaab Ishak from Rochdale, who died in December 2020 at the Royal Oldham Hospital. The investigation confirmed that the cause of death – acute airway oedema with severe granulomatous tracheobronchitis – was due to mould exposure (Courts and Tribunals Judiciary, 2022).

It was later confirmed that the Greater Manchester Combined Authority (GMCA) would receive just under £15 million of grant funding (AGMA, 2023). The GMCA planned to use the funding for projects consistent with the remit – supporting improvements in the quality of social homes – and intended to ensure that the projects represented value for money and that the outcomes would be assessed through an appropriate evaluation process. They set up a process to allocate funds to social housing providers in Greater Manchester, that could evidence that they had properties that had existing damp and mould issues or might present a risk of developing them. The result was a programme of works covering 16,177 properties across 17 housing providers, which the GMCA referred to as the Social Housing Quality Fund (SHQF) (GMCA, n.d). The measures were installed over a relatively short period, culminating in April 2024, with the GMCA and housing providers working rapidly to select suitable households and deliver a wide range of works.

The University of Salford was invited to conduct an evaluation of the programme. We developed a research project that would provide an evidence base on how tenants experienced living with mould, damp and condensation, alongside an understanding of the impact of the measures undertaken as part of the programme. It comprised an online survey of participating householders (582 responses) and a set of qualitative interviews to explore experiences in more depth (41 interviews). The study builds upon the team's expertise in the fields of housing quality, sustainability, marginalised communities and social inclusion.

We start in Chapter 2 by summarising the evidence base for damp, mould and condensation and, in particular, the impacts upon physical and mental health. We also provide a UK and Greater Manchester policy context. In Chapter 3, we describe the programme and our research. Chapters 4 to 7 concern the experiences of our survey respondents and interviewees with damp, mould and condensation *prior to the SHQF.* This included the approaches they took to manage and cope with these issues, the impact these had on their home and their health, and their relationship with their housing provider. In Chapters 8 and 9, we explore experiences of the SHQF programme and its impact. In particular, Chapter 8 considers the nature of the measures, the process of installation and levels of disruption. Chapter 9 focuses on the impacts of the programme on levels of damp, mould and condensation, the temperature of homes, energy use and tenant health and home life. In Chapter 10, we provide a summary structured around seven headline findings.

In appendices, we provide more detail on the methods (A), the online questionnaire (B), the qualitative interview topic guide (D) and a table of interviewees (E). We draw on our statistical analysis throughout the report and provide a complete account of this in Appendix C.

1 The SHQF programme was established by the Department of Levelling Up, Housing and Communities (DLUHC) in 2023. The department was renamed the Ministry of Housing, Communities and Local Government (MHCLG) in July 2024.

2. Context

2.1 Mould and damp in housing

This chapter provides the research and policy context to our study. We start with an overview of research on the link between mould and damp in residential buildings and residents' health and wellbeing, with a particular focus on social housing. This is followed by an assessment of its significance in housing policy in the UK and Greater Manchester.

2.2 Definitions

Current UK government guidance describes mould as a type of fungus that grows in damp conditions and damp as the build-up of excess moisture within buildings. This can be caused by condensation but also by water leaching in from outside. Persistent damp tends to be found in buildings with reduced ventilation and high humidity levels, particularly over 70%, and, when combined with warm indoor temperatures, can lead to increased risks of mould growth (Department for Communities and Local Government [DCLG], 2006a; MHCLG, 2024).

2.3 Health risks

There is strong evidence that a complex, multi-directional relationship exists between mould and damp, building design, residents' behaviour and their health and wellbeing. Meta-reviews of multiple large-scale studies, including randomised controlled trials (RCTs) (WHO, 2009; Fisk et al., 2010; National Institute for Clinical Excellence [NICE], 2020; Long & Cullum, 2024), indicate that mould and damp are linked to multiple negative health impacts on housing residents across the world.

Mendell et al. (2011) noted that the medical evidence pointed to 'consistent positive associations with multiple allergic and respiratory effects' (p. 748). Although they concluded that prevention and remediation would be likely to improve health, they highlighted that the specific microbiological causes were unclear. Similarly, a review of extant research by Cox-Ganser (2015) indicated a statistically significant association between, on the one hand, the presence of damp and visible mould in homes and, on the other, respiratory conditions such as asthma. They cautioned that it was not clear exactly what factors combined to generate these pathologies because a range of indoor air pollutants, including biological material (fungal spores, dust mites), can interact with synthetic chemicals from inside and outside the property to produce harmful internal atmospheres (NICE, 2020). Overcoming this uncertainty would require a collaborative enterprise involving different disciplines from across engineering and health sciences to collect and analyse the required data (Verdier et al., 2014; Du et al., 2021).

While studies of physical health impacts are more prevalent, a review by Brooks et al. (2023) found a significant association between mould and damp levels and psychological health. They cautioned that other factors such as income may play a role, making causal relationships difficult to pinpoint.

While a considerable proportion of the literature focuses on technical and scientific aspects, the role of wider socio-economic factors in increasing the risk of mould and damp (and cold) for some households has also been analysed. 'People who struggle to heat their homes and/or are experiencing fuel poverty' and 'people on low incomes' are included in the list of six 'Groups who are most likely to live in homes with damp and mould', alongside ethnic minorities, those with disabilities or long-term ill health and those in temporary accommodation UK Government (2024). Properties with mould and damp often required more heating to reach the desired level of comfort, but the groups most likely to be in these properties were disproportionately on lower incomes and/or in poorer health and therefore less able to afford this (see Boomsma et al., 2017).

A search of the online archive of fuel poverty research funded by the Eaga Charitable Trust reveals a range of articles pointing to the association between poverty, mould and damp and poorer health outcomes, with a subset focused on social housing in the UK (Critchley et al.,n.d.; Revie, 1999; Sullivan et al., 2003).

Occupants' behaviour can also play a role in aggravating mould and damp, posing a problem for building design and management (e.g. Blay et al., 2019). As a qualitative study of social housing in the UK commented, however, there are significant limitations to what behaviour change is possible and what it can achieve in tackling these issues (Sustainable Homes, 2018). Brambilla and Sangiorgio (2020) recommended that the development of buildings with higher resilience must be accompanied by strategies to improve residents' awareness of how their behaviour can heighten the risk of mould and damp. One aspect of building management is housing maintenance, and knowledge gaps still exist around the relationship between this, household behaviours and mould in poor-quality housing (Colbourn & Miller, 2022).

While an association with poorer health outcomes may be robust, evidence regarding the effectiveness of various interventions to tackle mould and damp is less comprehensive. Cox-Ganser (2015) highlighted a number of studies that examined a variety of techniques, including ventilation systems, mould removal and the use of

materials that inhibit dust accumulation. All these were correlated with improved health. Lopez-Arce (2023) concluded that positive input ventilation (PIV) systems were effective in addressing surface condensation and mould growth, although this depended on choosing a suitable system for a property and maintaining it properly.

As part of their guidance on improving indoor air quality for professionals across housing, healthcare and environmental health, NICE (2020) published an evidence review of the impact of different awareness-raising strategies among residents, such as ensuring increased ventilation and more regular removal of dust, on reducing negative health outcomes. They identified some effective approaches, although they cautioned about the need to make sure information is properly understood.

2.4 UK policy background

The challenges related to mould and damp must be seen within the wider context of housing management and regulation in the UK. The large-scale 'second generation' asset transfer of the control of local authority rented homes to arms-length management organisations (ALMOs), housing associations and similar entities from 1997 onwards saw the latter take control of well over a million properties, with the aim of increasing investment in repair and modernisation. A decade on, an assessment found this had proved effective, often to a higher level than prescribed by the Decent Homes Standard (DHS) (Pawson et al., 2009). Tunstall (2015) pointed out that the Decent Homes Programme budget of £50 billion from 1999/2000 to 2009/10 ensured that nearly three-quarters of social housing reached the standard by 2008. However, in 2011/12 the budget was halved. Nonetheless, the level of non-decency in social housing in England (as measured by the English Housing Survey [EHS]) fell from around 30% to 15% between 2007 and 2017 (Piddington et al., 2017).

The DHS continues to provide a minimum baseline of housing quality and applies to the majority of social housing, using a range of metrics related to the conditions of the building fabric and interior fitments (DCLG, 2006b). Social landlords are required to collect data from housing stock condition surveys in order to identify Category 1 health and safety hazards as set out in the Housing Health and Safety Rating System (HHSRS). The current HHSRS details 29 hazards, with damp and mould in first place on the list of reasons why a home can fail the DHS (Regulator of Social Housing, 2023: 9).

The EHS monitors the proportion of homes across the social, private rented and owner-occupied sectors that do not meet the DHS minimum. In 2022, 10% of social housing in England failed to meet the DHS, with 4% having an HHSRS Category 1 hazard. The general trend has seen proportions falling for a long period of time across all housing types (DLUHC, 2023b).

Due to changes in the EHS survey methodology necessitated by the Covid-19 pandemic, EHS data on levels of mould are only available up to 2019, when rates in social housing were estimated at 3.2%; notably, flats seemed more prone to mould. The latest available figures indicated that 4.3% of housing association dwellings in 2022 had a damp problem (ibid.). While this longer-term perspective suggested a brighter picture, mould and damp in social housing have come under renewed, intensive policy scrutiny over the last couple of years as part of wider concerns about tenant safety since the Grenfell Tower disaster in 2017. This has been heightened by the cost of living crisis, the impact of health issues on an overburdened NHS, and media reports of mould and damp in social housing (Balogun et al., 2023). Using the Building Research Establishment (BRE)'s 'cost of poor housing' methodology, Piddington et al. (2017) quantified the full annual health costs of poor housing in England, Wales and Northern Ireland at £20 billion per year.

The case of two-year-old Awaab Ishak, whose death in 2020 was attributed to the health impacts of toxic mould in social housing in Greater Manchester, was a landmark instance. This resulted in new guidance, aimed at all landlords, that emphasised the need to be proactive in tackling mould and damp and provided extensive detail of the medical evidence linking exposure to poor health (DLUHC, 2023c).

While there is activity and commitment from policymakers in relation to improvement of social housing, researchers have argued that policy choices must be carefully considered. The precedence given to making homes warmer and tackling fuel poverty risks pushing mould and damp down the list of priorities (Bonderup & Middlemiss, 2023), while measures to make buildings more energy-efficient could be counter-productive, as better insulation and reduced airflow increase humidity and warmth and therefore the risk of mould (Brambilla & Sangiorgio, 2020). Maidment et al. (2014) and Du et al. (2021) also highlighted this risk, the latter advocating for a balance between energy-efficient designs and reducing mould growth risks.

In December 2022, the Regulator of Social Housing (which has oversight of social housing providers in England)[2] formally contacted large registered social housing landlords (RSLs) requesting them to submit reports on the extent of mould and damp in their stock. Their analysis indicated that between 4% and 6% of properties had notable or more serious issues with mould and damp. While most RSLs had improved their approach and took the challenge seriously, a minority were still underperforming. The key components for success identified by the regulator were: effective governance (including regular reporting and customer commitment); comprehensive

2 The RSH is a non-departmental public body funded by the MHCLG – for more information see https://www.gov.uk/government/organisations/regulator-of-social-housing. In Scotland regulation is managed by the Scottish Housing Regulator https://www.housingregulator.gov.scot/, while the Welsh Government fulfils the function in Wales.

stock condition data and systems (that met the DHS and utilised other relevant data such as complaints, repair requests and demographic data); and effective operational practices (including training for staff and regular, appropriate communications with residents that are sensitive to specific needs and vulnerabilities) (Regulator of Social Housing, 2023).

Oversight and monitoring of RSLs has recently acquired statutory backing. The Social Housing Regulation Act ('Awaab's Law') 2023 introduced a number of provisions of particular relevance for this study. These include an obligation on RSLs to investigate and repair health and safety hazards within a specific timescale or rehouse residents. RSLs must also ensure that residents are provided with information on their rights and complaints procedures, have effective processes to take account of their views, and enable tenants to access performance data.

The Act also introduced new regulatory powers for the Regulator of Social Housing. From 1 April 2024 the existing Economic Standards (Governance and Financial Viability; Value for Money; and Rent) were joined by four updated Consumer Standards (Transparency, Influence and Accountability; Neighbourhood and Community; Tenancy; and Safety and Quality).

Intended to take more account of tenants' needs, the Economic and Consumer Standards measure performance against a series of outcomes. The Consumer Standards are more relevant for this report. Housing providers are expected to be able to demonstrate that they:

- maintain tenants' homes so that they are safe and of a decent standard and provide a quality service;
- handle complaints effectively where things go wrong;
- listen to tenants and support them to influence decisions;
- have a relationship with their tenants that is underpinned by shared expectations of fairness and respect and a shared understanding of their respective rights and responsibilities;
- demonstrate that they understand the diverse needs of the communities that they serve and that their services reflect those diverse needs (Regulator of Social Housing, 2024: 8).

The Greater Manchester Social Housing Quality Fund (SHQF) should be understood in the context of the national direction of policy around housing standards. This, along with our research, is described in more detail in the following chapter.

3. This study

3.1 Introduction

This chapter outlines the Social Housing Quality Fund (SHQF) investment programme, describing the measures applied across the 17 providers. It then outlines the research approach and explains how our sample relates to the SHQF programme as a whole. A detailed methodology is provided in Appendix A.

3.2 Social Housing Quality Fund

In January 2023, the then Secretary of State for Levelling Up, Housing and Communities announced that significant funding would be provided to Greater Manchester in order to improve the quality of social housing as part of the Levelling Up agenda for the North of England (DLUHC, 2023a). Communications from central government were clear that the primary aim of this funding was to tackle mould and damp in social housing, particularly those properties where they had become a serious threat to health (referred to as a Category 1 hazard) (DLUHC, 2023d).

Later that year, the GMCA received an allocation of £15 million and devised the SHQF. Housing providers were offered the opportunity to bid for capital funding to 'tackle potential health hazards, prevent issues arising, and improve the quality of social housing stock across Greater Manchester' (GMCA, 2023a). Further information on the application process, eligibility criteria and the specific objectives of the programme were provided to potential applicants.. As part of the application process, the GMCA required each housing provider to submit a detailed explanation of how they had identified the properties they intended to target (GMCA, 2023b). Funding was then provided to successful bidders with programmes of works identified.

Overall, 16,177 properties across 17 Greater Manchester housing providers received SHQF-funded measures. The total spend of £21.5 million (including £6.73 million co-funding) was higher than initially expected due to an increase in the number of properties benefiting from the programme (GMCA, n.d).

The number of properties treated by each provider varied, reflecting the scale/cost of the particular measures chosen, the size of their overall stock and perceived eligibility and need. Geographically, just under a third of all the properties were in the borough of Manchester, followed by Rochdale and Bolton. All other GM boroughs represented less than 10% of the total.

In total, 22,155 installations took place (in some instances, individual properties received more than one measure). There were 19 separate measures (Table 1). Seven of

Table 1 List of measures installed through the Social Housing Quality Fund (SHQF) with comparison with survey categories

measure	installs	%
Installation of mechanical ventilation systems	6,175	28%
Mould eradication works	3,911	18%
Mould treatment	1,299	6%
Internet of Things (IOT) sensors (including Switchee)	3,583	16%
Replacement of or major repairs to roof	1,769	8%
Replacing or major repairs to wall components	1,255	6%
Replacing doors and windows	1,121	5%
Loft insulation	647	3%
Cavity wall insulation	530	2%
Replacing or major repairs to electrical system components	436	2%
Replacing kitchens and bathrooms	285	1%
LED lighting	226	1%
Smart meter	226	1%
Water saving device	226	1%
Internal wall insulation	215	1%
Replacing or major repairs to heating systems	140	1%
Replacing bathrooms	98	<1%
Concrete subsurface	12	<1%
Underfloor insulation	1	<1%
Total	22,155	100

Source: GMCA, Greater Manchester Social Housing Quality Fund presentation, 10th June 2024.

these accounted for 86% of all the installations, with mechanical ventilation systems (28%), combined mould eradication and treatment (24%) and Internet of Things (IOT) sensors (16%) the most common measures. All works were completed by 22nd April 2024.

3.3 The research

Our study sought to understand the experiences of social housing tenants with regard to damp, mould and condensation and in relation to the SHQF. By means of an online survey distributed by the 17 participating Greater Manchester housing providers, we secured responses from 582 tenants. This provided a dataset from which to understand the ways in which damp, mould and condensation affected households and the impact that the SHQF measures have had. It enabled us to explore statistical relationships to understand the ways in which responses varied across the sample, highlighting the extent to which social groups differed in their experiences of both damp, mould and/or condensation and the SHQF measures.

We followed up the survey with a set of 41 qualitative interviews, selected from the 582 survey respondents. These provided an opportunity to explore experiences in depth and, in some cases, to follow up on specific issues raised in survey responses. The subsample was chosen in order to provide a cross-section in relation to demographic factors, housing providers, areas of Greater Manchester and experiences.

3.4 Our sample

Housing providers

Table 2 provides the number of properties across the SHQF, the number of responses to our online survey and the number of interviewees, distributed across the 17 housing providers. At least one tenant for each of the housing providers was invited to an interview, but two housing providers were not represented in the final set of interviewees.

SHQF measures

In our online survey, we asked respondents what measures they had received as part of the SHQF programme. It is worth noting that a variety of reasons could make it harder for tenants to accurately report these: for example, they could not always distinguish the particular measures funded under the SHQF from those from other programmes, or they might not necessarily know the appropriate technical descriptions, such as distinguishing between mould removal and mould treatment.

The greatest proportion (45%) of respondents told us they had received work on ventilation and/or fans, followed by mould removal (40%) and improvements to the building fabric (34%). This latter group consisted of works on the roof, walls, doors and/or porch and insulation in various parts of the home, including the roof and loft, cavity, external walls and internal walls. Taking the fabric improvements together, the 'top 3' major

Table 2 Number of properties across SHQF, responses to our online survey and interviewees, distributed across the 17 housing providers

housing provider	properties in SHQF*	survey responses	interviews
Bolton at Home	776	33	3
First Choice Homes Oldham	2,269	46	6
ForHousing Limited	260	8	2
Great Places Housing Association	121	6	1
Irwell Valley Housing Association	957	35	1
MSV Housing Group	267	26	1
One Manchester Limited	468	13	1
Onward Homes Limited	260	5	1
Places for People	227	14	3
Rochdale Boroughwide Housing	3,978	135	5
Salix Homes	2,349	10	0
Six Town Housing	381	6	1
Southway Housing Trust	522	76	5
Stockport Homes Ltd	899	6	0
The Guinness Partnership	924	114	9
The Riverside Group	229	17	1
Wythenshawe Community Housing Group	1,565	32	1
Total	16,442	582	41

*Data on properties by individual provider taken from GMCA, Greater Manchester Social Housing Quality Fund presentation, GMCA, 10th June 2024.

intervention types across the survey matched those of the programme as a whole (ventilation and/or fans, mould removal, building fabric).

The low proportion of surveys referring to IOT sensors, in comparison with their overall share in the total number of measures, may be partly explained by the fact that their installation was largely done by one provider and that this technology was seen as a way of measuring damp, mould and condensation rather than addressing them.

Demographic distribution

In order to assess the extent to which our sample was likely to be representative of the population of social housing in Greater Manchester, we compared our sample with data available from the Office of National Statistics. Table 3 shows the age distribution for social housing in England and Wales, social housing in Greater Manchester and respondents to our online survey. Whilst there was a slight underrepresentation of people aged 65 years and older in our survey population, the proportions are broadly comparable.

Table 4 counts the gender of the self-reported 'head of household' across social housing in England and Wales, gender of the self-reported 'head of household' across social housing in Greater Manchester, and gender of the person completing our online survey. It suggests that females may have been overrepresented in our survey. However, we cannot assume that the respondents to our survey would describe themselves as the 'head of household', and we are therefore comparing two potentially different populations.

Table 3 Numbers and percentages by age group of tenants in social housing in England and Wales and Greater Manchester and respondents to our online survey

age group	social households (England & Wales)	% social housing (England and Wales)	social housing households (GM)	% social housing (GM)	online survey responses	% online survey
24 years and under	148,832	3.5%	8,313	3.4%	27	4.5%
25 to 34 years	591,498	14.0%	34,993	14.4%	87	14.9%
35 to 44 years	732,233	17.3%	44,641	18.3%	137	25.4%
45 to 54 years	828,041	19.6%	47,829	19.7%	127	20.6%
55 to 64 years	803,188	19.0%	45,800	18.8%	106	18.0%
65 years +	1,123,962	26.6%	61,813	25.4%	91	15.6%
Total	4,227,754		243,389		581	

Source: GMCA (2023) Census 2021 Briefing, Tenure and Age. Planning and Housing GMCA Research Team, October 2023, p. 4–6. *The age categories used in the online survey were slightly different from those used in the GMCA report. The survey categories were: 18–25; 26–35; 36–45; 46–55; 56–65; 66–75; and 76 and over. We have combined the 66–75 and 76 and over categories for the purpose of comparison.

Table 4 Numbers and percentages by gender of tenants in social housing in England and Wales and Greater Manchester and respondents to our online survey

gender	social housing households (England & Wales)	% of social housing (England and Wales)	social housing households (GM)	% of social housing (GM)	online survey responses	% online survey
Male	1,931,741	45.7%	113,817	46.8%	166	28.6%
Female	2,296,015	54.3%	129,584	53.2%	401	69.0%
	4,227,756		243,401		581	

Source: GMCA (2023) Census 2021 Briefing, Tenure of Household by Sex. Planning and Housing GMCA Research Team, September 2023, p. 3.

Table 5 compares household size in social housing in Greater Manchester with our survey respondents. A slight underrepresentation of single-person households notwithstanding, these populations are broadly comparable.

Table 6 compares the percentages of people reporting having a long-term health condition in social housing in England and Wales and Greater Manchester and our sample. It indicates that the proportion of people with long-term health conditions may have been higher in our sample than on average. This may relate to the way the question was asked or the processes by which SHQF measures were allocated, which are likely to have favoured those most in need.

Table 5 Numbers and percentages by size of household of tenants in social housing in England and Wales and Greater Manchester and respondents to our online survey

persons in household	social housholds (GM)	% social housing (GM)	online survey	% online survey
1	107,611	44.2%	178	30.9%
2	54,973	22.6%	152	26.4%
3	34,226	14.1%	87	15.1%
4 or more	46,592	19.1%	154	26.7%
Prefer not to say			5	0.9%
Total	243,403		576	

Sources: Greater Manchester Combined Authority (2023) Census 2021 Briefing, Tenure. GMCA Research, April 2023, p. 4. Available online at: https://www.greatermanchester-ca.gov.uk/media/7877/230414-housing-tenure-accessible.pdf. Data also obtained from Nomis Dataset: TS054 – Tenure. Available online at: https://www.nomisweb.co.uk/datasets/c2021ts054

Table 6 *Percentages of tenants reporting a long-term health issue in social housing in England and Wales and Greater Manchester and respondents to our online survey*

	% of social housing (England & Wales)	% of social housing households (GM)	% online survey
Long-term health condition	15.3%	16.6%	57.8%

Source: GMCA (2023) Tenure and Disability. NHS Greater Manchester and GMCA Research Team, September 2023, p2

Table 7 gives a breakdown of social housing tenants and survey respondents by ethnicity. It indicates that we received a diversity of respondents. The one exception is that the 'Gypsy or Irish Traveller, Roma or Other White' category was underrepresented. This may reflect the tendency for Gypsy, Irish Traveller and Roma people to be underrepresented in UK data collection (House of Commons, 2019).

In places where there was a discrepancy between the overall population of social housing in Greater Manchester and the population captured by the survey, there are two main possible explanations for this discrepancy. First, the survey may have captured a different population, as the people living in the set of homes eligible for the SHQF may have differed from the people living in the overall set of social housing. Secondly, the survey itself may have failed to capture certain populations who did receive works under the SHQF. In the absence of robust data on the demographics of households eligible for and taking up the measures in the SHQF, it is not possible to distinguish between these two possible explanations.

Table 7 Percentages of tenants by ethnicity in social housing in England and Wales and Greater Manchester and respondents to our online survey

ethnic group	social households (England & Wales)	% social housing (England and Wales)	social households (GM)	% social households (GM)	online survey responses	% online survey
White: English, Welsh, Scottish, Northern Irish or British & Irish	3,240,753	80.9%	157,761	64.8%	395	67.9%
White: Gypsy or Irish Traveller, Roma or Other White	173,162	4.3%	22,995	9.4%	3	0.5%
Asian: Asian British Asian-Indian, Asian- Pakistani, Asian- Bangladeshi, Asian- Chinese	213,001	5.3%	31,115	12.8%	49	8.4%
Black, Black British, Black Caribbean or African	392,563	9.8%	15,000	6.2%	42	7.2%
Mixed or Multiple ethnic groups	106,883	2.7%	7,233	3.0%	24	4.1%
Other Ethnic group	101,394	2.5%	10,155	4.2%	24	4.1%
Total	4,005,663		243,403		582	

Source: Greater Manchester Combined Authority (2023) Census 2021 Briefing, Tenure and Ethnic Group. Planning and Housing GMCA Research Team, September 2023, Greater Manchester findings (All usual residents), p. 6–8.

4. Historical experiences of damp, mould and condensation

In this chapter, we explore the experiences of survey respondents and interviewees in relation to damp, mould and/or condensation *prior to* any measures and assistance received from their housing provider as part of the SHQF programme. It details the range of issues reported, varying in complexity, severity and duration, and explores tenants' understanding of the causes underpinning these problems.

In Chapters 4 to 9, we draw on the data collected through our online survey (582 respondents) and qualitative interviews (41 interviewees). All survey respondents and interviewees had received measures as part of the SHQF programme. The methodology is described in detail in Appendix A.

4.1 Forms of damp, mould and/or condensation

Figure 1 and Figure 2 summarise self-reported levels of damp, mould and/or condensation in survey respondent homes by both category and location within the home. The charts reveal high levels of damp, mould and/or condensation around the homes, particularly in bathrooms and bedrooms. Figure 3 quantifies the reported levels of concern before the SHQF, with the majority of respondents (69%) being extremely or moderately concerned.

Figure 4 provides illustrations of categories of damp, mould and/or condensation. These images were provided to survey respondents so that they could ascertain the types of damp, mould and/or condensation they had in their homes

The interviewees and survey respondents involved in this research represented a diverse range of housing experiences. Our interviewees lived in bungalows, flats, terraced houses, semi-detached homes and maisonettes, and these homes included older, historical buildings and more recent new builds. The majority lived in flats. The duration interviewees had spent in their homes varied from 15 months to over 40 years.

Interviewees reported a range of issues with damp, mould and/or condensation affecting them and their homes to varying degrees. Some described problems concentrated in very specific locations, such as mould accumulating in silicone sealant. In some cases, mould and damp were slightly more prevalent but largely contained in one room. In these circumstances, interviewees could suggest the issues were not too severe, challenging or impactful: *'it was black mould, but it wasn't extensive. It was mainly*

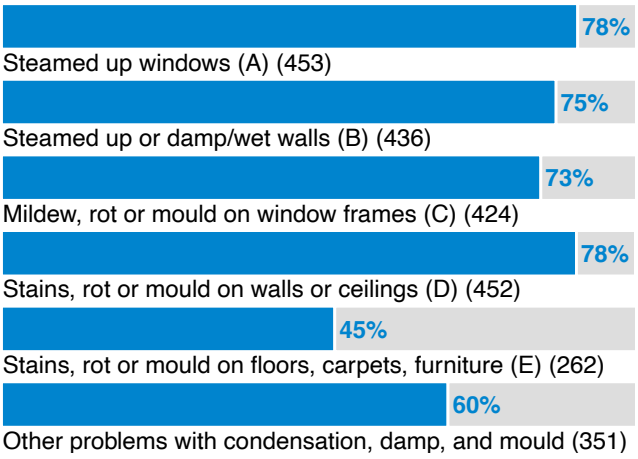

Figure 1 Before the recent measures, did you notice any of the following issues in your home? (%s of total N=582)

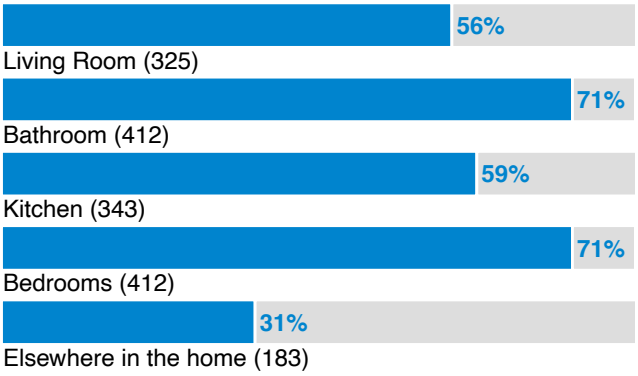

Figure 2 Before the recent measures, did you notice any of the following issues in your home? (Grouped by room in home) (N=582)

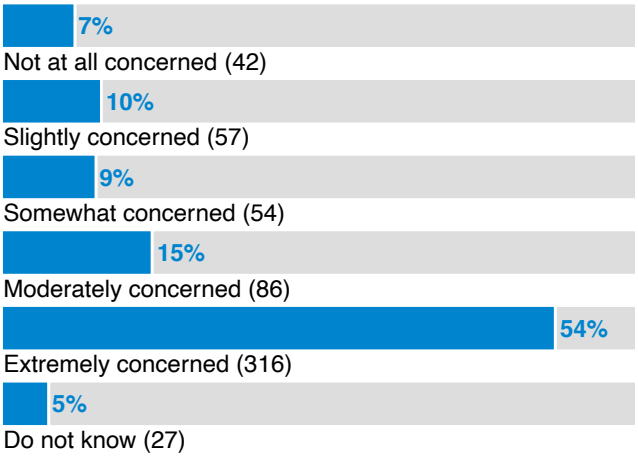

Figure 3 How concerned were you about condensation, mould or damp in your home? (N=582)

A Steamed-up windows

B Steamed up or damp/wet walls

C Mildew, rot or mould on window frames

D Stains, rot or mould on walls or ceilings

E Stain, rot or mould on floors, carpets or furniture

Figure 4 Photos of damp, mould and/or condensation, shown to survey respondents. (Images from stock photo library)

to the top of the ceiling and just down a bit of the wall' (Interviewee 29). However, their self-reported visual assessment could not measure the level of hazard such mould posed.

Where damp, mould and/or condensation were limited to one room, it was the bathroom that was most commonly affected, and in some cases mould was largely only experienced in the bathrooms. Wet rooms appeared to be particularly challenging, as in this example:

> It was particularly bad in the bathroom because I've got a wet room which they put in for me, and I don't think that that helps the situation, because, obviously, you can have just the condensation appearing on the tiles and lingering. (Interviewee 21)

Where damp, mould and/or condensation were more pervasive, there was a range of severe issues reported, such as mould covering ceilings, extensive mould and damp in bedrooms and living rooms and prominent mould in children's bedrooms. As one tenant noted: *'I can't think of anywhere that didn't ever have any mould'* (Interviewee 9). One reflected on the spread of mould over time:

> Then it starts spreading all into corners, corners of the room and then starts spreading out. It got so bad in my bedroom that it went down the wall where the window is, but then it went down the full wall. (Interviewee 15)

The majority of interviewees spoke about mould and damp as a more pervasive issue affecting multiple rooms and sometimes every room in their homes. In one example, mould was found extensively throughout the property. This interviewee described the different types and locations of mould, which was evidently something that they had observed over time and were concerned about, using the words *'perplexing'* and *'dangerous'*:

> I realised that there was mould growing in lots of different places. So, there were all different coloured moulds. I had green mould in my toilet room growing up the wall, which is quite perplexing. In the kitchen, mould started growing on my passport, and it was white mould, and I was like, I've never come across that before, and I was like, this is a bit dangerous. Then, obviously I've got the black mould in the shower room. Because of the damp issues in the front room, mould started growing in that corner. (Interviewee 17)

Interviewees gave examples of mould and damp affecting not only their living spaces but also their belongings. Examples included soft furnishings being constantly damp, mould growth on their children's toys and impacts on clothing:

> We pulled his bed out, all that were full of mould. He's got a weight bench, and all that was full of mould, and then clothes and stuff in his wardrobe, all that had gone mouldy, and these are things that were not actually next to the window. (Interviewee 15)

4.2 Timing and persistence

The timescales for experiencing mould, damp and condensation varied. Whilst some (19%) respondents experienced damp, mould and/or condensation issues in the winter only, the majority (61%) had some level of year-round damp, mould and/or condensation (Figure 5). Some survey respondents had been experiencing these issues for four or more years (Figure 6).

For some interviewees, mould and damp were seasonal. One noted that they did not feel they impacted them during summer (Interviewee 1), and another described the way they varied across the year:

> Well, it only seems to happen in the colder months [...] it dies off a bit when it gets warmer, and I don't see it as much. In the summer months it's pretty much fine. Don't really get it. (Interviewee 25)

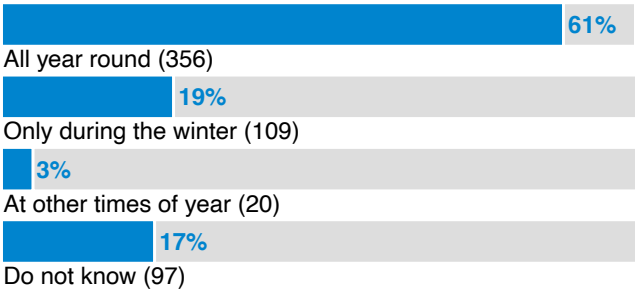

Figure 5 When have these issues occurred in your home? (N=582)

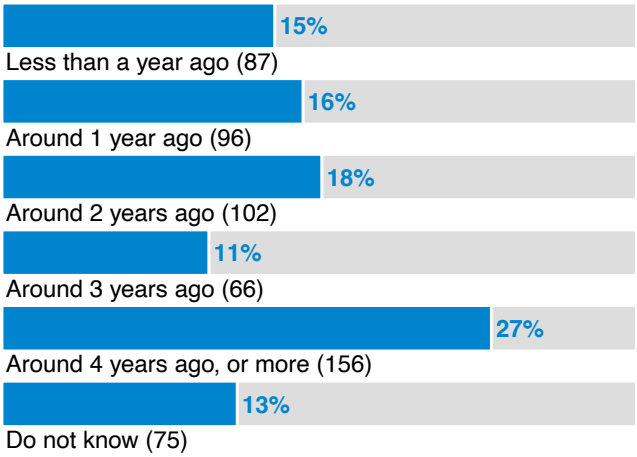

Figure 6 When did you first start noticing these issues? (N=582)

Amongst the interviewees, some encounters with damp, mould and/or condensation were brief, with issues both becoming apparent and being dealt with quickly: for one, it was *'a short matter of weeks'* (Interviewee 27). It should, nevertheless, be noted that the perceived severity and urgency of mould and damp problems are not solely determined by duration of exposure. The size of the home, the presence of children, the condition of the property and pre-existing health conditions all intersect here and influence the significance of the issue.

Establishing a timeline was not always a simple task, as issues may have been dealt with in a relatively superficial way before the tenants arrived in their property, and it may therefore have taken some time for them to become aware of problems in the home:

> When I came in, obviously all the walls had been replastered. Everything was painted bright. It looked pristine. I would never have guessed. Then, it was in the October that I had done a deep clean in here and realised that the skirting board where my sofa was, behind had quite a lot of mould in it. (Interviewee 16)

For some interviewees, it was a case of mould and damp getting progressively worse, spreading into different corners of a room or penetrating more rooms. In the following example, an interviewee described the relatively rapid spread of black mould throughout their home, highlighting that individuals were aware of measures they could use to counter mould and damp, even if, as in this case, they proved unsuccessful:

> Within six months I had black mould all on the ceiling, coming down the walls. I had an extractor fan. I had the windows open, so I didn't understand how it was happening. It then spread on to – it seemed to be on one side of the house, and it went down into the living room, and it was the entire wall. The carpet was soaking wet. (Interviewee 19)

Some interviewees gave examples of their damp, mould and/or condensation being an enduring and long-standing issue. One told us they had experienced these issues *'for years'* (Interviewee 20). Another, who had been living in their property since 2017, reported that within a week of moving in the ceiling began to leak, and a week later damp started appearing in the bedroom, which persisted for years. In this example, the mould had persisted despite their attempts to deal with it through redecorating, for which a grant had been provided:

> Well, unfortunately, that's been an ongoing thing since I've lived here. It's been in varying degrees: once, quite severe enough for them to give me a grant to redecorate, because I'd not too long decorated, only then to find black mould had crept up the walls, ceiling and so on, so that had happened. (Interviewee 9)

While some problems were relatively short-term, many tenants described a cyclical pattern of mould and damp reappearing despite attempts to address them:

> It [mould] comes back with a vengeance. (Interviewee 23)
>
> They have been a few times, and they just spray the mould and wipe it off, and then in a few weeks it comes back worse. (Survey response)
>
> We were regularly having work done to sort damp and mould, but it kept coming back in the same places and different places. (Survey response)

4.3 Underpinning causes

In considering the underlying causes of mould and damp, some respondents attributed these issues to temporary or relatively straightforward problems, such as bathroom leaks, faulty window closures or inadequate ventilation. Others identified more complex issues to do with the design, suitability and condition of their home.

In one example, the **design and configuration of the home** created challenges for drying laundry: there were no suitable spaces or efficient ventilation systems, and the interviewee was reliant solely on electric storage heaters. The example neatly evidences the ways in which home design and heating technology provision can lock people into practices that may worsen damp conditions:

> I think it's the house itself, how it's been designed, because it has storage heaters, which... It's just electric here. There's no gas, so we don't have radiators, so that means that you cannot hang your laundry [...] There was no thought to where are the people going to dry their clothes in this house, and they haven't given us a huge kitchen, so where was the drying going to take place? That was one fundamental that just wasn't taken into consideration. (Interviewee 9)

In another example, an engineer had inspected the home and told the tenant that rain was getting in through large holes in the walls: *'he watched the birds just fly in. He said, "The rain's getting in, so that's making it wet"'* (Interviewee 19). In another, the interviewee was able to partially explain some of their issues because the gutters were broken: *'They told me that it may be, it could be the fact that my gutters at the top were all broken, so the water was coming down the wall. That does not explain why that corner is the same'* (Interviewee 13). Another interviewee highlighted issues with brickwork and the ways in which flats had been created within a larger property:

> ...the brickwork is very, very poor. The property is poor, and they've put very, very cheap plastering inside it. It's like a cowboy job. It's like, when they divide the property, they just did it quickly. It's like a quick and sort job, it was. They didn't do it properly. It's not a proper flat, and the humidity is very bad. So bad it was, even if you opened the windows, it's worse. Well, look, let me give you a humidity. Average is 80 per cent [...] My clothes, mould. My leather things, mould. Everything's mould. I have to sun-dry things all the time, wash things all the time. It's a constant battle. (Interviewee 26)

Interviewees reflected on the ways in which their own practices might affect damp, mould and/or condensation. In this example, the interviewee associated damp with tenants heating their homes less as a result of concerns about the cost of energy. The interviewee referred to the people around them in the block of flats: *'It started to become a problem when people were more concerned about how they were heating their homes and the cost of doing it. That's when we started to get more and more damp'* (Interviewee 21).

There were examples in which interviewees **felt a sense of responsibility** for the presence of damp, mould and condensation, suggesting that their actions or behaviours had directly contributed to the problem. These quotes illustrate two different perspectives on the role of heating systems in relation to these conditions:

> When I had the damp and the mould, I was unable to put the heating on in all the rooms, so, obviously, struggled with even more damp. (Interviewee 8)

> I think putting my heating on a lot probably caused it, maybe. I'm not too sure. I don't even know what causes it. They never actually told me. I think it was the – like I said, they're not the best in communicating. (Interviewee 28)

The perception of personal responsibility was also influenced by interviewees' understanding of their living spaces and the impact of their own behaviours and habits more broadly. While the following examples highlight these perceptions, they by no means justify attributing blame for issues:

> When I moved in, I never had it. For the first two years, I was having mould problems, but then I had very less stuff. I didn't realise it. As my stuff built up, clothing build up, things built up, there was less space left to put down. Air doesn't move around very well. Then I knew that there was a problem with this flat. This flat has problems. The two most affected areas, the only two affected areas of this flat are the lounge and the bedroom, the main parts. (Interviewee 26)

> I've been told by someone that it's down to general housekeeping and lifestyle choices as if my house is untidy, unclean, and it's somehow my fault. (Interviewee 16)

Nonetheless, as the following chapter evidences, there were multiple examples of interviewees not only displaying awareness of common causes of damp, mould and/or condensation but also having undertaken measures to prevent them or mitigate their impact.

4.4 Conclusion

This chapter has reviewed the survey responses and interviews with regard to experiences of damp, mould and/or condensation before the SHQF measures. They indicate high levels of damp, mould and/or condensation in homes, especially in the bathrooms and bedrooms. In the majority of cases, these issues were experienced throughout the year, but in some it was a seasonal issue experienced primarily in the winter months. Respondents displayed a high level of concern about damp, mould and/or condensation and their potential to impact them. Respondents had a sense of the issues likely to be causing damp, mould and/or condensation and in many cases had sought out ways to manage them and reduce them. They had, however, found that they were constrained in what they could do, and therefore the impact they could have was limited. We explore these coping practices further in the next chapter.

5. Living with damp, mould and condensation

5.1 Introduction

This chapter explores how survey respondents and interviewees navigated and coped with the challenges of damp, mould and/or condensation in their homes *prior to* the SHQF programme. It examines the various strategies they employed to actively manage and reduce the prevalence and severity of these issues, as well as the difficulties they encountered in maintaining a sense of home amidst these conditions. It examines the experiences of those who struggled to address these problems independently, emphasising the complex web of challenges that are sometimes involved.

5.2 Routine activities

Figure 7 summarises the answers to the survey questions relating to what respondents did in their homes to try to mitigate damp, mould and/or condensation issues and the extent to which they were satisfied that these were effective. The chart reveals a range of practices, the most common relating to ventilation: opening windows and using fans. As shown in Figure 8, levels of satisfaction with the effectiveness of these practices were low, with 39% of respondents reporting being 'not at all satisfied' and only 15% being 'moderately' or 'extremely' satisfied.

The majority of our interviewees spoke at length about their efforts to clean and remove mould on an ongoing basis. Interviewee 29, for instance, described *'treating it'* themselves by cleaning the walls with bleach, as did another:

> Yes, so I bleach wash to maintain it, particularly in the bathroom. The mould is not growing in the kitchen, to be fair, but when I'm cooking in the winter and obviously the doors are shut because it's winter, the water is literally running off the cabinets and stuff. I don't quite know what to do about that, I'll be honest. So, I just tend to wipe it down. (Interviewee 4)

Cleaning tended to be framed as imperative not only for aesthetic reasons but also due to the potential health risks. This was especially the case for those with pre-existing health conditions. For instance, one interviewee reflected: *'Cleaning, definitely, because I can't allow any mould because I have to be on antibiotics 24/7 for the rest of my life'* (Interviewee 18).

Although cleaning was a core part of interviewees' everyday activities, a wider range of strategies to reduce mould and damp was reported. Ventilating the home was particularly common, with many interviewees describing

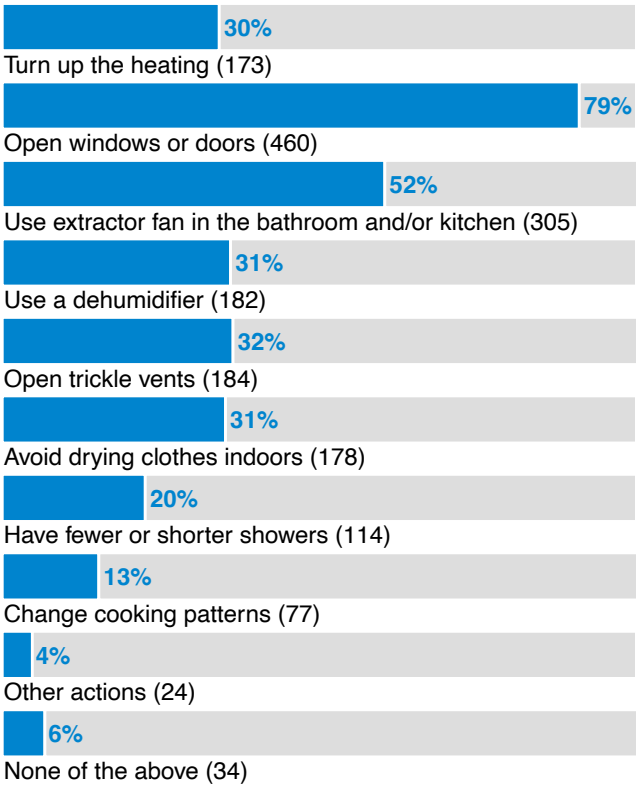

Figure 7 Before the recent measures, which if any of the following did you do in order to try to reduce the impact of condensation, mould and/or damp? (N=582)

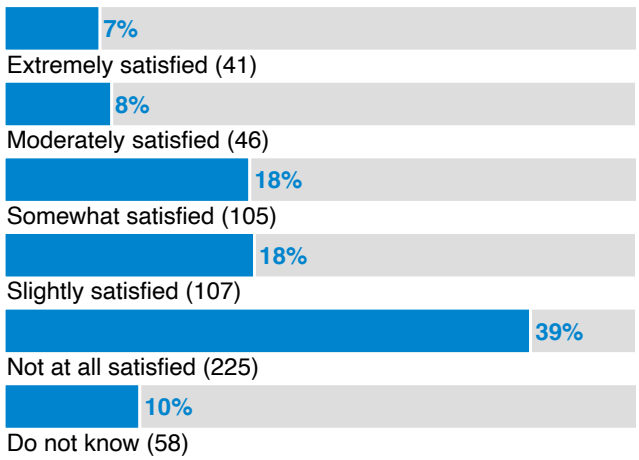

Figure 8 How satisfied were you that doing this (see Figure 7) reduced condensation, mould and/or damp? (N=582)

opening windows daily, keeping fans running continually or using dehumidifiers. In this example, the interviewee described actively opening windows to allow air to flow through the home:

> I think it was more of the opening of the windows, because the air in the home was too moist, so opening the windows back and front at least once a day to just try and get some fresh air flowing was something that I'd often do. (Interviewee 9)

Many interviewees emphasised the need to use heating to dry out their homes. However, some found this challenging, particularly those living in older houses, where heating systems were often reported to be less efficient. In this example, an interviewee reflected on the challenges of heating an older house:

> We love the space that we have here, but the only issue we have, it's an old house. I think it's about 138 years something, if I'm not mistaken, and the hall, I think the ceilings is high up, so by the time you're on your heating system, it takes a while before it circulates the whole house. So, through wintertime it's quite a challenge to stay downstairs for a bit longer; though you heat up, it's still not working. (Interviewee 7)

Some interviewees' work to mitigate mould and damp also involved moving and reorganising their belongings, as in these examples:

> I pulled all the furniture away from my walls. My bedroom was in the middle of my room. I decluttered and stored a lot of my things at my mum's. (Interviewee 5)

> I had to put my clothes – I had to get rid of my wardrobe and my drawers because there was mould in there. I had to clean all my clothes and pack them into plastic boxes because everything started getting destroyed. (Interviewee 6)

There was considerable diversity in the approaches taken. For example, some interviewees discussed DIY methods like sanding walls and reinsulating, using perfumes and air fresheners to mask the smell of dampness, hiring external contractors to treat the walls or buying carpet cleaners to tackle excess moisture in the flooring.

It is also important to note that interviewees typically employed more than one strategy to address mould, dampness and condensation. They often combined multiple methods to manage these issues effectively, as described by this interviewee:

> I don't put clothes on the radiators to dry. I put them on the maiden normally, and just, yes, do that in general, then open windows, because that lets moisture out, use the extractor fans. (Interviewee 10)

For many interviewees, addressing mould and damp was an almost continuous aspect of their daily routines. It was described as a *'never-ending battle'* (Interviewee 38), while another interviewee emphasised how their persistent and varied efforts to manage these issues had become a constant part of their everyday life:

> So, we have to clean it, or we have to – when to open the windows and when to clean it, so we take care of this all the time [...] we always have to keep the heating on, and we have to think about it; we can't leave this problem out of our sight. (Interviewee 24)

5.3 Maintaining a sense of home

The previous section has established that people worked hard to reduce mould, damp and condensation in their homes. However, these day-to-day efforts were intertwined with their broader effort to maintain a sense of home. Figure 9 summarises the responses to our question about the impact of damp, mould and/or condensation on home life. It shows that many respondents adopted coping practices such as spending less time in particular rooms, avoiding inviting people to the home and spending more time outside the home.

Interviewees often mentioned that living in these conditions disrupted their comfort and overall sense of belonging, as in this example: *'it wasn't a home to me – a home is somewhere where you're at peace, feel comfortable and want to be'* (Interviewee 13).

For many interviewees, the impact of damp, mould and condensation went beyond damaging their personal belongings; it also prevented them from decorating their homes as they wished. This was not only a *'burden'* (Interviewee 16) but also a source of disconnection from their surroundings, making it difficult to feel at home in their own space:

> So, the paint has completely peeled back to the plaster. All your paint is flickering off everywhere, all over your floor, and it just looks an absolute mess. So, that's depressing in itself, but you can't decorate until they come back out because you don't know what they're going to use. (Interviewee 15)

> The front room, I didn't even know we had damp until they came and said, 'Move a unit', and it was black all the way up and behind the settee and things like that. I weren't happy, because they went 18 inches from the skirting board, went across with a Stanley knife and then painted it. I thought, how do I decorate that? It's just been left like that because it's behind the settee and the units and things. (Interviewee 20)

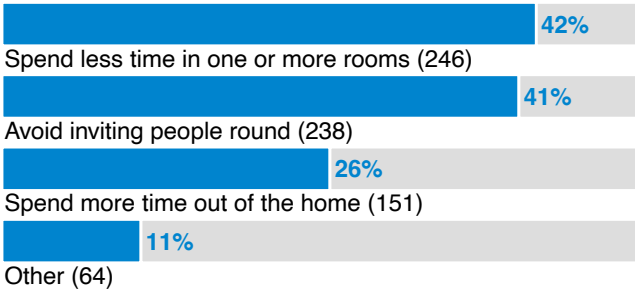

Figure 9 As a result of issues with mould, damp or condensation, did you do any of the following? (N=582)

> The amount of times I've redecorated, I've recarpeted, I've had to buy different furniture. (Interviewee 16)

Interviewees' inability to foster a sense of home was compounded by constraints on their ability to utilise the various rooms in their homes. This person, for example, described feeling forced to isolate in a single room due to the extensive damage caused by mould:

> I had to take my bed down and get rid of all my wardrobes because they was rotted with mould. I sleep on a camp bed in my living room because I don't sleep in my bedroom. (Interviewee 5)

The consequences of these conditions were especially severe for interviewees with underlying health issues. For example, one described feeling trapped and helpless during a particularly bad outbreak of mould:

> I didn't sleep in my bed upstairs; I slept on the settee for four nights. I have medication that prevents my legs from working. They cut my mind and my body off, so I was left in a situation for four days where I was weeing [sic] in a bucket in my front room. (Interviewee 13)

It was not always easy for interviewees to restrict access to certain rooms in order to avoid themselves and others in the household being exposed to damp, mould and/or condensation, and this was particularly the case for those living with children and/or in smaller properties:

> I didn't really have a choice, because the living room is one of the worst-affected rooms, and, obviously, that's where the children play, so there wasn't really any change, but it wasn't because of the lack of severity; it was the lack of choice of other rooms to use as an alternative. (Interviewee 12)

For some interviewees, the desire to escape mould and damp led them to seek comfort in public spaces. In this example, the interviewee described spending time in the local library to avoid the discomfort of their own property:

> Yes, so in winter it gets really horrible. I can't do nothing about it. I just have to constantly clean, wash, and sometimes I can't stay in the property [...] [sometimes] I have to go to the library and spend my time there, local library, a few hours, come home, stay in the kitchen because the kitchen's a bit warmer because I've got a gas cooker there. (Interviewee 26)

Those living in older houses or homes with inadequate heating systems faced even greater challenges in creating a comfortable and welcoming space:

> You just want your living room to be a place of abode where you will enjoy sitting at your comfort, not to look at the weather temperature in the room. (Interviewee 7)
>
> It's not warm in winter. It's not warm in winter one bit. Then in summer you're burning. The walls are too warm, which tells you there's something wrong with the insulation. (Interviewee 2)

5.4 Limits to adaptation

Despite their best efforts to reduce mould and damp and maintain a sense of home, many interviewees found the battle to be ongoing and overwhelming. The almost constant struggle left many feeling powerless and frustrated, and, despite their efforts, they often found themselves unable to break free from a cycle of repairs and maintenance. Even when interviewees tried their best, the issues often persisted, leaving them uncertain about the best course of action:

> No, it was just keeping the windows – there was not much I could do for it. Like, all my ceiling was black. Everyone kept saying, if you just paint over it, it'll just come through it, so there wasn't really much that I could do. (Interviewee 1)
>
> But we realised that the mould was coming through the wallpapers, and it was quite a bit challenging, and you don't know what to do. Am I going to rip that bit off? Am I going to get the wallpaper to replace it? So many thoughts coming through your mind, and you enter into my son's room, and the whole four corner of the wall, it is just unbelievable. (Interviewee 7)

This uncertainty was interlinked with communication issues, which are explored in more depth in Chapter 7. As these examples highlight, there could be uncertainty about *how* to manage it themselves when interviewees were receiving mixed messages from contractors:

> So, when I first highlighted the mould and damp, a surveyor came round and told me that it wasn't mould and damp. His advice to me was to bleach the skirting boards. So, I had been doing that for quite some time. His advice was, 'bleach your skirting boards. Paint over it.'
>
> So, that's what I had been doing, keeping my windows open because I've been told it's humid. [...] Just following the advice, but then I come to find that a gentleman from Domestic-Air who came out not long ago said using bleach is the worst thing to do because it spreads. (Interviewee 16)

> ...I bought a dehumidifier, but I'm still getting it... Then he turned round and said, 'You're in a block of flats. There's no point getting a dehumidifier.' I went, 'Oh, I wish people would give me the right information.' (Interviewee 2)

Interviewees faced a difficult challenge in finding effective solutions to damp, mould and/or condensation problems. While some remedies could help improve the situation, they often came with their own drawbacks. Interviewee 23, for example, noted that, while keeping the windows open helped, it was not possible as the house quickly became uncomfortably cold. Interviewee 40 noted that using mould removal products in her child's room was impractical due to strong fumes that exacerbated her asthma. Likewise, another interviewee was concerned about the impact on her child of both the mould *and* the cleaning products that could remove it:

> Essentially, I clean it as much as I can. I ventilate the house. The windows are normally always open when I'm in. That's kind of the extent of which I have. I don't like to clean it very often, because it disturbs the mould spores, and it makes my child worse. Obviously, the cleaning materials in itself are quite potent, and that doesn't help with his breathing either, so it's kind of limited on what I can actually do. (Interviewee 12)

Financial constraints were another significant factor affecting people's ability to manage the situation independently. One interviewee noted *'we can't afford to keep doing it [cleaning]'* (Interviewee 15). Others spoke about not being able to afford to redecorate to repair the damage caused, afford a dehumidifier to help dry the house out or hire external contractors to address the issue.

This challenge became even more complex for individuals with pre-existing physical or mental health conditions. For instance, one interviewee explained in detail why maintaining a mould-free environment was particularly difficult for them due to challenges they faced in opening the windows as a result of their height and visual impairment:

> Yes, cleaning was a big thing for me because I am very short. I am 4'10", so I can't reach the windows like a normal person would be able to. So, yes, trying to keep on top of the mould on the windows, especially when they're growing in the silicone at the top, I found it really difficult to maintain. I don't like mithering people, can you come round and clean the mould? It's not really the done thing [...] being visually impaired, being registered blind, it's not safe for me to get up on ladders and stepladders just to try and open a window. (Interviewee 17)

Another highlighted how mental health struggles could affect people's ability to manage the issue:

> I did notice a tiny bit where there's wallpaper on the side because it's not all tiled, but, as I say, the sealant is about the only thing where you can see mould. You sometimes get it – but if you get it in any home like that – where the shower drips on to the shower pipe. You just have to give it a clean now and then. If I did more cleaning, it wouldn't be too much of an issue. That's more me, really. I think that's really nothing to do with it. (Interviewee 11)

Moreover, for some interviewees, it was not only about struggling to manage mould and damp themselves, but also that they did not feel that it should be their responsibility to manage them. In this case, it was often noted by interviewees that housing providers (as opposed to the tenants themselves) should be held accountable for addressing or treating the issues:

> I'm not putting my own money into fixing the actual property. It's not my responsibility. Up to them to upkeep it, that's what they're there for. (Interviewee 25)

> If I want to paint my house, it should be because I'm happy to do it, not because I feel like, okay, I haven't got a choice. Because I want my home to look nice, I will go ahead and do this. (Interviewee 3)

5.5 Conclusion

This chapter has presented the complex realities faced by survey respondents and interviewees dealing with mould, damp and condensation. They strove to combat these issues through various methods, motivated by the desire to preserve their living spaces and maintain a sense of home. They reported varying levels of success in keeping damp, mould and/or condensation at bay. However, this was complex, and their efforts were often constrained by a range of practical and financial limitations, as well as ambiguity surrounding the attribution of responsibility in the context of social renting.

6. Impacts on health and quality of life

6.1 Introduction

This chapter explores the different, and often interconnected, ways in which living with damp, mould and/or condensation impacted survey respondents and interviewees *prior to* the SHQF programme. While some reported minimal impacts, particularly those who were only briefly exposed, the majority reported significant consequences, including physical health issues, mental, social and emotional distress and financial hardship.

6.2 Health and quality of life

Figures 10–13 summarise the responses to the survey questions on the impact of damp, mould and/or condensation on health and wellbeing. According to Figure 10, a majority of survey respondents (63%) felt that damp, mould and/or condensation affected their health and/or the health of others in the home. They indicated that specific groups were affected, including children, older adults and people with long-term health conditions. As shown in Figure 11, a majority (68%) reported that damp, mould and/or condensation were at least 'somewhat damaging' in relation to their quality of life. Figure 12 indicates the extent to which damp, mould and condensation issues affected vulnerable groups. 40% of those who had reported a health impact (see Figure 10) reported talking about it to their doctor or another health professional (Figure 13).

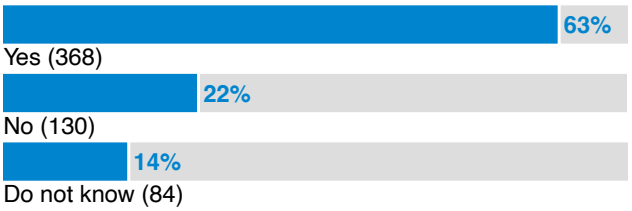

Figure 10 Before the recent measures, did condensation, mould or damp in your home affect your health or the health of others in your home? This could include mental and psychological health, e.g. worry and stress. (N=582)

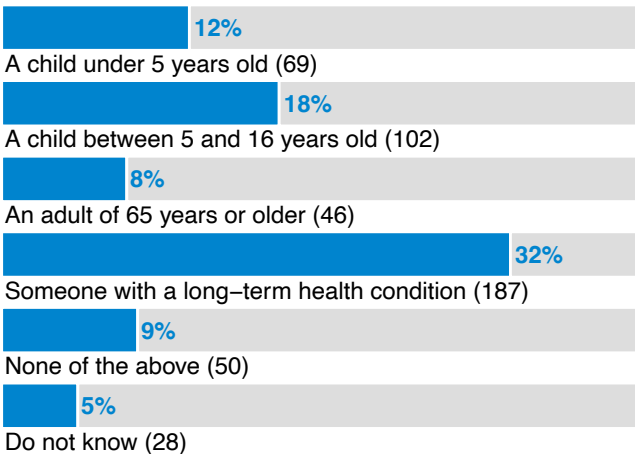

Figure 12 Have the issues with condensation, mould or damp affected the health of any of the following people living in your home? (N=582)

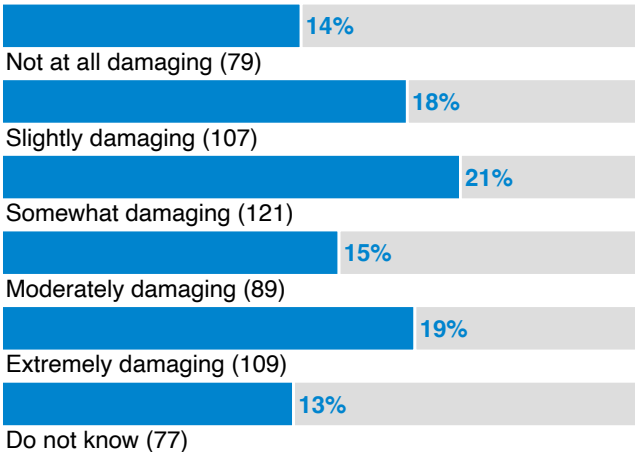

Figure 11 How would you describe the impact of condensation, mould and damp on your quality of life? (N=582)

Figure 13 Have you talked to your doctor or another health care professional about this health impact? (N=368, see Figure 10)

6.3 Physical health

Interviewees frequently reported experiencing respiratory health problems, including coughs, chest infections, sinusitis, asthma and chronic obstructive pulmonary disease (COPD). Amongst these were shorter-term conditions that they attributed to damp, mould and/or condensation and longer-term conditions that they felt were aggravated or worsened by damp, mould and/or condensation. One interviewee described a persistent cycle of chest infections, coughs and colds, stating: *'Me and my son, we didn't have a year where there were not chest infections, coughs, colds constantly, all the time'* (Interviewee 19). Interviewee 10, who had asthma, noted recurrent bouts of chest infections, and Interviewee 26 stated: *'I don't breathe properly here because of mould here.'*

For some interviewees, these issues were so severe that they required ongoing medical attention or even hospitalisation, as described in these three examples:

> [I] seemed to be struggling a bit with breathing. I went to the doctor, and he gave me some inhalers to try. (Interviewee 29)

> Yes, I did. I did have to go to A&E maybe two or three times. It also correlated with the fact that I was having medical investigation to eventually figure out that I had a hiatus hernia, which they did a repair surgery, but it wasn't – I also had acid reflux, which was aggravated by the cough that I was getting from the mould. So, on top of vomiting all the time from acid reflux, I was also coughing, unable to sleep, unable to breathe at all. There were a couple of times where, even in class, my teacher had to call an ambulance or a taxi for me, because I'd collapsed in class. (Interviewee 6)

> I went to the doctor's because for about six months I've been on antibiotics every month. I've got all the evidence of this to say this is not right. She's had chest infections, she's had – I can't remember the word of the other one, but there's so many that I've had, and I'm constantly antibiotics, which isn't good as well, being on antibiotics all the time. So, I ended up having to stay out of my house for ten days when I had pneumonia, but my doctor ended up writing a letter to say, 'It seems to be she's constantly being ill while she's in that property and nothing's being done. You need to move her.' (Interviewee 23)

As these examples highlight, some interviewees drew clear links between their health and living with mould, damp and condensation. In other words, a number directly attributed physical health problems to living in these conditions. One survey respondent, for instance, noted: *'I have asthma and have had several chest infections due to the mould and damp'* (Survey respondent). Another had found that the start of health problems had coincided with moving into their home: *'Before moving into this house, I was fit and healthy and never suffered with illness, but since moving in here I have numerous chest infections throughout the year!'* (Survey respondent).

While some tenants recognised a direct link between mould and damp and their health issues, others expressed uncertainty about the correlation, as in this example:

> After I moved in, I had several chest infections, well, several. I had about three within the space of three years that lasted for months, and I hadn't had any chest infections prior to that. Now, I know correlation doesn't imply cause and effect, but there it is. (Interviewee 22)

Others found it difficult to separate the impact of mould and damp from other factors. Interviewee 27 noted that it was hard to identify whether their reduced coughing was due to quitting smoking or the removal of mould in their property. Similarly, Interviewee 28 felt that, while mould and damp affected their asthma, it was challenging to isolate this impact from other triggers, such as owning a cat.

It was evident, however, that those with pre-existing physical health conditions, including asthma and allergies, were disproportionately affected by exposure to mould and damp. These two examples provide further evidence of this:

> So, I have severe allergic brittle asthma, and, obviously, just day to day, highly allergic to dust, mould, pollen, all the rest of it. Because I wasn't noticing, again with me visually impaired, I wasn't noticing the mould. So, I'm going in these rooms, cooking, or for the kitchen, taking a shower, going in the shower room which I'm – a lot of mould, the worst amount of mould in it. Then the toilet, that really perplexed me. I was like, how the heck do you get mould growing in the toilet and you don't see it. I'm ingesting these spores [...] It's only when it got too far that I realised, because I just thought it was a flare-up of the asthma, I was putting it down to everything else, as opposed to looking at the mould side of things. (Interviewee 17)

> I got a throat infection. There's another infection I got, but I can't remember what it's called. Then I ended up getting pneumonia. I kept sending messages the housing and saying, 'Something needs to be done. I can't keep living like this. I've got epilepsy.' At that time as well, I was on treatment for a benign brain tumour and kidney tumour, so I was having treatment every Thursday and every Sunday, and all I'd do is sleep anyway because of my illness I've got, which is epilepsy. So, me being asleep all the time and being around mould, it was making me more ill and more prone to infections because my immune system was very low. (Interviewee 23)

Furthermore, survey respondents also referred to their children having experienced various health problems linked to mould and damp exposure prior to the SHQF intervention. It was reported that children experienced nosebleeds, sneezing and colds, as well as a range of respiratory issues like coughs and asthma:

> I have a child under the age of 3 with chronic asthma that has since had an increase in his steroid inhaler and be put on additional medication. I feel the mould & damp has significantly contributed to this. (Survey respondent)

For many respondents, these were not isolated incidents but rather part of a pattern of repeated illnesses persisting over a long period of time. One survey respondent noted that their children had been *'continuously sick'* for months, experiencing a sore throat, temperature, chest infections and dry chesty coughs. Similarly, another had received confirmation from hospital staff that the mould was contributing to her son's health issues:

> My son, who was under 5 at the time, was admitted to hospital over nine times with croup. When I showed the hospital staff the photos of the mould, they said they were no doubt in their minds that this was contributing towards his respiratory issues. Also, I have asthma and have been hospitalised with pneumonia. (Survey respondent)

6.4 Mental, emotional and social health

These reported physical health impacts tended to be difficult, if not impossible, to separate from the negative impacts damp, mould and/or condensation had on mental health, as in this example: *'It's mainly the damp and mould that's still present that's clearly impacting the health of my youngest child and, by extension, my mental health'* (Interviewee 12).

Stress and anxiety were recurring themes in the narratives. The presence of mould itself was often identified as a primary source of these mental health issues. However, the ongoing burden of cleaning the mould and its impact on interviewees' belongings also contributed significantly. The inability to *'make a house a home'* (Interviewee 10) or create a *'homely home'* (Interviewee 16) was strongly connected to these negative mental health impacts:

> Only, one thing that affects my mental health is that I have to keep it clean again and again. (Interviewee 24)

> Yes, my mental health – I mean, I still don't like my house. I hate it, but obviously, when that happened, I just like, I just feel like I'm decorating, and something keeps happening, like holes keep appearing from damp and that. (Interviewee 28)

These impacts were not experienced solely in the home; examples of having damp-smelling clothes illustrate the impact on life outside the home:

> My mental health, it's not been very good. It's my morale, really, because I can't invite anybody around. All my clothes, everything I have absolutely smells. It smells awful, and I get really, really embarrassed because when I'm out and about and I can smell myself. Even though I've washed everything, my clothes still smell. (Interviewee 5)

> When I moved in, people would say to me, 'Your clothes smell damp.' Living here, I can't smell anything, but my kids have said, 'Dad, we've got something that's been at yours, and it smells of damp.' I thought, well, are people smelling this damp and not mentioning it to me?! (Interviewee 22)

Additionally, the inability to address these issues independently and the need to rely on external support proved mentally draining for many interviewees. The process of chasing housing providers often involved persistent efforts to be heard and acknowledged, which could be emotionally draining. The issue of communication is explored in more depth in Chapter 7. One interviewee described feeling ignored in this context:

> Of course, that does start to then have an effect on your mental wellbeing and even you emotionally because, are you being ignored? Is it not serious? Are you not important? Those things start coming to your mind. For example, if I'm speaking to somebody about an issue that I have, and that issue to them is not important, how is that going to make me feel? (Interviewee 3)

The social impacts of mould and damp were also significant in this context, often leading to feelings of isolation, embarrassment and shame. Many interviewees reported that they avoided interacting socially within their homes, which in turn negatively impacted their relationships with friends and family: *'my spare room's full of mould, so I can't have someone to come and stay with me'* (Interviewee 23). Similarly, this interviewee described how the mould had forced them to limit their family's visits:

> No, it didn't. It was very depressing. It was embarrassing because I didn't want people to come over because it was too cold. My daughter would say, 'Right, we'll come over', with my grandson, and I'm like, 'Don't, it's absolutely freezing.' I'd go to her house and be absolutely sweltering with no heating on because her house is so well insulated. I'd be, 'Right, I've come over to grab some warmth so I can take it back with me', kind of thing, just to make light of it, but it was embarrassing and very depressing because we couldn't have heat on and just absolutely freezing. (Interviewee 19)

6.5 Finances

While some survey respondents reported minimal financial impacts, the majority voiced that mould- and damp-related issues had led to significant financial burdens. A major contributor was heating costs. Figure 14 summarises the answers to the questions about indoor temperature and home heating. It shows some level of difficulty in maintaining a comfortable temperature. Figure 15 shows that a majority of respondents reported that they did not use the heating as much as they would like to, mostly due to cost (55%) but also for other reasons, including the heating not functioning as it should.

Many interviewees recognised the need to maintain a certain temperature to reduce the risk of mould and damp, but navigating this balance proved challenging:

> So, we were sitting in coats, quilts, blankets in our own bedrooms because it was better to be in one room to try and keep warm. I spent a fortune on electric fires to try and warm the house up. It got to a point, up to last year, it was actually warmer outside last winter than it was inside my house. (Interviewee 19)

> If anything [is having an impact], it's heating, because we've got to put the heating on in the winter, more heating on to get rid of – so there's not as much mould. The heat goes quite quick out of here in the winter. I put the radiator on downstairs, put it on, and it still feels cold, even though the radiator's on, in the winter. (Interviewee 25)

In addition, heating costs could be exacerbated by the need to both heat the home and dry clothes whilst managing other household costs such as groceries:

> Then there was the financial cost because then we'd have to turn up the storage. I would have turn up the storage heaters to full blast to actually get them done, especially if I needed them done, like, by the morning. That amount of clothing for a household of three girls, it would have to be – I'd have to turn it up so that could happen. (Interviewee 9)

> Oh, all the time. I've asked [housing provider] for help once with food because I couldn't afford it [heating]. It was either one or the other, and I couldn't be cold. (Interviewee 13)

While heating costs were a prevalent financial impact, mould- and damp-related expenses affected survey respondents and interviewees in various ways. The high cost of purchasing and operating dehumidifiers, along with the need for home repairs like painting and redecorating, contributed to these burdens. Moreover, the loss of belongings due to mould and damp resulted in substantial financial losses. This interviewee described the extensive damage to – and necessity to replace – their clothing:

> In fact, it was in two storage cupboards, because when I went away and came back after a week I opened the walk-in wardrobe I have, and everything was covered in white mould. I just went, 'Yikes.' (Interviewee 18)

These examples relate to needing to replace furniture and other belongings:

> I had a lot of damage done to things that were put near the wall, where got damp on it, so I had to throw things away. Furniture got damp and wet, that had to be thrown away. There's the cost with that as well. (Interviewee 19)

> I've lost thousands of pounds in damages. Furniture's been destroyed. I even broke down to [housing provider] when they come out to my house, and I said, 'All my furniture's gone. All my beautiful furniture has been ruined.' (Interviewee 23)

> It's very stressful in terms of financially being a burden, the amount of belongings that I've had to, well, I can't even afford to throw them out, so they're just in the cupboard, but the amount of belongings that I've lost, the amount of times I've redecorated, I've recarpeted, I've had to buy different furniture. (Interviewee 16)

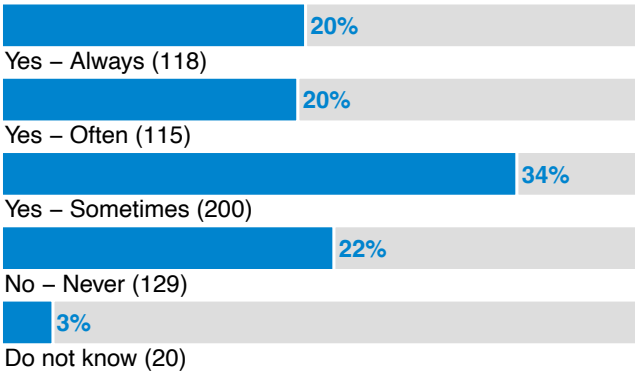

Figure 14 Before the recent measures, could you keep your living room warm during cold winter weather? (N=582)

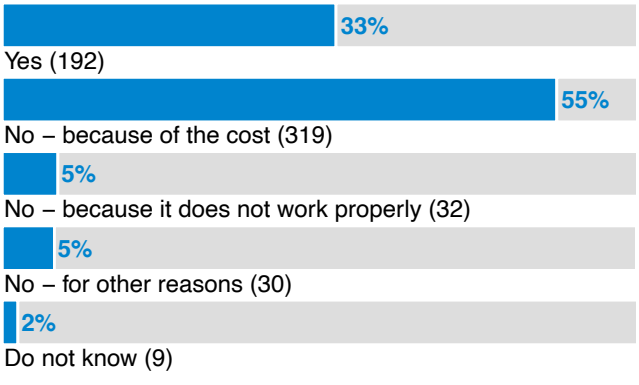

Figure 15 Do you tend to use the heating as much as you would like to? (N=582)

7. Communication, advice and support

7.1 Introduction

This chapter provides a picture of survey respondents' and interviewees' relationships with their housing providers *prior to* the SHQF. The focus is on their experiences of navigating processes and systems when seeking to access services and/or information. Understanding the wider context of relationships between survey respondents and interviewees, contractors and housing providers was essential in grasping the context in which residents received details about the SHQF and their receptibility to it.

Much of the emphasis is on communication between housing providers and individual households. We were keen to discern the channels through which information flowed to and from survey respondents and interviewees, to gain a sense of the extent to which they were clear about how to contact their provider, and to understand previous experiences of such contacts, particularly where respondents had sought to request repairs or other works. This could encompass a number of interactions with different workers, such as contact centre staff, frontline housing officers, contractors, inspectors and other personnel, as well as the use of different formats (e.g. online forms, SMS, apps or face-to-face discussions). We asked for examples where housing providers offered advice, guidance and support on broader issues affecting households, such as finances, accessing public services or community organisations, training and employment opportunities and health and wellbeing programmes. We sought to gauge to what extent respondents were broadly positive or negative about the interactions.

7.2 General communications

Interviewees were asked *how* they typically received information from their provider: if that was regular or irregular, formal or informal communication, what format it took, the content and whether they felt it was beneficial to them.

If communication was initiated mainly by them, we wanted to understand what had prompted the interaction and what had been the outcome. Interviewees reported receiving official information in different formats such as email, newsletters and phone calls. They also picked up details more informally via visits from workers sent out to inspect and carry out repairs.

Some interviewees referred to regular phone calls from their housing provider to enquire about how they were getting on, but this mainly involved checking if they had any issues managing rent payments.

In-house newsletters were mentioned by 12 interviewees. Three recalled advice on mould and damp appearing in newsletters (notably, all from the same housing provider):

> All I can say is that, certainly in the newsletters and stuff like that, they have asked people, 'If you've got any problems with mould and damp, do get in touch', obviously because of that awful case. So, they have done that. They've not been negligent in that at all. (Interviewee 11)

Two were involved in housing providers' residents' forums. One received a personal email inviting them to join a forum offering them the chance *'To give my opinion on the property and the type of properties that we're living in in our area'* (Interviewee 36). Similarly, another recalled emails inviting them to events or consultations on various works programmes their housing provider was planning, although they had not been able to attend.

7.3 Experiences with reporting issues

Figures 16–19 summarise the survey responses relating to communications with housing providers prior to the SHQF measures taking place. According to Figure 16, 81% of respondents had raised issues relating to damp, mould and/or condensation with their housing provider. Of those who had contacted their housing provider, 86% (402 respondents out of 470) recalled receiving a response (Figure 17). As shown in Figure 18, a majority were at least 'slightly satisfied' with the response they received, but 34% were 'not at all satisfied'. Those respondents who had not contacted their housing provider were asked if there was a reason for this, as shown in Figure 18. A majority (54% of those who had not contacted their housing provider) answered that they did not believe they would provide any help (Figure 19).

In our statistical analysis, we looked at ways in which satisfaction with the responses of the housing providers differed across the sample. As above, this related to satisfaction with the housing providers' responses to issues raised prior to the SHQF measures taking place. In this summary and throughout the body of this report we include only the statistically significant relationships, and we indicate the estimated magnitude of the difference as

a multiple (e.g. that people with a particular characteristic were 1.5 times more likely [equivalent to 50% more likely] to have a particular outcome than people without that characteristic).

The following groups were more likely to have been **at least 'somewhat' satisfied with the response of their housing provider before the SHQF**:

- Those who had received work on mould removal (2.3 times more likely)
- People who reported there was not a child under 5 who normally lived in the home (2.0 times more likely)
- People who reported there was not a child between 5 and 16 who normally lived in the home (1.8 times more likely)
- People who reported there was a person aged 65 years or over who normally lived in the home (1.7 times more likely)
- People who reported they were less than moderately concerned about condensation, mould or damp in their home before the SHQF measures (3.4 times more likely)
- People who reported taking a higher number of mitigation approaches before the SHQF measures. For each additional approach they were using beforehand, they were 1.2 times less likely to report being satisfied.
- Survey respondents who were 66 years old or older (2.6 times more likely)

In addition, the level of satisfaction was related to when people first noticed the issues in their home: the more years had passed since they had first noticed the issues, the **less likely they were to be somewhat satisfied**. Compared with people who had first noticed the issues less than a year earlier:

- Those who reported first noticing issues around 1 year earlier were 1.9 times less likely to be at least somewhat satisfied
- Those who reported first noticing issues around 2 years earlier were 2.5 times less likely
- Those who reported first noticing issues around 3 years earlier were 3.6 times less likely
- Those who reported first noticing issues around 4 years earlier were 4.1 times less likely

Finally, people living in homes with at least two other people were less likely to report being satisfied with the response of their housing provider than those living in homes containing only one or two people.

The overwhelming majority of contacts with the housing provider cited in the interviews concerned the reporting of repairs, including those related to mould and damp. For most interviewees, this was usually done via customer contact centres, with phone calls the predominant method of contact. Interviewees could be positive about

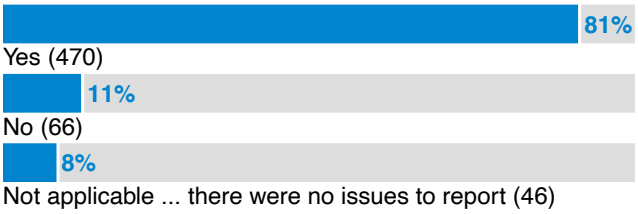

Figure 16 Have you raised issues with condensation, mould or damp with your housing provider? (N=582)

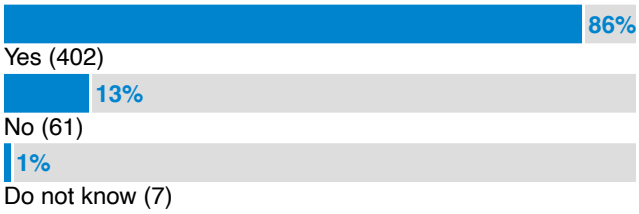

Figure 17 Did you get a response from your housing provider? (N=470, see Figure 16)

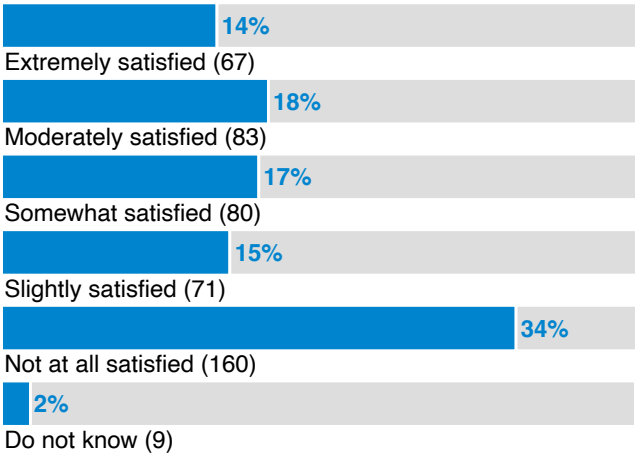

Figure 18 How satisfied were you with the response of your housing provider? (N=470, see Figure 16)

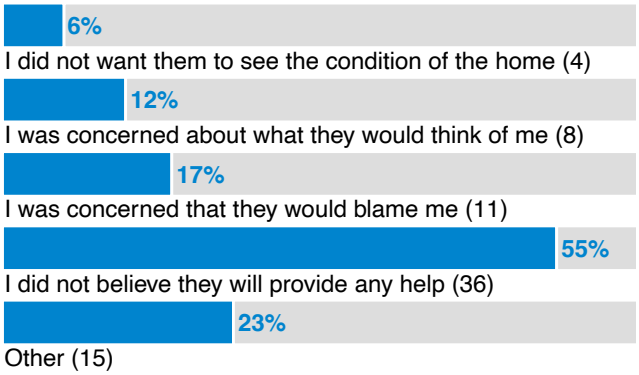

Figure 19 Which of the following describes your reason for not raising these issues with your housing provider? (N=582)

the speed of the response: *'The repairs line, they put details down and book a job in and so on. That aspect, I'm more than happy with'* (Interviewee 36); *'When I first reported it, generally they give me an appointment then and there'* (Interviewee 40).

In other cases, there were long waits on the phone, and, although they were encouraged to use the online system, this had resulted in these interviewees tending not to report issues:

> You're meant to do it online now. It's hard to get through to them. I've not booked one in, like, a year. I do need to book some, but because it takes so long to get through I just don't. It's just like you used to be able to just call up, but ever since Covid they've got such a backlog, so they just always have excuses, so I've not called up since... (Interviewee 28)

Some interviewees were quite happy with **online reporting mechanisms** precisely because they avoided waiting on the phone. However, being *required* to use such text-based formats posed challenges for an interviewee with dyslexia, who was advised to go onto the website to report issues but struggled with reading and as a result gave his housing provider 5 out of 10 *'because of the difficulty in contacting them'*, even though he indicated they did get works done (Interviewee 11).

Some of those who commended the initial 'front of house' contacts could, however, be **disappointed with the practical response to the issue they were raising**. One contrasted the 'rapid repairs line' with *'the people in the background, in the back offices, where everything seems to slow down'* (Interviewee 36).

Interviewees described repeated contacts regarding the same issue involving **long, drawn-out processes** characterised by referrals between different workers, contradictory answers and some confusion over records and missed appointments. In fact, poor communication was often given as the primary reason for giving the housing provider a low score: *'I'm not going to lie. It does get a little bit frustrating, ringing up about the same thing...'* (Interviewee 17)

Some interviewees described **constantly having to 'chase'** repair jobs, with contact frequencies including 'once a month' (Interviewee 4) and 'every week' (Interviewee 19). For one interviewee, who described frequently having to put in *'four or five chases on the job'*, it had reached a stage where they had now raised two official complaints in 12 months and had received compensation *'because they've admitted that they've not kept up with their side of the agreement, when it comes to repairs, where they've not met their targets'* (Interviewee 36).

The interviewees perceived the communication process between different actors to be a reason for these slow processes. Interviewee 40, for example, who praised the initial speed of response, outlined the extended nature of contacts once a job was raised:

> Then they'll come out, and then they'll do whatever they're doing. They'll say, 'I'll speak to such-and-such a person, and then they'll get in touch', but sometimes that can be a week or two weeks before I hear anything. Then I have to do a follow-up phone call, go through the whole thing again, because obviously it's not that person I didn't deal with the first time. Then they'll be like, 'Oh, I need to get in touch with such-and-such a person to find out what's going on. They'll ring you.' It's a long process just to get an answer of what's happening. I'm still waiting now from the last report. (Interviewee 40)

Similarly, this interviewee reflected on their experience with messages not reaching them through the network of contractors:

> I think the communication between themselves is what lets them down the most, because I've had loads of issues with them, like they haven't sent the right person, or the job's been lost or they haven't communicated back with me that somebody's not coming, and I've waited in all day, but, obviously, that's not just for me. I know other tenants who have had the same. (Interviewee 1)

As this illustrates, communications often involved a variety of representatives and a considerable amount of administration on behalf of the occupant. This could make it more challenging and onerous for the householder. As part of this constellation of different workers, contact with local officers was mentioned infrequently but usually related to repairs. One man, for example, described speaking to his housing provider's local head of maintenance and repair for the area about an issue with drainage at his property but was disappointed with the follow-up:

> He turned around and said, 'These works will be done. They'll be done.' Every time I ring him, 'Oh, I'll chase it up. I'll chase it up.' I just give up. (Interviewee 39)

These 'frustrating' experiences were worsened by the tendency for high staff turnover, adding to the likelihood that interviewees would not know who to contact and that they would have to explain the situation again:

> I've had about seven different managers. As I said previously, they don't even tell you that they've changed who's your manager. It's all as if you don't need to know. Well, I think that you do need to know. If you've got a problem, your first port of contact, obviously, is your manager. If it's a nameless, faceless person, might as well say I haven't got one. (Interviewee 41)

Before the SHQF programme, the weight of the communications appeared to be heavily on the side of the individual. For example, one said they received a phone call every couple of months to check their rent status, whereas they contacted the housing provider every three weeks *'to notify them that the works that have been completed haven't been successful, that the mould has come back. I may call them to check on how long the repair is going to take'* (Interviewee 16).

One of the major complaints cited by interviewees was the considerable number of different people they were in contact with over a single issue, with a range of opinions and advice being issued by different actors that were

sometimes contradictory or did not reflect the householder's understanding of the situation. One case illustrated this well:

> The responses have been completely different. […] Then I had some guy coming round saying, 'Oh, it's a change of paint. It's just a different shade of paint', and I'm like, 'But it's not.' It turns out that I was right. It's not a change of paint, it is wet, which is essentially causing the mould. It's different people's responses can impact somebody's decision. (Interviewee 17)

This could lead to a loss of faith in those trying to help. In this example, the interviewee questioned what was happening to the data the housing provider was collecting on their property:

> This went on for quite some time. I kept saying, 'Well, have you not got any record of the surveys that have been carried out?' They didn't have. So, it just went on for quite a while. In the end, I emailed them, and I said, 'I'm going to have to put in a subject access request.' (Interviewee 22)

Relatedly, another interviewee commended how quickly they received a response when they raised the issue of mould, but they were thinking about making a complaint because they felt their housing provider was not listening to their feedback that the treatments were unsuccessful and the real cause was being ignored: *'they're just coming, doing the same thing, and I'm telling them it's not working and it's the windows, and they're still just… They're not listening to me, basically'* (Interviewee 15). This lack of faith in the organisations providing assistance was one reason why a number of interviewees – such as Interviewees 21 and 14 – stated that they kept logs of the contacts. Several individuals commented that they did not have the energy to pursue issues further:

> At the moment, at this stage where I am now, especially with the damp and the mould, I've kind of like, emotionally even, given up. (Interviewee 3)

Some interviewees stated that the standard of **communication had declined in recent years**. Comparing the current service with the *'brilliant relationship where they were very keen to listen'* when they first moved in, one commented that *'that's all changed in the last ten years'* (Interviewee 3). A number explicitly cited the pandemic as a turning point.

> When I first moved in they were very supportive, but then I think they've lost a lot of good workers… Before, they were a lot more engaging… I don't know if everyone's just changed since Covid. I know a lot of staff have left. So, it's just they haven't got the same values. It's just a job, isn't it? (Interviewee 28)

In the view of eight interviewees, communications had deteriorated to such a point that they had initiated formal complaints, with another seriously considering it and two others having involved their MP. For example, Interviewee 5 had been contacting their housing provider since 2017 by phone, email and letter regarding mould and damp but in 2023 contacted a solicitor about the matter, which was now an ongoing court case. Although some felt powerless, others had researched the legal rights they could expect; for example, one interviewee had read up on the DHS, which he intended to use to hold his provider to account.

7.4 Positive experiences

Despite feeling compelled to keep a record of things *'because I had different excuses: we haven't got that job number, that's not listed'* (Interviewee 19), one interviewee was very positive about their relationship with their housing provider and stated they were quick to come out and sort issues, including at a time when mould had appeared. However, they commented that, as someone who had worked in the public sector for many years, they felt they were particularly aware of how to negotiate with large organisations and explicitly contrasted this with their neighbour, who had *'got very upset and frustrated, and that was translated in putting the phone down'*:

> I can navigate the systems extremely well. It's like anything else; if you don't fully understand how to react to what's going on, you may not be listened to as quickly as somebody who can work their way through. (Interviewee 19)

A small number of interviewees were very positive. Awarding their housing provider 8½ or 9 out of 10, one stated, *'Everything I've asked them to do, they've proceeded, got on with it and got it done for me'* (Interviewee 29). Even where there had been issues with mould that had required their housing provider to come out and carry out works, Interviewee 21 was *'more than happy'* with the service, noting they had always dealt with it quickly.

Others were positive about certain aspects: *'Don't get me wrong, certain elements of [name of housing provider] are absolutely brilliant'* (Interviewee 6). When asked to provide feedback on a particular repair job, Interviewee 7 rated it '10 out of 10', although other issues had not been resolved as satisfactorily. Another, who also gave the same provider 10 out of 10, described how they helped her with many things and praised their communications about mould and damp. After commending the newsletter, she recounted that the waiting message on the phone had suggestions on how to reduce mould and damp and also that the contractors who had visited to carry out works had provided her with further tips on how to deal with them.

Although they were less positive (6 out of 10 'for trying'), a third interviewee with the same housing provider also recalled receiving advice on what to do to prevent mould:

> I remember there being something about mould and talking about ways to prevent mould, about hanging clothes, windows and all of that sort of stuff, which I've had from them verbally anyway when they'd come to assess the mould situation in my house, so yes. (Interviewee 9)

For most interviewees, the picture was mixed, which was clearly described by one:

> It can be really good, but it can go both ways, where they say they're going to do something, and then it'll take them six months to do it. I have to constantly then email back and forth to get something done. I've been doing this now for nearly two years up until I just recently had pneumonia, and I went to the doctor's because for about six months I've been on antibiotics every month. (Interviewee 23)

7.5 Advice and guidance

We asked about communications received about managing mould and damp and what advice was given regarding looking after the home. In one example, the interviewee was very positive and indicated they had benefited immensely from their provider's advice on the topic: *'I think all housing providers, if they would provide the same education as I've received, I think we'd have a lot less mould and damp'* (Interviewee 8).

Where advice was offered, **it was not always possible or practical for interviewees to follow the advice**, and, in some cases, it was not effective. For those with children, being asked to limit the condensation was difficult, especially in the winter when clothes needed drying. Interviewee 9 was advised to get a tumble dryer but could not afford to run one, and others baulked at the cost involved in keeping the heating on, which they were advised would mitigate mould and damp:

> They said, 'Oh, all you have to do for a solution is put your radiators on', but again, that costs money. That's not fair... I'm on key-pay meter, anyway, so it's not fair to do that, especially in the winter months, as well, to get rid of mould let's put the heating on full blast. That's not a solution for me. (Interviewee 25)

Recommendations regarding treatment were also unwelcome when it had been attempted unsuccessfully several times before. Interviewees recounted, for example, that they were advised to keep the windows open, but many stated they already did that, but the mould and damp had persisted. One gave a specific example: *'if somebody else says to me, "Paint mould wash", I'm just showing them the front door'* (Interviewee 3).

As noted above (Chapter 4), a number of interviewees expressed resentment that messages from housing providers implied that the mould and damp in their property were (wholly or partly) the result of their own behaviour and were not due to more structural problems with the building or repairs that had not been carried out correctly, which they felt was at the root of the problems. Interviewee 5 related how her housing provider had repeatedly told her the flat was too cluttered and was maintaining that line in legal proceedings; similarly, Interviewee 39 related how *'they just keep saying, declutter, declutter, declutter'*. Overall, there was a sense of being unjustifiably blamed for something interviewees did not feel was their fault, a sentiment expressed here:

> I'd just say one thing I found from this experience is from what I've got from [name of housing provider] is just... I felt a lot of the time like this whole situation has been my fault. I felt like I've spoken to contractors and they're using terms such as general housekeeping, lifestyle choices. (Interviewee 16)

7.6 Wider support

Over the past decade, social housing providers have developed an 'ecology of services' that goes beyond 'business as usual' housing issues and involves the provision of advice, guidance and even direct delivery of support around employment and training (Wilding et al 2019). In part, this is aimed at ensuring the financial stability of tenants, thus maintaining providers' rental income.

We wanted to collect evidence on how easy it had been for interviewees to access and navigate this support and to what extent this had helped improve housing provider reputations or provided evidence of effective communications.. Many interviewees were aware that such support mechanisms existed, even if they had not availed themselves of them. For example, one interviewee (Interviewee 37) had received an email that indicated that advice on finances and energy efficiency was available in an app, so they knew where to find information if they needed it. Interviewees 1 and 15 also knew this advice was available online.

For those with positive views of their housing provider, the wider support and services offer could be an important factor. Interviewee 37, for example, described their housing provider's involvement in extensive community services, which they termed *'almost extra-curriculum'* activity, and also cited the help with swapping over their utilities *'without me having to make any phone calls or fill out forms or anything like that. It was absolutely marvellous.'*

This type of assistance could be valued, even where other aspects of services were heavily criticised. Advice on benefits and other welfare payments was a common area. For example, one man rated the department that dealt with financial matters '11 out of 10' for sorting his Pension Credit, before adding: *'Then again, a lot depends on the person that you're dealing with your case, and he was extremely good.'* This was one positive comment among what was a generally negative perspective of his housing provider (Interviewee 41).

Interviewee 8, who described the support as *'tremendous'*, said they had been unaware that they could claim benefits until they had contacted their provider's financial team for help with heating their house, *'who not only ensured that I had heating; they actually assisted me in applying for benefits'* (Interviewee 8). A third interviewee praised their housing provider's practical intervention: *'Absolutely brilliant because, when I got ill, the welfare officer from [name of housing provider], he was fantastic, and he sorted everything out for me in terms of benefits...'* (Interviewee 6). This echoed the interviewee who paid

tribute to her housing officer, who was *'very proactive'* in advising her about Discretionary Housing Payment, although she noted: *'Other than that, I haven't really spoken to anybody else'* (Interviewee 16).

One man recalled his housing provider asking him if he wanted help with financial matters (Interviewee 11), and a couple had received help with managing utility bills: for example, Interviewee 39 had received vouchers to help pay for his gas and electricity bills. Interviewee 28 accessed a food club run by their housing provider; however, they added *'that's the only thing I'd say is good in relation to [name of housing provider]'* because the dissatisfaction with repairs was such that they had had to contact their MP *'on multiple occasions in regard to my damp and mould'*. Possibly the most notable example was provided by a woman who had been provided with free professional counselling sessions (Interviewee 26).

7.7 Cycle of works

Although it was not the subject of a specific question, across the sample, communications regarding cycles of works and associated improvements were often mentioned. This issue is also covered in Section 9.5. Its relevance here is the impact it had on an individual's understanding of when and why their housing provider would undertake works and also their belief that they would see a positive outcome from interventions. In addition, for some interviewees it was hard to disentangle such cyclical programmes from the SHQF because they expected the former to also have had a significant impact on mould and damp. For example, Interviewee 4 stated that they had raised the issue of a leaking sink in the bathroom and asked when the bathroom was due for renewal: *'I think they said it was like 2030 or something'* (Interviewee 4).

Interviewee 41 commented that he had been waiting for about six years for a new kitchen but emphasised that the issues with the property's roof were the priority. Nonetheless, he explained that the delay with the kitchen and bathroom was *'really is starting to make my wife a bit down, really, because it just feels that nobody is listening'*. He was sceptical that his provider would undertake the accessibility work he needed on his bathroom and believed he would probably end up paying for it himself to avoid a long wait.

> I can guarantee that nothing will come of it... I mean you can only go off your experience, can't you? Going off experience, I would just have got a standard letter saying that they had no money. It's got to the stage now where I'm going to have to see about getting – what do you call them? – a wet room/shower... Now, I might be wrong. If a doctor said there was a medical-type thing, you might get it done. (Interviewee 41)

Interviewee 7 explained the serious impact of their heating system repeatedly breaking down, leaving the house with young children freezing cold, and the frustrating conversation regarding a replacement:

> So, there was a time that this guy came several times, and I'm like, 'I don't want to see your face again, but I want another person to see what are you doing. That is not okay', and he said to me, 'Your boiler needs to be 15 years old before they will change.' I said, 'How old is the boiler?' He said, 'It's about 12 years.' I said, 'Well, so that means I have a long way to go.'

Interviewee 39 had missed out on improvements to the kitchen and bathroom during the pandemic but, despite his mobility issues, had been told the earliest that work would be done would be 2027. He was one of several interviewees who supplied examples of being told the housing provider lacked the money to undertake works. After detailing the draughts and cold, which affected his ability to keep the flat warm – *'all the heat was just going through the doors and the windows anyway'* – he recounted how contractors took measurements for new fittings *'and then said, "Get in touch with the housing association for further updates on it." I've rang them, and they've said, "We've no money."'* A similar experience was described by Interviewee 20, who also got a *'new front door because of the draught that was coming through, but the back door is just the same, but they say, "We not got [sic] the money for it yet."'*

7.8 Conclusion

Assessing how respondents navigated the landscape of provision enabled us to build a picture of their interactions with the housing providers. We found that better communication was a key demand. Many households reported having to make repeated enquiries about the same issue(s), experiencing multiple layers of contact with different staff members and receiving at times inconsistent and unclear advice. These experiences had created a legacy of confusion and scepticism, and this affected the willingness of individuals to engage positively and constructively with their housing provider. This meant they tended to doubt that works would achieve the desired effect, whatever the claims that were made.

It is fair to say that views on housing providers were mixed, and, even within the same provider's reach, individuals were willing to compliment the organisation in one area and be highly critical in another. This would imply caution against the use of simple satisfaction measures when assessing performance, especially where SHQF measures were implemented alongside other ongoing works.

In the next chapter we assess survey respondents' and interviewees' experiences of the SHQF measures, including how housing providers communicated their purpose and the specific elements of the programme.

8. Experiences of SHQF

8.1 Introduction

This chapter reviews survey respondents' and interviewees' experiences of the delivery of the SHQF programme. The online survey asked respondents to identify the measures delivered and provided the opportunity to insert some detail on experiences of installation from first notification to completion. Interviewees were invited to provide further detail about the appropriateness of the measures in relation to their home and their needs, the information they received about the programme and their level of satisfaction with the resulting changes.

8.2 Information about the programme

Some 62% of respondents recalled receiving information about the SHQF programme before the works started (Figure 20). Levels of satisfaction with the information given varied, as shown in Figure 21. Whilst 25% of respondents were 'not at all satisfied', 54% were at least 'somewhat satisfied'.

Various communications by housing providers were sent out to the target properties before any SHQF-funded measures were installed, and in our evaluation we were keen to understand whether survey responses and interviews provided evidence of awareness of the programme's main purpose (and, if so, to what degree), as well as any expected benefits.

What was clear from interviewees was that most were not clear before the work started that this was a specific project targeting damp, mould and condensation and were unclear what it would involve. This suggested that any communication before the works started did not make a major impression. While many interviewees remained uncertain, others gained knowledge from contractors and neighbours during the works.

Nonetheless, some interviewees felt they had been fully apprised by the information they had received, and others had gained more awareness after the installations began, often from contractors rather than their housing providers. However, there was less certainty about the likely benefits, and some interviewees, particularly those with previous negative experiences, could be sceptical about the potential impact of the programme.

Future programmes may therefore benefit from clearer, simpler messaging co-ordinated across providers and contractors, clearly distinguishing them from other works programmes. One option could be to use customer records to highlight where previous issues may have presented barriers to engaging fully with interventions like the SHQF.

Preparing the ground

As noted in Chapter 7, many interviewees confirmed a long history of contact with their housing provider about damp, mould and condensation, as well as related issues, such as heating and general repairs. In some cases, the issues were still ongoing, so that a 'long tail' of communication could exist, and this meant that interviewees could not always distinguish this particular set of works from another when they were focused on the same problem(s) and in some cases were occurring around the same time. The fact that previous contacts and complaints regarding

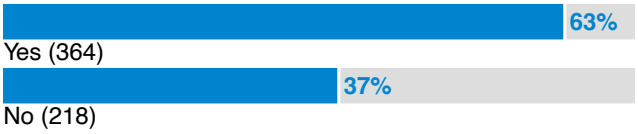

Figure 20 Do you recall receiving information about the measures before the works started? (N=582)

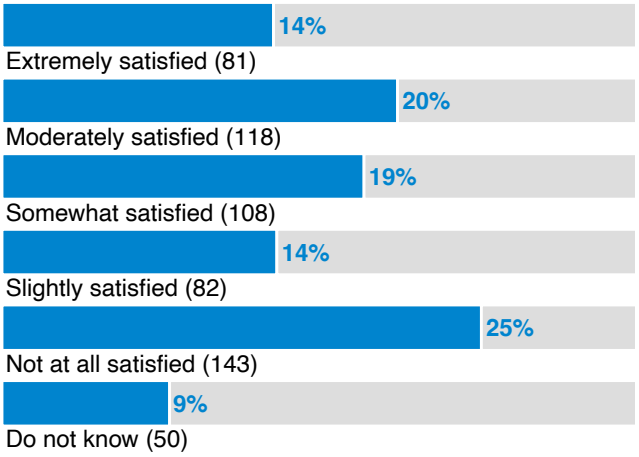

Figure 21 How satisfied have you been with the information you have been given about the measures? (N=582)

mould and damp were in some cases used by housing providers as inclusion criteria for the SHQF perhaps makes this uncertainty understandable.

Interviewee 2, for example, believed that the damp proofing works that had taken place in late 2023 or early 2024 resulted from earlier complaints, although acknowledging that they struggled with the *'mix of information off them'*. Others were unsure whether the measures were the consequence of previous complaints, a general message to all households that they had received or part of ongoing works on aspects of homes. One interviewee, for instance, said their housing provider had first notified them by letter that a new kitchen and bathroom would be installed about eight months earlier, but they assumed the former was because of the general poor condition of the units and the latter was related to their repeated requests to fix the leaking bath.

For some interviewees, the information provided was thorough, but they had not fully grasped the detail or appreciated that it was a particular programme of works. Interviewee 12 received a phone call from their housing provider, during which they were told that the planned work would help reduce condensation in the property, but did not recall any contextual information explaining the background. Interviewee 9 did recall receiving information explaining why the work was taking place but acknowledged *'exactly what was going to be taking place, I was a bit unsure...'*, before adding that they could not be definitive regarding whether they were aware it was part of the SHQF programme.

On the other hand, one respondent felt they were fully apprised of what was involved, asserting they had received a *'very clear'* letter *'stating what date it was going to start and what was going to be done'* (Interviewee 5). In total, letters were mentioned by ten interviewees as the primary way they were informed initially by their housing provider. Others mentioned a combination of approaches, which were part of a programme of information over time:

> We received phone calls, a consultation and, yes, they kept us informed every way along the line on what was going to happen, when it was going to happen and how it would – the effects of what was going to be done. Yes, all the way along the line, they just kept us fully informed. (Interviewee 8)

Learning during the process

Notwithstanding this lack of awareness of the programme early on, knowledge could grow while the work was underway. Interviewee 8 was just one of many respondents who mentioned that they had learned a lot from the installation team. Many stated that it was the contractors who told them in detail about the purpose and nature of the measures. Interviewee 28 explained: *'They were really good and just told me how it all works and everything and how much of a difference it would make, because I didn't really understand'*.

In cases such as this, it was through informal chats during the actual installation that information sharing occurred. However, it could also be part of a more formal process. This quote indicates that it was the contractors who informed them that this was a discrete government project:

> ... the supervisor of the team that were going to carry out the work, she came round and introduced herself and told us everything that was going to be done... They said it was a government scheme to insulate properties. (Interviewee 5)

Interviewee 10 said they thought they had received a letter from *'an outside company saying that they was coming to fit a couple of fans. Could I give them a call to make an appointment?'* However, they were uncertain *why* it was being done until the contractors came, at which point *'I asked, they just said it's like a new thing that they're doing.'* As this demonstrates, receiving a letter, email or phone call prior to the installation did not necessarily mean interviewees felt confident they understood about the proposed measures.

Interviewee 29 had been unaware these were part of a specific programme *'until they started doing it'*, when they realised their neighbours were having the same measures completed.

Understanding the outcome

Assessing what information they had received and understood about the proposed measures was an essential starting point as to whether interviewees had felt they were likely to address any existing issues and be beneficial going forward (in particular concerning damp, mould and condensation). We asked interviewees if they had had any expectations of what the measures would (or were intended to) achieve. In general, there was an attitude of cautious optimism, tempered by previous experiences and a lack of certainty about exactly what was involved.

Interviewee 11 – who had received a leaflet through the door – had hoped the planned insulation would *'possibly'* make the house warmer. Interviewee 34 anticipated that the installation of new ventilation in the bathroom and the mould removal would be helpful, because previous treatments had not addressed the root cause, but was guarded about the outcome: *'let's just let them do it and see what happens.'* More optimistically, on receiving information about the programme, Interviewee 9 *'definitely thought that this looks, this sounds like it's going to help.'*

Overall, the evaluation suggested that communication about the SHQF was often interpreted in the context of longer-term interactions with housing providers over not only damp, mould and condensation but also other repair and maintenance issues. Where there had been many exchanges, this could lead to uncertainty.

8.3 The measures undertaken

Through our statistical analysis, we observed some patterns in relation to the categories of intervention and the impact on survey respondents and their homes.

Compared with other types of intervention, work on the fabric of the building was:

- More likely to be disruptive (1.5 times)
- More likely to lead to people reporting the home being warmer after the measures (2.4 times)
- More likely to lead to people reporting the home feeling less damp after the measures (1.6 times)

Compared with other types of intervention, work on heating was:

- More likely to be disruptive (1.8 times)
- More likely to lead to people reporting the home being warmer after the measures (2.2 times)

Compared with other types of intervention, work on mould removal was:

- More likely to lead to people reporting the home feeling less damp after the measures (1.9 times)
- More likely to lead to people reporting there were improvements in long-term health conditions after the works (2.2 times)
- More likely to lead to people reporting that they were satisfied with the response of their housing provider (2.3 times)
- More likely to lead to people reporting that they were satisfied with the information they were given about the works (1.8 times)

Compared with other types of intervention, work in the kitchen or bathroom was:

- More likely to be disruptive (2.2 times)

Compared with other types of intervention, work on ventilation or fans was:

- More likely to lead to people reporting that they were satisfied with the information they were given about the works (1.5 times)

This summary suggests that mould removal is the intervention most likely to lead to people reporting an impact in relation to the home feeling less damp, long-term health conditions being alleviated and people reporting being satisfied with the response of their housing provider. This is encouraging, but it is useful to note that this reported impact could reflect the visibility and immediacy of this intervention, i.e. the tenant can see that the mould has been removed and they can observe this straight away.

8.4 The process of installation

We wanted to understand the impact of the works on households, including considerations such as the length of time the works took and the practical challenges for respondents using their living spaces during the works. As most, if not all, works were carried out by contractors, we also explored how respondents rated the conduct and competence of the contractors and how the property was left at the end. To do this, we first asked how straightforward or disruptive the process had been and then how satisfied they were when it was done.

Figure 22 gives the responses relating to how disruptive respondents found the process of installing the SHQF measures. It indicates that over half experienced either no, or slight, disruption. Over one in five of our survey respondents, however, found it moderately or extremely disruptive.

From our statistical analysis, we found that the following groups were more likely than others to report that the process was at least 'somewhat disruptive'. For other groups tested, we found no statistically significant relationships:

- People who reported there was a person in the home with a long-term health condition that limited their day-to-day activities (1.6 times more likely)

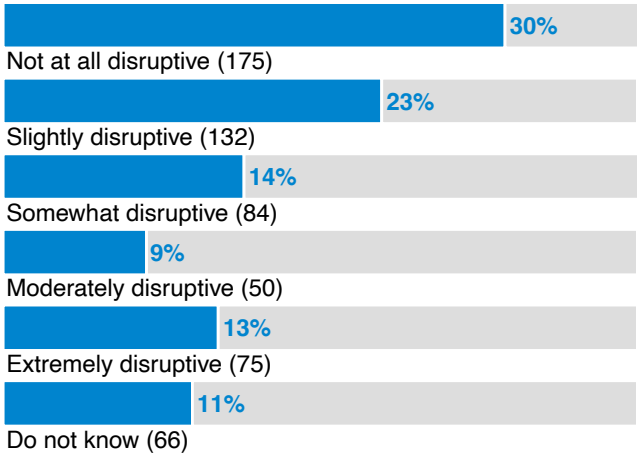

Figure 22 How disruptive were the changes when they were carried out? (N=582)

- People who preferred not to say whether there was a person in the home with a long-term health condition that limited their day-to-day activities (2.3 times more likely)
- People who reported they were at least moderately concerned about condensation, mould or damp in their home before the measures (2.5 times more likely)
- People who reported they first noticed the issues around 4 years earlier, or more, compared with people who first noticed the issues less than a year earlier (1.8 times more likely)
- People living in homes containing only people self-reporting as non-white (1.9 times more likely)

To many of our interviewees, the process had been **reasonably straightforward and not disruptive**. There was considerable praise for contractors for their conduct and the standard of their work, with adjectives such as 'amazing' (Interviewee 27), 'fantastic' (Interviewee 33) and 'great' (Interviewees 28 and 6) used. In a further example: *'The interaction with the workmen was brilliant, absolutely brilliant. They were a good crew, and I mean they were a good crew. They knew what they were doing'* (Interviewee 18).

Positive behaviour was often remarked upon: the workers were *'amazingly gracious, always on time'* (Interviewee 6); *'so respectful. They were talkative. They engaged with me. They made me feel at ease'* (Interviewee 17); and *'all very understanding and polite, yes'* (Interviewee 5).

Nonetheless, even those who were positive about the conduct of workers and felt the process had not been disruptive could be critical of certain aspects. One issue related to the property having not being professionally **restored after the works were completed**. One interviewee stated that, while the installation of fans had not been disruptive and the workers had cleaned up, they had left a hole in the wall, which the interviewee had filled themselves *'because they did quite a naff job of it, really'* (Interviewee 12). Interviewee 24 had a very similar experience, while Interviewee 11 complained that holes were left in the outside after cavity wall insulation was installed, adding that the polystyrene filling was getting everywhere.

Another issue related to the **amount of preparation needed to make the house ready**. One interviewee, for example, who stated it was very disruptive, explained that in order for extra insulation to be added to their loft, they had had to spend a long time moving out all the items stored there and then putting them back: *'what was very orderly in the very beginning became this big mess'* (Interviewee 9). Another commented that the prospect of having to move all their belongings out of the living room ahead of spray treatment caused them considerable stress; despite their housing provider having told them the contractors would work around them, the company wanted to do all the spraying and painting in one go, leaving them to *'become frustrated and become angry, nothing else'* (Interviewee 26).

The perceived levels of disruption were not necessarily related to the extent of the intervention. Interviewee 6, for example, who had had mould removal and a new bathroom as well as having been dissatisfied for a while, did not feel it had been disruptive. A smaller job, however, such as installing a fan was regarded as very disruptive for Interviewee 35, who had sent photographic evidence as part of a complaint to their housing provider about the contractors for not cleaning up and damaging some personal items.

Dust, rubbish and fumes were a concern and a source of disruption. In one example, despite the plastic sheets laid down, the dust left all over children's toys, sofas, windowsills and skirting boards, as well as contractors' rubbish, was frustrating for Interviewee 16, who had only just decorated. They also reported that fumes from mould spraying in a family home caused them some stress:

> I had to keep myself and my two young children upstairs in my bedroom for two days. When they come and paint, I stay upstairs anyway because of the fumes. It's very disruptive. (Interviewee 16)

8.5 Overall satisfaction

We asked survey respondents specifically about their satisfaction with the SHQF programme: 'How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?'

As Figure 23 shows, levels of satisfaction varied greatly. Some 28% of respondents were 'not at all satisfied', whereas 46% were at least 'somewhat satisfied'.

From our statistical analysis, we found that the following groups were more likely than others to report that they were (at least somewhat) **satisfied that the process had addressed any concerns they had** about condensation, mould and/or damp:

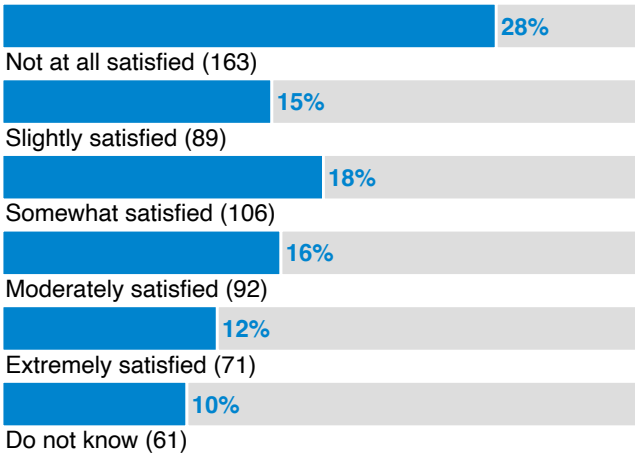

Figure 23 How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp? (N=582)

- People who had work on mould removal undertaken (2.4 times more likely)
- People who reported there was not a child under 16 who normally lived in the home (1.8–2.0 times more likely)
- People who reported there was a person aged 65 years or over who normally lived in the home (1.7 times more lily)
- People who reported they were at least moderately concerned about condensation, mould or damp in their home before the measures (2.8 times more likely)
- Survey respondents aged 66 years old or older (3.4 times more likely)

We found that the following groups were less likely than others to report that they were **satisfied that the process addressed any concerns they had** about condensation, mould and/or damp:

- People who reported they first noticed the issues around 4 years earlier, or more (2.3 times less likely)
- People who reported taking a higher number of mitigation approaches before the measures were less likely to report that they were at least somewhat satisfied with the measures. For each additional approach they were using beforehand, they were 1.2 times less likely to report being satisfied.
- People living in homes with at least two people in them (1.9–2.7 times less likely)

For other groups tested, we found no statistically significant relationships.

Reduced levels of mould and damp undoubtedly influenced people's reflections on how satisfied they were, but it was also the case that those who expressed satisfaction with the process all stressed that **good communication was a key reason**. Interviewee 33 commended the workers who came and installed fans in the bathroom and kitchen: *'they were absolutely fantastic. They were telling me what was going on and how to use [them].'* Interviewee 28 was also effusive about the installers, who *'told me how it all works and everything and how much of a difference it would make…'*. They made a point of distinguishing the contractors from their housing provider: *'it was like a separate company that they hired, but it was a good company, and they had good communication.'*

Interviewee 8 was also pleased: *'They dealt with everything and educated me at the same time.'* Interviewee 17 was very happy because the contractors had treated the mould in the kitchen, but the workers had gone *'above and beyond'* by checking the whole house for signs. As someone who had sight issues, they were very grateful for this additional assessment.

Some people were glad to get a new bathroom or kitchen, especially if they had been **waiting for some time** or experiencing problems. Interviewee 6 was *'ecstatic'* at getting a new bathroom suite, despite the existing one not being unsatisfactory. This was not directly related to their mould and damp issues.

Unsurprisingly, those who had **disruptive experiences of installation** tended not to be satisfied with the process. The interviewee who had complained about the mess left stated that, after some initial contact with their housing provider, communication from the latter had ceased. Criticising them as *'really unprofessional'*, they said they *'didn't have the energy to pursue it'* (Interviewee 35). Interviewee 3 was dissatisfied with the standard of the workmanship, with remediation needed on the walls to improve the appearance.

A **gap between expectations and delivery** was often a source of dissatisfaction. Several interviewees had expected that more was going to be done and were disappointed that the work had not been more extensive. One described how the mould in their bathroom had grown everywhere, including the ceiling, and their housing provider had sent out workers on several occasions to treat it by spraying it, without success. On the day of the SHQF measures, they had had to ask a neighbour to supervise the contractors *'because their timing was insufferable'*. However, they returned to find the water-resistant panels had been installed on the bath/shower side only:

> I came back, so I was just thinking that maybe it's half the work done, and they are going to come back. […] I got a message, 'Oh, can you rate us for the job that we've done?', and I put, 'Are you're going to finish up the whole place?', and he said, 'Oh, no, we just do that.' I said, 'Well, the other one is also affected', so he said, 'Well, that is what we were instructed to do, and that is what we have done.' I said, 'Okay.' I was expecting them to do everything, because the roof and the other works, because when you come you can literally see the mould on the wall over there. (Interviewee 7)

The interviewee had dealt with this issue by employing their own contractor to purchase the same panels and install them at their own expense. Another was dissatisfied when the contractors completed one anti-mould spray and one clean: *'and then that was it. They were here not even ten minutes, and I'm thinking, well, that's not even dealt with the problem, then'* (Interviewee 25). They had expected the contractors to target the root cause of the mould and damp, not just address the visible issue. The same complaint was made by Interviewee 38, who queried why fans had been installed when he believed water ingress from the outside of the property was the main cause of the mould and damp. Interviewee 39 felt short-changed when he received mould detector sensors: *'They did mention extractor fans, but they've still not been installed.'*

8.6 Conclusion

This chapter has explored survey respondents' and interviewees' experiences of the SHQF programme. Responses suggest that many did not have a good understanding of the purpose of the SHQF or why particular interventions had been selected for their home. Communications about the programme could be extensive, but the works often became entangled in ongoing issues with their housing provider. It was not only housing providers that were the source of information about the scheme; it was also the case that contractors could keep tenants informed, and in many cases they were able to provide more detail.

Some interviewees were satisfied with the measures, but some had expected more comprehensive interventions to tackle damp, mould and/or condensation: against this expectation, the SHQF works could seem like isolated measures. The installations were generally straightforward and involved low levels of disturbance. Work on the building fabric and heating system was, unsurprisingly, more likely to have been disruptive. Many installers were praised for their professionalism, but a minority caused stress and upset.

The following chapter considers to what extent the measures have been able to achieve their primary objective: reducing the risks associated with mould and damp in social housing in Greater Manchester.

9. Impact of SHQF

9.1 Introduction

This chapter considers the ways in which the SHQF affected our online survey respondents and interviewees. The primary objective of the SHQF was to support remedial and preventative damp and mould measures with the aim of addressing potential and actual health hazards and improving the overall condition of housing stock (GMCA, n.d.). A central purpose of this evaluation is therefore to assess to what extent those living in the properties felt this had been achieved.

Interviewees were asked a series of questions that aimed to explore the impact of the programme:

- if they had continued to experience issues with mould, damp and condensation and, if so, to what extent;
- if the work had led to change(s) in their physical and/or mental health;
- and what impact, if any, it had made on their lives and their use of the property.

We also asked about any outstanding issues affecting their property that had *not* been addressed by the programme, with particular interest in those that had a direct or indirect association with mould and damp. We examined the potential for these to limit the impact of the SHQF in the short, medium and longer terms.

When the interviews were undertaken, many of the measures described had been completed relatively recently. Some interviewees indicated it was too early to make a judgement as to the impact, whether positive or negative; consequently, our assessment can only be a snapshot. Impacts will undoubtedly continue to emerge over time.

9.2 Changes in the home

Figures 24–27 summarise the responses relating to the way the home had changed following the SHQF interventions. They show that experiences had been quite mixed and that for around half the respondents the temperature (Figure 24) and the level of damp were about the same (Figure 25), they spent around the same on energy (Figure 26), and the extent to which they needed to do actions in the home to try to reduce damp, mould and/or condensation had not changed (Figure 27). In some cases, however, the home was warmer and less damp and they spent less on energy, indicating positive change following the SHQF measures. It is, however, concerning that there were some respondents who reported it being colder, with more damp present, and that they found that they needed to more often take their own measures to try to reduce damp, mould and/or condensation. This implies a value in investigating possible adverse impacts.

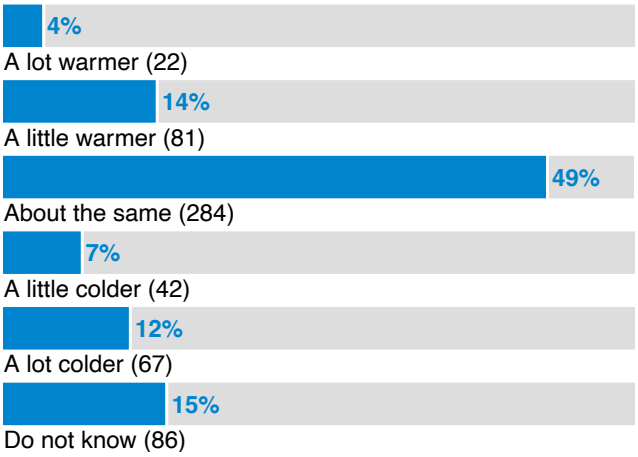

Figure 24 Compared to before the measures, is the home now colder or warmer? (N=582)

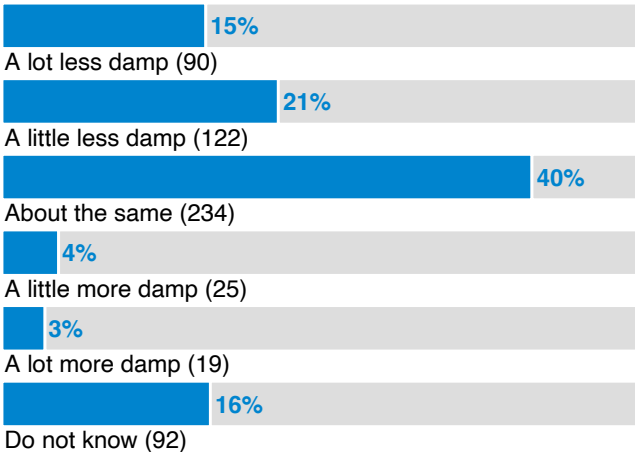

Figure 25 Compared to before the measures, does the house feel more, or less, damp? (N=582)

In our statistical analysis, we looked at how these outcomes varied across the sample. The following groups were most likely to report that **their home was less damp** after the SHQF measures:

- People who had work carried out on the fabric of the building (1.6 times more likely)
- People who had work on mould removal (1.9 times more likely)
- People who reported they were less than moderately concerned about condensation, mould or damp in their home before the measures (1.7 times more likely)
- People living in households containing only people self-reporting as non-white (1.6 times more likely)

Additionally, the following group was **less likely to report that their home was less damp**:

- People who reported they first noticed the issues around 4 years earlier, or more, compared with people who first noticed the issues less than a year earlier (1.8 times less likely)

We also looked at which groups were **more likely to report their home being warmer** after the SHQF measures:

- People who had received work on the fabric of the building (2.4 times more likely)
- People who had received work on heating (2.2 times more likely)
- People living in households containing only people self-reporting as non-white (1.8 times more likely)

Additionally, the following group was **less likely to report their home being warmer** after the SHQF measures:

- People who reported there were three people living in the home (3.4 times less likely)
- People who reported they first noticed the issues around 4 years earlier, or more (3.6 times less likely)

We also looked at which groups were **more likely to report spending less on energy**:

- People who reported they were less than moderately concerned about condensation, mould or damp in their home before the measures (2.7 times more likely)
- People living in households containing only people self-reporting as non-white (2.3 times more likely)

The following section examines where respondents identified a change, whether positive or negative, following the SHQF measures with regard to the *physical* presence of mould and damp in their property or saw no change at all. It includes both immediate and longer-term effects that they had observed. It is also worth adding that a number of respondents mentioned having received mould and damp treatments in the recent past, which had been beneficial but were not part of the SHQF.

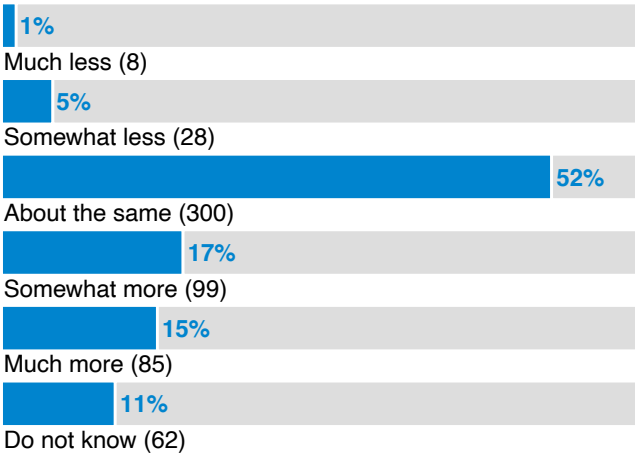

Figure 26 Compared to before the measures, how much do you spend on energy? (N=582)

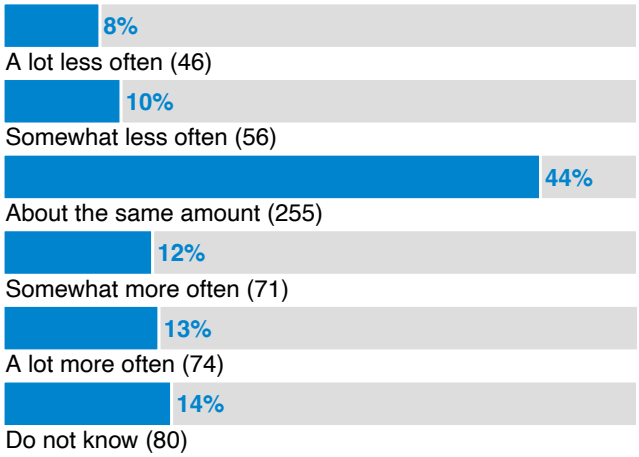

Figure 27 Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp? (N=582)

9.3 Impact on levels of damp, mould and condensation

Positive impacts

There were many examples of interviewees citing very positive outcomes following completion of the measures. Sixteen interviewees said that the **mould had been eliminated** and they had not seen *any* reoccurrence of the mould they had previously endured.

Interviewee 14, for example, had been experiencing mould in their bedroom for a couple of years. In summer 2023, they received a damp course prevention on the wall, as well as loft insulation. After commending the standard of work, they added that over the winter of 2023/24, *'I didn't have any issues again with damp and mould in that area.'* Another interviewee (Interviewee 2) had not seen any damp returning following the installation of a membrane on their bedroom wall, although they were uncertain whether the measures had tackled the root cause.

Following the installation of a combination of fans in the lounge and kitchen plus mould wash on the bathroom and living rooms and waterproofing treatment of the bricks, Interviewee 8 commented: *'I've not had one piece of mould come back in there at all… That was part of the scheme, I believe, but excellent, truly excellent.'* While it had been difficult to keep their home warm and dry before the works, they said the situation had now *'improved tremendously'*.

A **substantial decrease in damp** was noted by ten interviewees, although they were often referring to moisture in the bathroom rather than structural conditions, such as rising damp. These two interviewees referred to the result of the installation of new bathroom fans:

> A few months ago, they put it in, really, really good ones, the more up-to-date ones. Yes, made a huge difference […] Like I say, the new ones, the damp sensor in them must have been really clever because it would stay on until the room was dry, so they were quite good, those, yes. (Interviewee 37)

> The first couple of times after I'd had a shower, I was like, am I seeing things here? Because even my carer, and she's not the most observant, shall we say, but even she picked up on that straight away. She went, 'Wow, the bathroom walls are bone dry.' With the one in the kitchen, yes, it's win-win. (Interviewee 34)

Along the same lines, Interviewee 18, who had received new fans in their bathroom and kitchen in February 2024, was positive about their impact:

> The difference it's made is ridiculous… in a very, very, very good way. Each and every morning I would wake up, and the windows would be full of condensation. Even with the windows open all day, the moment they were shut the condensation started. Within two to three days of putting in these two fans, one in the kitchen and one in the bathroom, there was no water on the living room window, but there was a little in the bedroom. There was none in the bathroom and none in the kitchen.

In other examples, the effect had been positive, but the overall **impact was less pronounced**. A few of these examples related to insulation measures. Interviewee 5 said the property was *'a little tiny bit warmer'* since the area around their front door had been insulated, whereas it had been *'absolutely freezing'* before, while Interviewee 16 also noted that their living room was warmer after insulation had been placed behind the walls: *'So it is doing its job, yes, because they did say it's going to insulate the front room.'* They had also not detected any mould returning in the same space, which represented a considerable improvement from their description of the room before the measures.

Interviewee 22 expressed similar concerns. After chemical treatment, the mould in their home had not come back, but he recalled the worker's parting comments:

> On the way out, they said, 'Oh, well, of course it will come back!', which I don't think they were probably meant to say. See, I thought, do I need a new damp course? So, they looked outside, and they didn't say anything. It just feels to me as if it's a matter of treating symptoms rather than anything… It's not just my door; it's my neighbour's, too. The doors and windows, they don't fit particularly well, and that can lead to some mould growth.

As Section 9.6 illustrates, outstanding issues with windows were a major worry for a significant proportion of interviewees, but, like several others, Interviewee 22 commented they would probably have to wait for cyclical repairs to get them replaced.

Uncertain outcomes

While many interviewees were satisfied with the impact of the measures, for others it was less certain what the benefits were or were likely to be. Interviewee satisfaction was tempered by anxiety that **mould and damp issues might return**. The positive effects of their insulation improvements notwithstanding, Interviewee 16 remained concerned for a number of reasons, including the fact that there was rising damp elsewhere, which made them cautious whether the mould and damp had gone forever. This caution was partly due to the short time that had elapsed since the intervention, but there was also apprehension that the impact would be short-term because it had not addressed other contributing factors.

Section 9.6 highlights how other unresolved issues in their property could make it harder for survey respondents and interviewees to be sure if the measures had been effective. In many cases, these factors were not being addressed by the specific SHQF-funded measures but were suspected of contributing to damp, mould or condensation. For example, Interviewee 25, who had received mould spray treatments, believed that the root cause of damp was damaged window seals and doors. This was not the first time it had been sprayed, but, on those occasions, it had returned in the winter, which he expected it would do again.

The fact that interviewees had not experienced a full year to assess the difference to the house and their health was one aspect of this, especially when the effects differed according to the season or weather conditions:

> Being honest, I can't say whether it's affected my health in any way, because that was early in the year, so the good weather was coming in. It's usually wintertime that I get affected by things. So, I can't really say for that aspect with the newest ones that they put in. (Interviewee 37)

Interviewee 9 couldn't give a 'yes' or 'no' answer as to whether the insulation had made a difference yet: *'I think I'll know in the winter whether that's helping or not.'* On a similar note, Interviewee 19 was unsure whether the cause of their health improvement had been the reduction in damp in the house or simply the weather. The real test, they noted, would be whether they needed to put the heating on.

In some cases, the **impact was mixed**, with the situation having improved in one area but declined in another. An example of this was given by Interviewee 18. They were very pleased with the reduction in condensation since the installation of fans in their bathroom and said no mould had returned to that room since it had been cleaned. They were, however, still in *'a very, very, very low mood'* due to still having unresolved issues with damp in their property. This situation had led to legal proceedings, and they remained very concerned about its potential effect on their chronic health conditions.

A small number of respondents described **ongoing problems** with damp, mould and/or condensation following the SHQF measures. This could include no change in the levels of mould and damp or, in one case, a deterioration. Despite having anti-mould treatments, Interviewee 23 was still having issues with it in their spare room and kitchen. They had emailed their housing provider to come back and resolve it but were awaiting a response. Interviewees 4 and 7 said the mould wasn't growing back quite as fast as before but was still present. Those who were neutral, such as Interviewee 11, tended to indicate it was too early to tell. In the case of Interviewee 39, they were concerned that there was still mould in every room and that this could be affecting their health. Their housing provider had installed what they described as a *'mould sensor'*.

In two cases, interviewees reported that they had been told by their housing provider they needed to declutter, one adding the works could not be completed because of this issue. Interviewee 15 also believed no work had been done on their property under the SHQF (but had previously had treatments) and said mould was still present in every room.

Interviewee 3 was the only one to indicate mould was *worse* now than before the SHQF. In this case, fans were installed, suggesting the fans were too small to make a difference, while six interviewees said things were much the same, as this example illustrates:

> It's not really improved anything, to be honest. It's still just as bad as it was… It's in the living room, the kitchen, the bathroom. I mean, I'm naming all the rooms in the house. It's in every room… even since the installation of the fans and, obviously, the painting of the mould – or not the painting of it, you know what I mean, the cleaning – it's kind of got no better. (Interviewee 12)

9.4 Health and wellbeing

Figure 28 summarises the responses on the change in health following the SHQF measures. Although 41% of respondents reported their health being 'about the same', 17% were at least 'somewhat better'.

Figure 29 shows the reported change in the frequency of asthma inhaler use for those who used one (which was 47% of the sample). Although half the sample used their inhaler the same amount, 11% now used their inhaler at least 'somewhat less often'.

Through our statistical analysis, we looked at the ways in which these outcomes differed across the sample. For the subsample of homes in which at least one person used an asthma inhaler, the following groups were **more likely to report that use of that asthma inhaler** reduced after the SHQF measures:

- People who had work on mould removal undertaken (2.8 times more likely)
- People who reported there were two people living in the home, compared with people who reported there was one person living in the home (4.8 times more likely)

We found that the following groups were **more likely to report their health conditions getting better**:

- People who had work on mould removal undertaken (2.2 times more likely)
- People who reported there was not a person in the home with a long-term health condition that limited their day-to-day activities (2.0 times more likely)
- People who reported there were at least five people living in the home (2.2 times more likely)

We also found that these groups **were less likely to report that their health conditions were better**:

- People living in semi-detached houses, compared with people living in flats (1.8 times less likely)
- People who reported they first noticed the issues around 2 years earlier (3.2 times less likely)
- People who reported they first noticed the issues around 3 years earlier (2.3 times less likely)
- People who reported they first noticed the issues around 4 years earlier, or more (3.1 times less likely)

As the mitigation of health hazards was such an important goal for the SHQF, we were particularly keen to understand in detail what difference, if any, the measures made to people's physical and mental health and wellbeing. There was a considerable amount of evidence that they had achieved both, and survey respondents and interviewees were able to make the link between improvements in health and the measures undertaken.

Interviewees were able to give multiple examples of **improvements relating to breathing, coughs and colds**. One man with significant mobility issues described improvements in his breathing:

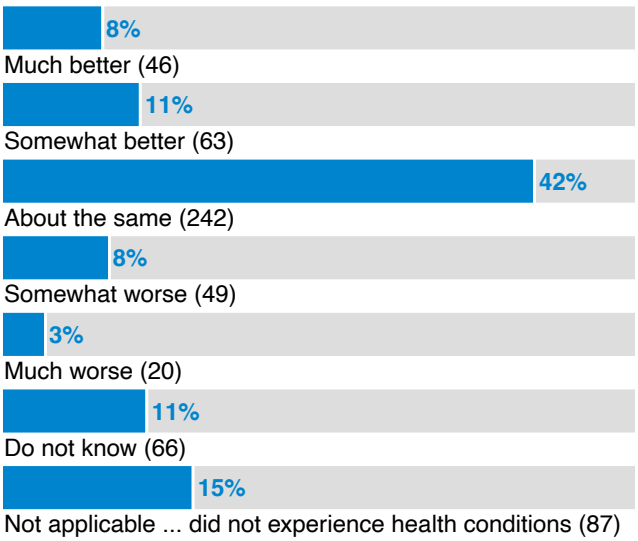

Figure 28 Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...? (N=582)

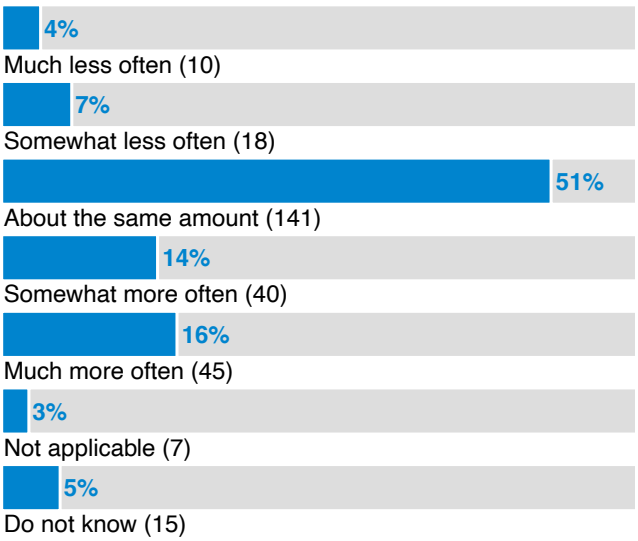

Figure 29 Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...? (N=276 - asthma inhaler users)

> There's no mould whatsoever in the flat now. I'm really pleased about that because of my breathing. I'm now breathing – I'm not 100 per cent as I was, but I'm breathing a lot better now than while that bit of mould was there. There's nothing in the flat at all, not even a little dot, a couple of dots or anything. The bathroom has cleared up completely with a big fan. (Interviewee 29)

Whilst Interviewee 41, who had serious pulmonary issues, felt that his major issue had been resolved – *'The one major issue was worrying about my health because of the mould'* – for Interviewee 6, their persistent cough *'that I was getting from the mould'* had also disappeared following the measures. Interviewee 8 was effusive about the impact on their chest: *'I can't tell you how much, honestly. I feel so much better, and I've not got the constant cough and my chest… No, it's wonderful.'* Interviewee 19 (who was registered disabled) said the mould removal and ventilation works had *'definitely helped'*: they had not had illness since but again were unsure whether the better weather had played a role. Interviewee 28 had noticed her breathing had been easier since the spring of 2024 after the fans were installed and added that this had also improved her mental state: *'I can breathe better, so, yes, I'm not stressed. Yes, because it's only when I can't breathe I'm a bit stressed and anxious. Yes, I can't complain.'*

This connection with **impacts on mental health and anxiety** was shared with other interviewees. The general reduction in stress was also reported by Interviewees 35, 41 and 10. The latter was more relaxed because the work had been done – although they wanted to wait until after the winter to be absolutely sure the problems had gone – but they had noticed an improvement in their physical health as well. Interviewee 17, along with several others, felt much more relaxed in their home knowing the mould had been treated, after a period when they had endured *'chest infections, coughs, colds constantly, all the time'*, which had made them very depressed.

On the other hand, a few interviewees felt *more* stressed after the interventions because of the disruption caused, not least where areas that had required replastering or drilling still needed redecorating:

> …so that's another area that I'm going to have to redecorate. Negatively, I just think it's a burden. It's a burden having to do it all over again when these works could have been ordered from the get-go when I first reported it and be done with. (Interviewee 16)

Where measures had not had the desired impact, ongoing health impacts took their toll on family life and affected wider quality of life. Interviewee 15, for example, stated the persistent mould and damp continued to make their family ill, which made them depressed.

These mental health impacts should be understood within the context of the home in a broader sense. One interviewee, for example, described the *'very positive'* psychological impact of the new bathroom, even if the shower didn't work properly *'because of how stupid the boiler system is'*, hinting at work yet to be tackled. There is some evidence that the health impacts meant **a reduction in the need for healthcare and medicines**. For Interviewee 10, before the measures the extensive mould *'was affecting my breathing. I kept getting recurrent chest infections, so I was on antibiotics and steroids a lot.'* The absence of mould meant fewer visits to the doctor's and less need for medication. Similarly, Interviewee 17 reported being able to cut down use of a nebuliser and inhaler:

> It turned out that since the mould treatment I've not had to be on nebuliser as much, which is a big thing. Inhaler usage is a lot less. I'm not using like seven inhalers a month any more; I'm only using four, which is a big improvement. It has cut it down. The amount of steroids I was having to use, they've cut down dramatically. So, yes, it has made a big impact. (Interviewee 17)

9.5 Impact on use of space

In Chapter 6, we discussed the ways in which damp, mould and/or condensation can limit the extent to which people make full use of their homes, with some spaces feeling uncomfortable or unhealthy. Following the measures, interviewees talked about an increased ability and confidence to utilise areas of their home that they had either felt unable to access at all or were anxious spending time in.

Interviewees 7 and 30, for example, felt much more confident in using their bathroom after the measures. The latter was able to return to her bedroom after an extended period sleeping in the living room. Interviewee 8 was also moving back to her bedroom from the lounge and now felt able to invite her grandchild into the home. Similarly, Interviewee 19 stated their grandson could now come and stay over. A survey respondent related reducing levels of anxiety to reduced mould:

> Yes, I'm not as embarrassed about people coming in any more. Not that many do: my son and one friend. I'm very isolated. But I don't feel on edge or my anxiety doesn't go when they walk in the house, so it's helped with my anxiety, the mould going. (Survey respondent 137-1)

As above, these comments need to be understood in the context of the quality of the home in general. A more equivocal response was offered by Interviewee 1, for example, who felt that, although the work meant she

would not mind being in the kitchen now, it was still old and needed updating, so she did not go in there as much as she otherwise might.

9.6 Outstanding issues

Interviewees could be highly positive about the impact of the SHQF in tackling mould and damp but highlighted how additional measures were still necessary: as Interviewee 19 indicated, *'we're not quite there. We're half done.'*

In some cases, the unresolved **issues related directly to mould, damp and condensation**. Interviewee 2, for example, was happy with the measures but unhappy they had not fixed what they perceived as the original problem, a damp wall. Interviewee 16 would have rated their satisfaction higher if their housing provider had fixed the rising damp on the front wall.

Repairing holes in the roof was the final job Interviewee 19 was *'still battling with them'* about as one of the causes of damp in their home, while four interviewees (Interviewees 12, 14, 16 and 38) stated pointing, tiles and other roof and brickwork repairs were required to mitigate or eliminate the risk of mould and damp in the future. The link to the SHQF measures was made explicit by one person, who emphasised that he had communicated his concerns to the housing provider:

> When the people came to put the vents and stuff in, I pointed out to them all the – because there's obviously water damage to the brickworks and mortar, and this green mould grows up the sides of the building. So, I pointed all of that out to them, but nothing's ever been done about that. That gets worse every time it rains. (Interviewee 38)

In general, these were structural works: as one interviewee commented (Interviewee 30), their housing provider had tried numerous fixes for water ingress into their flat but *'it was very hard without repairing the whole roof…'*. Despite flagging it to their housing provider, water was continuing to leak into another's home, but they added:

> It's not only me that has that issue. I know my neighbour's said that they have the same issue with the damp and stuff around the window, but these houses were built in 1923. (Interviewee 17)

It was significant that so many of the respondents were living in flats or end terraces, often (but not always) built in the early to mid-20th century.

New **windows, doors and related repairs** were seen as primary areas of unmet need in order to address mould and damp (as well as cold homes and the cost of heating) by eleven interviewees. As one reflected: *'To be honest, I'd just be happy with my windows being fixed. I just think that would make a big difference'* (Interviewee 1). Doors were also an issue, and several interviewees indicated that better-fitting doors would help considerably in reducing draughts.

Concerns were raised about **heating systems**. Interviewees 6 and 7, for example, highlighted the ongoing poor performance of their boiler. With regard to warmth in general, a few interviewees criticised storage heaters as particularly inefficient in keeping homes comfortable.

While not directly related to mould and damp, a number of unmet needs regarding wider support issues were identified. We include here those raised by interviewees with **mobility and long-term health challenges**.

Interviewee 34, a wheelchair user, commended his housing provider for the work they had done to adapt his home but mentioned that he needed floors rather than carpets. In addition, although they had flagged his outside space to make it wheelchair accessible, the flags had settled over the years and were now uneven, making it difficult for him to cross them.

He also mentioned the poor state of kitchen fittings, something also highlighted by Interviewee 39, who explained that the kitchen cupboards were not at an accessible height for them and that their disabled toilet was too low to the floor. They also commented the doors were not wide enough to get their wheelchair through. The poor condition of the kitchen was causing stress to Interviewee 41 and his wife, although he did note a surveyor was scheduled to inspect it in the near future. Increasing infirmity meant they would need a wet room in the near future, but they were sceptical that their housing provider would install it.

It should be noted that, like Interviewee 34, others did appreciate the extensive support provided by their housing provider to adapt their property to suit their needs. Interviewee 29 in particular commented that his housing provider had met his every request, providing additional fittings throughout the home.

9.7 Conclusion

The absence of mould and damp following the SHQF measures reported in many interviews represents a considerable accomplishment for the scheme, particularly when multiple previous interventions had been unsuccessful. This achievement is especially significant considering the chronic health challenges many interviewees faced, to which mould and damp posed severe risks. However, for some, the satisfaction that mould and damp had not returned was tempered by caution that it was too soon since the works to be sure they were a permanent solution. In some cases, this concern reflected previous experience of damp, mould and/or condensation issues recurring.

In order to assess the impact over the longer term, then, it will be necessary to await future inspections. These will enable housing providers to assess if unresolved issues are undermining the impact of this programme.

The positive effect on physical and mental health was notable, but, although widespread, it was not universal. There were examples of the home space opening up, as areas that had been rendered less accessible by mould and damp became liveable again, providing tenants with the confidence to have visitors and reduce isolation.

As a result, there were examples of improvements in some survey respondents' and interviewees' views of their housing provider. Where attitudes had previously been negative, after the SHQF tenants could feel a much greater sense of recognition and care.

It was clear, however, that there is considerable work outstanding, a proportion of which is connected to mould and damp. The more intractable challenge here relates to the fabric of buildings that are old and in poor condition and require substantial investment to reach modern standards of comfort and repair. It was notable how many interviewees evidenced a detailed understanding of these issues.

The SHQF was largely focused on repairs and mitigation measures, although major works such as installation of new kitchens and bathrooms, usually part of cyclical works, were undertaken by some housing providers. Future programmes may need to assess how their banding of measures (as a way of deciding priority) can be mapped against cyclical works schemes where the latter are potentially relevant to mould and damp and the general wellbeing of households.

10. Discussion

Our study sought to understand the experiences of social housing tenants with regard to damp, mould and condensation and in relation to a particular government-funded package of measures, the Social Housing Quality Fund (SHQF). By means of an online survey distributed through the 17 participating Greater Manchester housing providers, we secured responses from 582 tenants. This provided a rich dataset from which to understand the ways in which damp, mould and condensation affected households and the impact that the SHQF measures have had. It enabled us to explore statistical relationships to understand the ways in which responses varied across the sample, highlighting the extent to which social groups differed in their experience of both damp, mould and/or condensation and the SHQF measures.

We followed up the survey with a set of 41 qualitative interviews, selected from the 582 survey respondents. These provided an opportunity to explore experiences in depth and, in some cases, to follow up on specific issues raised in survey responses. The subsample was chosen in order to provide a good cross-section in relation to demographic factors, housing providers, areas of Greater Manchester and experiences.

The combined analysis of the qualitative (interviews) and quantitative (online survey) data highlights these findings:

1 Damp, mould and condensation are pervasive issues, commonly year-round, and can be entrenched, recurring problems.

Our survey responses evidence that damp, mould and condensation were pervasive across the sample of participating households (Chapter 4). Given that invitations to the survey were sent out to households participating in the SHQF, and they were selected for the SHQF by housing providers based in part on their understanding of householders' needs, this is not surprising. Whilst it cannot be taken as a picture of the whole of GM social housing, it is unlikely that these 582 households are completely atypical.

Some 69% of the sample were extremely or moderately concerned about the damp, mould and/or condensation they had observed in their homes and, as we discuss here, described ways in which they affected them and their lives. For most of these households, damp, mould and/or condensation were a year-round issue (61%), with a minority (19%) reporting them to be more prevalent in the winter months. For some households, damp, mould and/or condensation had been identified and dealt with relatively quickly, but for many they were something that had built up over several years and tended to endure and/or return, even when measures had been applied with the intention of addressing them. In terms of the SHQF, these observations would indicate that the programme was well targeted and that the funding went to homes who had damp, mould and/or condensation issues and were concerned about them.

2 Tenants are, in many cases, knowledgeable about what they can do to avoid damp, mould and condensation. They adopt coping strategies, and for many these are part of everyday life, but there are financial and practical limitations to what they can achieve.

They are also aware that there are issues relating to the design, condition and suitability of their home over which they have little agency and for which they require the involvement of their housing provider.

To some extent, survey respondents and interviewees saw dealing with damp, mould and/or condensation to be something they needed to address and, in some cases, evidenced an internalised sense of responsibility (Chapter 5). Generally, though, they were aware that there were issues relating to the design, condition and suitability of their home that needed to be addressed and which their housing provider needed to deal with. These observations evidence the extent to which damp, mould and condensation issues were part of everyday life in these homes.

Even if respondents were aware of practices they could adopt to try and mitigate the problem, these were often not practical or possible: increasing the use of the heating was expensive, as was purchasing and running a dehumidifier or tumble dryer. Although they understood that drying clothes indoors could exacerbate issues with damp, mould and/or condensation, this was sometimes the only option they had.

These limitations notwithstanding, respondents had adopted a range of mechanisms to cope with, and attempt to limit the development of, damp, mould and condensation. Opening doors and windows and using vents and fans were common practices. There were other practices, which could be understood to some extent as 'sacrifices'. These included having fewer or shorter showers, changing cooking patterns and putting clothes in plastic boxes. Some had attempted their own DIY methods, including sanding walls, adding insulation and buying carpet cleaners.

3 Living with damp, mould and condensation impacts physical and mental health.

Our survey and interviews provide clear evidence that damp, mould and condensation impacted respondents' physical and mental health (Chapter 6): 63% of survey respondents told us that they affected their health or the health of others in the home, and 68% felt that they were at least 'somewhat damaging' to their quality of life.

Interviewees shared their experiences with respiratory health problems in relation to themselves and their children, including coughs, chest infections, sinusitis, asthma and COPD. Many had sought medical advice, and some recounted that health professionals had been clear with them that the issues were being caused or worsened by the condition of their home. In one case, a doctor wrote to the interviewee's housing provider asking for her to be moved. Interviewees described symptoms starting or worsening on moving into their current home. In some cases, ongoing conditions, such as fibromyalgia, were exacerbated.

It is unsurprising that these experiences also took a toll on mental health: whether related to the ability to make a 'homely home', having to throw away and replace damaged possessions, the presence of damp smells in the home and in clothing, financial stress or the feeling of not being listened to or properly supported. Connected to this sense of home, damp, mould and condensation could be the root of anger, frustration and isolation resulting from tenants feeling uncomfortable having friends and family to visit and being unable to have their children live with them.

4 One of the less tangible impacts of damp, mould and/or condensation is on the ability to make a comfortable home.

Damp, mould and/or condensation impacted how survey respondents and interviewees used their homes (Section 5.3): 42% of survey respondents told us that they limited how much time they spent in one or more rooms, 41% avoided inviting people round and 26% spent more time out of the home than they otherwise would.

Tenants expanded upon this in interviews. Not being able to invite people round, not being able to accommodate children and be confident that they could be healthy and feeling that their homes and their clothes smelt all impacted emotional health. Sleeping on temporary beds downstairs to avoid damp in the bedroom was another example, especially for people with chronic health conditions since they were more severely affected by damp, mould and/or condensation. These options were not available to all: it was sometimes not possible to avoid mould and damp when in small spaces with children or other household members. Difficulty decorating, stopping paint peeling off and keeping carpets clean all presented challenges and related directly to creating and maintaining a sense of home.

5 The SHQF has positively impacted some homes and health, but it appears that the impact varies, particularly by the installed measure.

The evidence of positive impacts of the SHQF on the condition of the home and, in turn, of health is somewhat mixed (Chapter 9). The survey responses indicate that around half of the sample reported their home being 'about the same' after the SHQF in relation to the temperature of the home, the extent to which it felt damp, how much they spent on energy and how often they did anything to try to reduce damp, mould and/or condensation. On either side of these there were people who found that things had got worse to some extent (colder, damper, more expensive) or better (warmer, dryer, less expensive).

Digging a little deeper indicated that certain measures were more likely to have had an impact than others: compared with those in receipt of other interventions, those who received work on the fabric of the building were more likely to say their home was now warmer and less damp; those who received improvements to their heating system were more likely to say their home was warmer; and those who had mould removal were more likely to say their home was less damp. It was also the case the people who had first noticed their issues around four years earlier, or more, were more likely to report the home being warmer after the SHQF, potentially reflecting the length of time they had had to become accustomed to colder conditions.

The survey indicates that the measures did lead to real positive change in health, with 60% of respondents stating their health had improved and 62% of those who used an asthma inhaler reporting using them less often.

These changes were illustrated in the interviews. Some interviewees reported transformative impacts, with reductions in the symptoms they had previously reported, a reduced need for medicines and improved mood. Interviewees talked specifically about the reduction of mould, linking this to reduced symptoms. This may help to explain why those who had had mould removal were more likely to report that their health conditions had been improved and that they were using their asthma inhaler less. Some still felt that there was more to be done, however, and that these remaining tasks would help in resolving lingering issues (Section 9.6).

Survey data also revealed that certain demographics were less likely to experience health improvements, including those households with long-term health conditions. This is consistent with the findings of other studies (Chapter 2). The longer damp, mould and/or condensation issues had been present in the home, the less likely positive health outcomes were to be reported. This may reflect the fact that those exposed to damp, mould and/or condensation issues for longer were more likely to have more severe health conditions that had not been dealt with. In relation to the lower levels of satisfaction in those who had

experienced the issues for longer, this may reflect the fact that the time taken for support to be given made them less positive about the improvements overall.

When considering these impacts, it is important to be aware of timescales. The SHQF programme was completed over a relatively short period, and the research was conducted soon after the interventions were completed and before tenants experienced another winter. It is therefore important to continue to monitor tenant experiences and to ascertain the extent to which improvements endure and mould, damp and condensation issues return. As tenants told us, there were remaining, often long-standing, issues about which they were concerned. Addressing these issues will further improve tenant quality of life, with likely positive implications for health.

6 Experiences of seeking support from housing providers are mixed. Where tenants have had frustrating experiences with their housing provider, these add to the mental health impact of housing quality issues.

Interviewees reflected on their experiences with their housing provider, and, although these experiences varied, it was clear that the processes of reporting issues and seeking support were time-consuming and stressful for some. Many were positive about the initial call but then found themselves having to repeatedly contact housing providers and contractors to find out when support was coming. This is not necessarily a reflection of the SHQF, which was a time-limited programme, but of the ongoing support offered by housing providers. Whilst our survey indicated that experiences varied greatly, and some people reported high levels of satisfaction, the interviews highlight the extent to which frustration with housing providers and their contractors can add to the impact of poor housing quality, especially on mental health (Chapter 7).

The measures were broadly welcomed, but there was a considerable lack of understanding of exactly what was going to happen and why. This indicates that it is important to understand how suitable and effective processes of communication are. Survey respondents and interviewees could find it hard to distinguish between the SHQF and other measures – especially if they had ongoing cases related to mould and damp – and were often uncertain about the exact nature of the planned works and the extent to which they should expect them to 'fix' their ongoing issues. It was notable that it was not only to housing providers that they looked for information: information, and sometimes more precise information, was routinely obtained from the contractors undertaking the installations.

It is also notable that one of the reasons given by the minority who were unhappy with the delivery was that they did not understand the reason for the specific choice of measures under the SHQF. In that regard, satisfaction was also tempered by the lack of communication and progress about unresolved issues, which respondents often described as the source of major stress and poor relationships with their housing provider. These concerns should be understood in the context of broad satisfaction and, in some cases, enthusiastic approval of the installation and the improved appearance of the property.

7 Whilst vulnerable groups and households with complex lives stand to gain from reductions in damp, mould and condensation, they are likely to be disproportionately affected by remedial interventions. This implies the need for a tailored and personal touch in project delivery.

Although vulnerable groups are likely to feel some of the most severe impacts of damp, mould and condensation and housing quality issues, they are also likely to be disproportionately affected by efforts to mitigate them (Chapter 8). In our survey, we saw that those with children and/or older people in the home were likely to be less satisfied with the process and outcome. Those with long-term health conditions were more likely to report the works being disruptive.

The interviews helped to flesh out this picture: the disruption of needing to move people out of room(s) so that works could take place, and the experience of people with health conditions being affected by the sprays being used to tackle mould. It was also the case that the larger households were less likely to be satisfied with the overall response of their housing provider and less likely to be satisfied that the works addressed their concerns about damp, mould and/or condensation. This may be because the communication was going through one person and the others were less aware of what measures were taking place or why, or that having more people meant that there was more likely to be one or more people affected by a health condition. As the interviewee evidence suggests, larger households would also have found it more difficult to avoid disruption from the works and would have potentially already had larger burdens with cleaning, more furniture and possessions and more washing to dry.

References

Association of Greater Manchester Authorities (AGMA), GMCA Damp and Mould update - Report to GM Housing & Planning Commission. Available online at: https://democracy.greatermanchester-ca.gov.uk/documents/s25411/GMCA%20Damp%20and%20Mould%20update.pdf

Balogun, B., Rankl, F., Wilson, W. (2023) Health inequalities: Cold or damp homes. House of Commons Research Briefing Number CBP9696. Available online at: https://researchbriefings.files.parliament.uk/documents/CBP-9696/CBP-9696.pdf

Blay, K., Agyekum, K., Opoku, A. (2019) Actions, attitudes and beliefs of occupants in managing dampness in buildings. International Journal of Building Pathology and Adaptation, 37(1), 42–53. Available online at: https://doi.org/10.1108/IJBPA-06-2018-0044

Bonderup, S., Middlemiss, L. (2023) Mould or cold? Contrasting representations of unhealthy housing in Denmark and England and the relation to energy poverty. Energy Research & Social Science, 102, 103176. Available online at: https://doi.org/10.1016/j.erss.2023.103176

Boomsma, C., Pahl, S., Jones, R.V., Fuertes, A. (2017) "Damp in bathroom. Damp in back room. It's very depressing!" exploring the relationship between perceived housing problems, energy affordability concerns, and health and well-being in UK social housing. Energy Policy, 106, 382–393. Available online at: http://dx.doi.org/10.1016/j.enpol.2017.04.011

Brambilla, A., Sangiorgio, A. (2020) Mould growth in energy efficient buildings: Causes, health implications and strategies to mitigate the risk. Renewable and Sustainable Energy Reviews, 132, 110093. Available online at: https://doi.org/10.1016/j.rser.2020.110093

Brooks, S.K., Patel, S.S., Weston, D., Greenberg, N. (2023) Psychological effects of mould and damp in the home: scoping review. Housing Studies, 1–23. Published online at: https://doi.org/10.1080/02673037.2023.2286360

Coulburn, L., Miller, W. (2022) Prevalence, Risk Factors and Impacts Related to Mould-Affected Housing: An Australian Integrative Review. International Journal of Environmental Research and Public Health, 19, 1854. Available online at: https://doi.org/10.3390/ijerph19031854

Courts and Tribunals Judiciary (2022) Awaab Ishak: Prevention of future deaths report. Available online at: https://www.judiciary.uk/prevention-of-future-death-reports/awaab-ishak-prevention-of-future-deaths-report

Cox-Ganser, J.M. (2015) Indoor dampness and mould health effects – ongoing questions on microbial exposures and allergic versus nonallergic mechanisms. Clinical & Experimental Allergy, 45(10), 1478–1482. Available online at: http://dx.doi.org/10.1111/cea.12601

Critchley, R., Howard, R., Oreszczyn, T. (n.d.) The Nottingham Energy, Health and Housing Study: A Demonstration Project to Reduce Humidity, House Dust Mites and Asthma. Eaga Charitable Trust, UK. Available online at: https://www.fuelpovertylibrary.info/content/nottingham-energy-health-and-housing-study-demonstration-project-reduce-humidity-house-1

Department for Communities and Local Government (2006a) Housing Health and Safety Rating System - Guidance for Landlords and Property Related Professionals. Available online at: https://www.gov.uk/government/publications/housing-health-and-safety-rating-system-guidance-for-landlords-and-property-related-professionals

Department for Communities and Local Government (2006b) A decent home: definition and guidance. https://www.gov.uk/government/publications/a-decent-home-definition-and-guidance

Department for Levelling Up, Housing & Communities (2023a) Levelling Up Secretary's speech to the Convention of the North. Published 25 January 2023. Available online at: https://www.gov.uk/government/speeches/levelling-up-secretarys-speech-to-the-convention-of-the-north

Department for Levelling Up, Housing & Communities (2023c) Guidance - Understanding and addressing the health risks of damp and mould in the home. Published September 2023. Available online at: https://www.gov.uk/government/publications/damp-and-mould-understanding-and-addressing-the-health-risks-for-rented-housing-providers

Department for Levelling Up, Housing & Communities (2023d) Guidance June 2023 - update on government's work to improve the quality of social housing. Available online at: https://www.gov.uk/guidance/june-2023-update-on-governments-work-to-improve-the-quality-of-social-housing

Du, C., Li, B., Yu, W. (2021) Indoor mould exposure: Characteristics, influences and corresponding associations with built environment—A review. Journal of Building Engineering, 35, 101983. Available online at: https://doi.org/10.1016/j.jobe.2020.101983

Fisk, W.J., Eliseeva, E.A., Mendell, M.J. (2010) Association of residential dampness and mold with respiratory tract infections and bronchitis: a meta-analysis. Environmental Health, 9, 72. Available online at: https://ehjournal.biomedcentral.com/articles/10.1186/1476-069X-9-72

Greater Manchester Combined Authority, (n.d) Social Housing Quality Fund. Accessed 29th October, 2024 at: https://greatermanchester-ca.gov.uk/what-we-do/planning-and-housing/social-housing-quality-fund

Greater Manchester Combined Authority (2023a) £15m fund to open for social housing improvements to tackle damp and mould. Available online at: https://www.greatermanchester-ca.gov.uk/news/15m-fund-to-open-for-social-housing-improvements-to-tackle-damp-and-mould/

Greater Manchester Combined Authority (2023b) Decision details - Social Housing Quality Fund. Available online at: https://democracy.greatermanchester-ca.gov.uk/ieDecisionDetails.aspx?ID=2153

Greater Manchester Social Housing Quality Fund (2024) Presentation, 10th June 2024, received by email from Planning and Housing Team, Greater Manchester Combined Authority, October 2024.

House of Commons Women and Equalities Committee (2019) Tackling inequalities faced by Gypsy, Roma and Traveller communities. Seventh Report of Session 2017–19. Report, together with formal minutes relating to the report. HC 360. Available online at: https://publications.parliament.uk/pa/cm201719/cmselect/cmwomeq/360/360.pdf

Long, H., Cullum, N. (2024) Rapid Evidence Synthesis: What is the health impact of poor housing? University of Manchester, UK. Available online at: https://www.healthierfutures.manchester.ac.uk/research/insights/reports/housing-and-health/

Lopez-Arce, P. (2023) Can positive input ventilation tackle surface condensation and mould growth? Literature review and case study of a UK dwelling. Journal of Building Survey, Appraisal & Valuation, 11(4), 319–332. Available online at: https://ideas.repec.org/a/aza/jbsav0/y2023v11i4p319-332.html

Maidment, C.D., Jones, C.R., Webb, T.L., Hathway, E.A., Gilbertson, J.M. (2014) The impact of household energy efficiency measures on health: A meta-analysis. Energy Policy, 65, 583–593. Available online at: http://dx.doi.org/10.1016/j.enpol.2013.10.054

Mendell, M.J., Mirer, A.G., Cheung, K., Tong, M., Douwes, J. (2011) Respiratory and Allergic Health Effects of Dampness, Mold, and Dampness-Related Agents: A Review of the Epidemiologic Evidence. Environmental Health Perspectives, 119(6), 748–756. Available online at: https://pubmed.ncbi.nlm.nih.gov/21269928/

Ministry of Housing, Communities and Local Government (2024) Understanding and addressing the health risks of damp and mould in the home. Accessed 24th September 2024. https://www.gov.uk/government/publications/damp-and-mould-understanding-and-addressing-the-health-risks-for-rented-housing-providers/understanding-and-addressing-the-health-risks-of-damp-and-mould-in-the-home--2#introduction

National Institute for Clinical Excellence (2020) Indoor air quality at home, NICE guideline NG149. Available online at: https://www.nice.org.uk/guidance/ng149. Evidence Review 4 on effective strategies for raising awareness available at: https://www.nice.org.uk/guidance/ng149/evidence/4-effective-strategies-for-raising-awareness-pdf-7020943891

Pawson, H., Davidson, E., Morgan, J., Smith, R., Edwards, R. (2009) The impacts of housing stock transfers in urban Britain. Chartered Institute of Housing, UK.Piddington, J., Nicol, S., Garrett, H., Custard, M. (2017)

The Housing Stock of The United Kingdom. The BRE Trust, UK. Available online at: https://files.bregroup.com/bretrust/The-Housing-Stock-of-the-United-Kingdom_Report_BRE-Trust.pdf

Regulator of Social Housing (2023) Damp and mould in social housing - Learning the lessons. Available online at: https://www.gov.uk/government/publications/damp-and-mould-in-social-housing-learning-the-lessons

Regulator of Social Housing (2024) Reshaping consumer regulation - Our new approach. Available online at: https://assets.publishing.service.gov.uk/media/65df3e88f1cab3863afc4779/20231219_feb-doc-FINAL.pdf

Revie, C. (1999) Fuel Poverty and Health in Paisley - A comparative study of housing conditions, affordable warmth and health status in west central Scotland. Available online at: https://www.fuelpovertylibrary.info/content/fuel-poverty-and-health-paisley-1

Sullivan, S., Somerville, M., Hyland, M., Barton, A., on behalf of the Torbay Healthy Housing Group (2003) The Riviera Housing and Health Survey - A report to the Eaga Partnership Charitable Trust. Eaga, UK. Available online at: https://www.fuelpovertylibrary.info/content/riviera-housing-and-health-survey-0

Sustainable Homes (2018) Breaking the Mould – should landlords be doing more? https://www.specifiedby.com/envirovent/mvhr-heat-recovery-slimline-150/sustainable-homes-breaking-the-mould-report_e42dc491.pdf

Tunstall, R., (2015) The Coalition's Record on Housing: Policy, Spending and Outcomes 2010-2015, Social Policy in a Cold Climate Working Paper 18. (SPCCWP18). Centre for Analysis of Social Exclusion, London, UK. Available online at: https://sticerd.lse.ac.uk/dps/case/spcc/wp18.pdf

Verdier, T., Coutand, M., Bertron, A., Roques, C., (2014) A review of indoor microbial growth across building materials and sampling and analysis methods, Building and Environment 80, 136-149. Available online at: http://dx.doi.org/10.1016/j.buildenv.2014.05.030

UK Government (2024) Understanding and addressing the health risks of damp and mould in the home. Accessed 24th September 2024. Available online at: https://www.gov.uk/government/publications/damp-and-mould-understanding-and-addressing-the-health-risks-for-rented-housing-providers/understanding-and-addressing-the-health-risks-of-damp-and-mould-in-the-home--2

World Health Organization. Regional Office for Europe (2009) WHO guidelines for indoor air quality: dampness and mould. World Health Organization. Regional Office for Europe. Available online at: https://www.who.int/publications/i/item/9789289041683

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Appendix A: Methodology

Introduction

This study comprised two related stages: an online survey and semi-structured in-depth interviews. The online survey provided a baseline relating to mould and damp issues from a sample of 582 tenants in Greater Manchester social housing distributed across the 17 participating housing providers. The survey responses allowed us to perform a statistical analysis, informed the development of a topic guide for the qualitative interviews and provided a population from which to select people to invite to take part in the 41 interviews we conducted.

Online survey

The survey was designed to capture a baseline of quantitative and qualitative data from a sample of households receiving support through the SHQF programme. It covered a set of topics including past experiences of mould and damp and their impact, particularly on health, experiences of the SHQF measures, and any changes experienced since completion.

The choice of themes and individual questions was determined by the original requirements laid out by the commissioner, the GMCA, and drew on the evaluation team's previous experience of qualitative research on associated topics, such as household energy use, retrofit and energy efficiency improvements, the health impacts of poor-quality housing and fuel poverty. Draft versions of the questionnaire were circulated to the GMCA, DLUHC (now MHCLG) and 17 housing providers for comment. Their comments were taken account of when developing the final version.

The final version (see Appendix B) included both closed and open questions, with routing pathways dependent on prior responses. It also contained a series of demographic questions with a view to correlating responses by age, gender, household size, ethnic background and other social factors.

Survey respondents were recruited in collaboration with the housing providers. It made practical sense for the links to be distributed by the housing providers, as they already held tenant contact details and contact preferences and specific information on households participating in the SHQF. Many housing providers send out their own internal surveys and knew which communication pathways were likely to be most successful. It was believed that this would also reduce the risk of households assessing this as an illegitimate approach or unwanted 'junk' marketing and rejecting it. As part of the process, we provided each housing provider with a template for a covering email that could be adapted to suit their house style. To prepare for the launch of the survey and avoid delays, we contacted housing providers to request that they complete internal approvals procedures and liaise with appropriate communication and IT teams and other relevant colleagues to ensure the necessary resources were in place.

A set of unique URLs was provided to each housing provider. These could be inserted into an SMS, email or letter. A QR code was also supplied. These codes enabled the evaluation team to monitor the progress of each housing provider and to ascertain the relative success of different modes of communication.

To provide an incentive for participation, all respondents were given the opportunity to be entered into a prize draw to win £100 in shopping vouchers. Housing providers were asked to distribute the survey to households at the end of March 2024 and to send a reminder in late April and a final reminder from mid-May onwards. In between, the evaluation team monitored response rates and contacted individual housing providers to update their numbers and explore alternative options. We ceased publicising the survey at the end of May and closed the online platform on 25th June 2024.

Invitations to complete the survey were sent to all tenants who had received some support through the SHQF programme. Across all 17 housing providers, this was estimated to be 16,177 tenants. With 582 responses, this was an overall response rate of 3.60%, varying across the 17 organisations, as shown in Table 3. Some 45% of the respondents declared that they were willing to take part in a follow-up research interview.

Charts were produced to summarise the responses and to present these in this report. A detailed statistical analysis was conducted in order to explore the relationships between factors such as the impact on health and household demographic characteristics.

Qualitative interviews

The study included semi-structured qualitative interviews with 41 of the 582 online survey respondents. These provided an opportunity to explore experiences in more depth and, in some cases, to follow up on issues raised in the survey responses. The subsample was chosen in order to provide a good cross-section in relation to demographic factors, housing providers, areas of Greater Manchester and experiences. At least one tenant from each of the 17 participating housing providers was invited to take part in an interview.

The interviews covered the background to the interviewees and their time in their home, their relationship with their housing provider and how they felt about living in their home. We then discussed mould, damp and condensation in more detail, including the interviewees' experiences of these, how they affected them and their health and what they did to try to reduce them and/or cope with them. Finally, we discussed the SHQF interventions themselves, the information the interviewees received about these, how they found the process and what impact the interventions have had on their home, health and quality of life. The interviews were conducted online, recorded and transcribed. They were analysed thematically to pick out core themes in line with the aim of the study.

Appendix B: Online questionnaire

Q1 - I understand what taking part involves, how data about me will be collected, stored and used. I have read the information about the project. I understand that my identity will be anonymised in any research outputs (reports and publications). I confirm that I am at least 18 years old.

- Yes - I agree
- No - I do not agree

Q2 - What changes has your housing provider recently made to your home?

- Work on roof, walls, windows, doors and/or porch
- Insulation improvements
- Repair or upgrade of heating (e.g. boiler or heaters)
- New kitchen and/or bathroom
- New smart meter or thermostat (e.g. the Switchee)
- Ventilation and/or fans
- New water saving device
- External paint removal
- Repairs or upgrades to the electrics
- Mould removal
- Drainage
- Other
- Don't know

Q3 - If other, please briefly describe.

Q4 - Where was insulation added?

- In the roof or loft space
- In walls (Cavity insulation)
- External walls
- Internal walls
- Other
- Don't know

Q5 - When were the works completed?

- Before August 2023
- Aug-23
- Sep-23
- Oct-23
- Nov-23
- Dec-23
- Jan-24
- Feb-24
- Mar-24
- Apr-24
- Another time

Q6 - Please state when the works were complete.

Q7 - Before the recent measures, did you notice any of the following issues in your home?

Steamed up windows (Photo A)

- Living Room
- Bathroom
- Kitchen
- Bedrooms
- Elsewhere in the home

Steamed up or damp/wet walls (Photo B)

- Living Room
- Bathroom
- Kitchen
- Bedrooms
- Elsewhere in the home

Mildew, rot or mould on window frames (Photo C)

- Living Room
- Bathroom
- Kitchen
- Bedrooms
- Elsewhere in the home

Stains, rot or mould on walls or ceilings (Photo D)

- Living Room
- Bathroom
- Kitchen
- Bedrooms
- Elsewhere in the home

Stains, rot or mould on floors, carpets, or furniture (Photo E)

- Living Room
- Bathroom
- Kitchen
- Bedrooms
- Elsewhere in the home

Other problems with condensation, damp, and mould

- Living Room
- Bathroom
- Kitchen
- Bedrooms
- Elsewhere in the home

Q8 - When did you first start noticing these issues?

- Less than a year ago
- Around 1 year ago
- Around 2 years ago
- Around 3 years ago
- Around 4 years ago, or more
- Don't know

Q9 - When have these issues occurred in your home?

- All year round
- Only during the winter
- At other times of year
- Don't know
- How concerned were you about condensation, mould or damp in your home?

Q10 - Not at all concerned

- Slightly concerned
- Somewhat concerned
- Moderately concerned
- Extremely concerned
- Don't know

Q11 - Are you aware of any particular cause of these issues in your home? If so, please describe briefly.

Q12 - Before the recent measures, could you keep your living room warm during cold winter weather?

- No - Never
- Yes - Sometimes
- Yes - Often
- Yes - Always
- Don't know

Q13 - Are there any other times of year when you have difficulty keeping your living room comfortably warm? If so, please state. Otherwise, leave blank.

Q14 - Do you tend to use the heating as much as you would like to?

- Yes
- No - because of the cost
- No - because it does not work properly
- No - for other reasons
- Don't know

Q15 - When you have the heating on, at what temperature do you tend to set the thermostat? If you don't use the heating in this way, please leave blank.

- Lower than 15 degrees C
- 15 - 17 degrees C
- 18 - 19 degrees C
- 20 - 22 degrees C
- 23 - 24 degrees C
- Higher than 24 degrees C
- Don't know / It varies / I don't use a thermostat

Q16 - Before the recent measures, which if any of the following did you do in order to try to reduce the impact of condensation, mould and/or damp?

- Turn up the heating
- Open windows or doors
- Use extractor fan in the bathroom and/or kitchen
- Use a dehumidifier
- Open trickle vents
- Avoid drying clothes indoors
- Have fewer or shorter showers
- Change cooking patterns
- Other actions
- None of the above
- Please state what other actions you took

Q17 - How satisfied were you that doing this reduced condensation, mould and/or damp?

- Not at all satisfied
- Slightly satisfied
- Somewhat satisfied
- Moderately satisfied
- Extremely satisfied
- Don't know

Q18 - As a result of issues with mould, damp or condensation, did you do any of the following?

- Spend less time in one or more rooms
- Avoid inviting people round
- Spend more time out of the home
- Other
- Please state what you did.

Q19 - Before the recent measures, did condensation, mould or damp in your home affect your health or the health of others in your home? This could include mental and psychological health, e.g. worry and stress.

- Yes
- No
- Don't know

Q20 - Have the issues with condensation, mould or damp affected the health of any of the following people living in your home?

- A child under 5 years old
- A child between 5 and 16 years old
- An adult of 65 years or older
- Someone with a long-term health condition
- None of the above
- Don't know

Q21 - If you are happy to tell us more, please briefly describe the health impact.

Q22 - Have you talked to your doctor or another health care professional about this health impact?

- Yes
- No

Q23 - How is your health in general?

- Very bad
- Bad
- Fair
- Good
- Very good
- Don't know

Q24 - How would you describe the impact of condensation, mould and damp on your quality of life?

- Not at all damaging
- Slightly damaging
- Somewhat damaging
- Moderately damaging
- Extremely damaging
- Don't know

Q25 - Overall, how satisfied are you with your life nowadays?

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Q26 - Have you raised issues with condensation, mould or damp with your housing provider?

- Yes
- No
- Not applicable – there were no issues to report

Q27 - Which of the following describes your reason for not raising these issues with your housing provider?

- I didn't want them to see the condition of the home
- I was concerned about what they would think of me

Q28 - I was concerned that they would blame me for the problems

- I didn't believe they will provide any help
- Other
- Please briefly describe the other reason

Q29 - Did you get a response from your housing provider?

- Yes
- No
- Dont't know

Q30 - Please briefly describe what, if anything, the housing provider did as a result of your concerns.

Q31 - How satisfied were you with the response of your housing provider?

- Not at all satisfied
- Slightly satisfied
- Somewhat satisfied
- Moderately satisfied
- Extremely satisfied
- Don't know

Q32 - Do you recall receiving information about the measures before the works started?

- Yes
- No

Q33 - How satisfied have you been with the information you have been given about the measures?

- Not at all satisfied
- Slightly satisfied
- Somewhat satisfied
- Moderately satisfied
- Extremely satisfied
- Don't know

Q34 - If you have any comments or feedback on the information, please add here.

Q35 - How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?

- Not at all satisfied
- Slightly satisfied
- Somewhat satisfied
- Moderately satisfied
- Extremely satisfied
- Don't know

Q36 - How disruptive were the changes when they were carried out?

- Not at all disruptive
- Slightly disruptive
- Somewhat disruptive
- Moderately disruptive
- Extremely disruptive
- Don't know

Q37 - Compared to before the measures, is the home now colder or warmer?

- A lot colder
- A little colder
- About the same
- A little warmer
- A lot warmer
- Don't know

Q38 - Compared to before the measures, does the house feel more, or less, damp?

- A lot less damp
- A little less damp
- About the same
- A little more damp
- A lot more damp
- Don't know

Q39 - Compared to before the measures, how often do you see the following issues?

Steamed up windows

- A lot less
- Somewhat less
- About the same
- Somewhat more
- A lot more
- Don't know

Steamed up or damp/wet walls

- A lot less
- Somewhat less
- About the same
- Somewhat more
- A lot more
- Don't know

Mildew, rot or mould on window frames

- A lot less
- Somewhat less
- About the same
- Somewhat more
- A lot more
- Don't know

Stains, rot or mould on walls of ceilings

- A lot less
- Somewhat less
- About the same
- Somewhat more
- A lot more
- Don't know

Stains, rot or mould on floors, carpets or furniture

- A lot less
- Somewhat less
- About the same
- Somewhat more
- A lot more
- Don't know

Q40 - After the recent measures, which if any of the following do you do in order to try to reduce the impact of condensation, mould and/or damp?

- Turn up the heating
- Open windows or doors
- Use extractor fan in the bathroom and/or kitchen
- Use a dehumidifier
- Open trickle vents
- Avoid drying clothes indoors
- Have fewer or shorter showers
- Change cooking patterns
- Others
- None of the above

Q41 - Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?

- A lot less often
- Somewhat less often
- About the same amount
- Somewhat more often
- A lot more often
- Don't know

Q42 - Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?

- Much worse
- Somewhat worse
- About the same
- Somewhat better
- Much better
- Don't know
- Not applicable – I/we did not experience health conditions

Q43 - Compared to before the measures, how much do you spend on energy?

- Much less
- Somewhat less
- About the same
- Somewhat more
- Much more
- Don't know

Q44 - Do you or anyone in your home use an asthma inhaler?

- Yes
- No
- Don't know

Q45 - Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?

- Much less often
- Somewhat less often
- About the same amount
- Somewhat more often
- Much more often
- Not applicable
- Don't Know

Q46 - Do you have any comments or additional information about your experiences with mould and damp and/ or the changes that have been made?

Q47 - What is your age?

- 18-25
- 26-35
- 36-45
- 46-55
- 56-65
- 66-75
- 76 and over
- Prefer not to say

Q48 - What is your gender?

- Male
- Female
- Prefer to self-describe
- Prefer not to say

Q49 - How long have you lived in your current home?

- Less than 1 year
- 1-2 years
- 3-4 years
- 5-10 years
- Over 10 years

Q50 - Which of the following best describes your home? (Select one)

- Terraced
- Semi-detached
- Detached
- Bungalow
- Low rise flat (1-2 storey)
- Medium rise flat (3-5 storey)
- High rise flat (6+ storey)
- Maisonette
- Other

Q51 - How many people normally live in your home, including you?

- 1
- 2
- 3
- 4
- 5
- More than 5
- Prefer not to say

Q52 - Which of the following age groups normally live in your home?

- Children under 5
- Children between 5 and 16
- Adults 65 or over
- None of the above
- Prefer not to say

Q53 - Which of the following ethnic groups normally live in your home?

- Asian or Asian British - Indian
- Asian or Asian British - Pakistani
- Asian or Asian British - Bangladeshi
- Asian or Asian British - Chinese
- Any other Asian background
- Black or Black British - Caribbean
- Black or Black British - African
- Any other Black or Black British background
- Mixed or Multiple ethnic groups - White and Black Caribbean
- Mixed or Multiple ethnic groups - White and Black African
- White and Black African - White and Asian
- Any Other Mixed background
- White - English, Welsh, Scottish, Northern Irish or British
- White - Irish
- White - Any other White background
- Other ethnic group - Arab
- Other ethnic group - English, Scottish or Welsh Gypsy
- Other ethnic group - Irish Traveller
- Other ethnic group - Roma
- Any other ethnic group
- Prefer not to say

Q54 - Does anyone in your home have a long-term health condition that limits their day-to-day activities?

- Yes
- No
- Prefer not to say

Q55 - Does anyone in your home act as a carer for, or give any help or support to, anyone because they have any long-term physical or mental health conditions or illnesses, or problems related to old age?

- Yes
- No
- Prefer not to say

Q56 - How would you describe your household financial situation at present?

- Very difficult to afford living costs
- Somewhat difficult to afford living costs
- Able to afford living costs
- Living somewhat comfortably
- Living very comfortably
- Prefer not to say

Q57 - On a typical week day, is there someone in the house (approximately 9am to 5pm)?

- Always
- Mostly
- Sometimes
- Rarely
- Never
- Prefer not to say

Q58 - What is your postcode?

Q59 - Who is your housing provider?

Q60 - How did you find out about the survey?

Q61 - Would you like to be entered into a prize draw to win £100 in shopping vouchers?

- Yes
- No

Q62 - Please provide your name and your email address or phone number. These will only be used to contact you in relation to the prize draw.

Q63 - Would you be willing to take part in an interview about the recent measures and their impact as part of this research?

- Yes
- No

Q64 - Please provide your name and your email address or phone number. These will only be used to contact you in relation to arranging an interview.

Appendix C: Statistical analysis

Methods

The purpose of this analysis was to look at factors that may impact people's levels of satisfaction with the measures undertaken, or their views as to the changes that resulted from the measures. To that end, a series of predictor variables were defined, based on characteristics either of the measures themselves, or the household receiving the measures. Similarly, a series of outcomes were defined, looking at changes from before to after the measures were completed.

The chosen predictor variables are given in Table 9, together with the specific question from the survey from which this information was derived.

Table 8 Table 1 Predictor variables in analysis

Predictor variable	Question used in online survey
Types of work undertaken	What changes has your housing provider recently made to your home?
Impact of long-term health conditions	Does anyone in your home have a long-term health condition that limits their day-to-day activities?
Presence of a child under 5 years of age	Which of the following age groups normally live in your home?
Presence of a child between 5 and 16 years of age	Which of the following age groups normally live in your home?
Presence of an adult 65 years or older	Which of the following age groups normally live in your home?
Level of concern before the measures were taken	How concerned were you about condensation, mould or damp in your home?
Number of mitigation approaches used by the household before the measures were taken	Before the recent measures, which if any of the following did you do in order to try to reduce the impact of condensation, mould and/or damp?
Duration the issues existed for	When did you first start noticing these issues?
Month when work completed	When were the works completed?
Age of survey respondent	What is your age?
Ethnicity of people living in the home	Which of the following ethnic groups normally live in your home?
Ethnicity of people living in the home	Which of the following ethnic groups normally live in your home?
Type of housing	Which of the following best describes your home?

The chosen outcome variables are given in Table 10, together with the specific question from the survey from which this information was derived. In order to be able to use logistic regression, outcomes with more than two possible response categories were combined to give a binary outcome variable. The way outcome categories were combined is also given in Table 2.

For some questions the scale included positive outcomes of the measures, negative outcomes, and neutral outcomes, and for these negative and neutral outcomes were combined, meaning the results look at comparing those for whom the measures provided an improvement, to those for whom they did not provide an improvement (which would include both those who experienced no change, and those who experienced a worsening).

Table 9 Outcome variables in analysis

Outcome variable	Question used from survey	Categories
Level of disruption	How disruptive were the changes when they were carried out?	Outcome category 1: ■ Not at all disruptive ■ Slightly disruptive Outcome category 2: ■ Somewhat disruptive ■ Moderately disruptive ■ Extremely disruptive Responses excluded: ■ Don't know
Change in levels of damp	Compared to before the measures, does the house feel more, or less, damp?	Outcome category 1: ■ A lot less damp ■ A little less damp Outcome category 2: ■ About the same ■ A little more damp ■ A lot more damp Responses excluded: ■ Don't know
Change in levels of action taken by household to manage condensation, mould and damp	Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	Outcome category 1: ■ A lot less often ■ Somewhat less often Outcome category 2: ■ About the same amount ■ Somewhat more often ■ A lot more often Responses excluded: Don't know
Change in home temperature	Compared to before the measures, is the home now colder or warmer?	Outcome category 1: ■ A lot warmer ■ A little warmer Outcome category 2: ■ About the same ■ A little colder ■ A lot colder Responses excluded: ■ Don't know
Change in impact on health conditions	Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	Outcome category 1: ■ Much better ■ Somewhat better Outcome category 2: ■ About the same ■ Somewhat worse ■ Much worse Responses excluded: ■ Don't know ■ Not applicable (no health conditions before)

Outcome variable	Question used from survey	Categories
Change in energy costs	Compared to before the measures, how much do you spend on energy?	Outcome category 1: ■ Much less ■ Somewhat less Outcome category 2: ■ About the same ■ Somewhat more ■ Much more Responses excluded: ■ Don't know
Change in asthma inhaler use	Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	Outcome category 1: ■ Much less often ■ Somewhat less often Outcome category 2: ■ About the same ■ Somewhat more often ■ Much more often Responses excluded: ■ Don't know ■ Not applicable
Level of satisfaction with housing provider	How satisfied were you with the response of your housing provider? Note – This question is about broader satisfaction with the responses of the housing provider when the respondent had raised issues of mould, damp and condensation with them, not just about the SHQF	Outcome category 1: ■ Extremely satisfied ■ Moderately satisfied ■ Somewhat satisfied Outcome category 2: ■ Slightly satisfied ■ Not at all satisfied Responses excluded: ■ Don't know
Level of satisfaction with information provided	How satisfied have you been with the information you have been given about the measures?	Outcome category 1: ■ Extremely satisfied ■ Moderately satisfied ■ Somewhat satisfied Outcome category 2: ■ Slightly satisfied ■ Not at all satisfied Responses excluded: ■ Don't know
Level of satisfaction with measures undertaken	How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp? Note – This question is specifically about satisfaction with the SHQF works	Outcome category 1: ■ Extremely satisfied ■ Moderately satisfied ■ Somewhat satisfied Outcome category 2: ■ Slightly satisfied ■ Not at all satisfied Responses excluded: ■ Don't know

For each of the variables defined above, a logistic regression analysis was conducted, to look for significant associations between predictor and outcome variables. The results of these tests are given in the section below. Where a statistically significant result was identified at the 95% confidence level, the magnitude of the impact the predictor has on the outcomes is also reported.

Data cleaning

After preliminary cleaning of the data from the survey was conducted, a number of tests were undertaken to look for concerns in the patterns of the data, that may indicate people were not completing the survey as intended. Specifically:

- Looking for individuals who appear to commonly select a consistent response based on its position in the list (for example, consistently selecting the first or last response). A high proportion of such responses may indicate people not completing the survey accurately.
- Similarly, looking for individuals who appear to commonly select a consistent response based on its position in the list from a certain point in the survey, having not done so previously. This may indicate people who began filling in the survey accurately, but failed to do so beyond a certain point.
- Looking for people providing "illogical responses." For example, a person who responds that overall, the measures made the house less damp, but then reports things being worse on all of the questions asking about specific aspects of damp.

None of these checks can identify an individual response as being wrong – some individuals may have unusual experiences that do not fit the "average" pattern. However, a high proportion of such responses may identify issues with the survey (for example, questions not being fully understood, or the length of the survey causing people to cease to answer accurately beyond a certain point).

In this case, none of these checks flagged up more than 5% of the survey response as being of potential concern, and therefore there was no reason identified to believe data quality issues will have affected the conclusions of our analysis.

Results

The types of work undertaken

What changes has your housing provider recently made to your home?

Overall summary

The following patterns were observed across the different types of works undertaken:

Work on the fabric of the building was:

- More likely to be disruptive than other types of work
- More likely to lead to people reporting the home being warmer after the measures, compared to other types of work.
- More likely to lead to people reporting the home feeling less damp after the measures, compared to other types of work.

Work on heating was:

- More likely to be disruptive than other types of work
- More likely to lead to people reporting the home being warmer after the measures, compared to other types of work.

Work on mould removal was:

- More likely to lead to people reporting the home feeling less damp after the measures, compared to other types of work.
- More likely to lead to people reporting there were improvements in long-term health conditions after the works, compared to other types of work.
- More likely to lead to people reporting that they were satisfied with the response of their housing provider, compared to other types of work.
- More likely to lead to
- reporting that they we e satisfied with the information they were given about the works, compared to other types of work.

Work in the kitchen or bathroom was more likely to be disruptive than other types of work.

Work on ventilation or fans was more likely to lead to people reporting that they were satisfied with the information they were given about the works, compared to other types of work.

Table 10 Impact of type of work undertaken on outcomes

Outcome	Impact of type of work undertaken on outcomes
How disruptive were the changes when they were carried out?	People who had the following types of works undertaken were more likely to report the changes were at least somewhat disruptive, compared to those whº had other types of works: ■ Work on the fabric of the building **(1.5 times more likely)** ■ Work on heating **(1.8 times more likely)** ■ Work in kitchen or bathroom **(2.2 times more likely)**
Compared to before the measures, does the house feel more, or less, damp?	People who had the following types of works undertaken were more likely to report the house feeling less damp after the measures, compared to those who had other types of works: ■ Work on the fabric of the building **(1.6 time more likely)** ■ Work on mould removal (**1.9 times more likely)**
Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	There were no statistically significant relationships between the types of work undertaken, and whether people report taking less measures to reduce condensation, mould and damp after the measures.
Compared to before the measures, is the home now colder or warmer?	People who had the following types of works undertaken were more likely to report their home being warmer after the measures, report their home being warmer after the measures: ■ Work on the fabric of the building **(2.4 times more likely)** ■ Work on heating **(2.2 times more likely)**
Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	People who had the following types of works undertaken were more likely to report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures, compared to those who had other types of works: ■ Work on mould removal **(2.2 times more likely)**
Compared to before the measures, how much do you spend on energy?	There were no statistically significant relationships between the types of work undertaken, and whether people report a decrease in the amount they spend on energy after the measures.
Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	People who had the following types of works undertaken were more likely to report that a person in their home had to use an asthma inhaler at least somewhat less often, compared to those who had other types of works: ■ Work on mould removal **(2.8 times more likely)**
How satisfied were you with the response of your housing provider?	People who had the following types of works undertaken were more likely to report they were at least somewhat satisfied with the response of their housing provider, compared to those who had other types of works: ■ Work on mould removal **(2.3 times more likely)**
How satisfied have you been with the information you have been given about the measures?	People who had the following types of works undertaken were more likely to report they were at least somewhat satisfied with the information they were given about the measures, compared to those who had other types of works: ■ Work on ventilation or fans **(1.5 times more likely)** ■ Work on mould removal **(1.8 times more likely)**
How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?	People who had the following types of works undertaken were more likely to report they were at least somewhat satisfied that the measures addressed any concerns they had about condensation, mould and/or damp: ■ Work on mould removal **(2.4 times more likely)**

The impact of long-term health conditions

Does anyone in your home have a long-term health condition that limits their day-to-day activities?

Possible responses included in the analysis:

- Yes
- No
- Prefer not to say

Overall summary

People who reported there is a person in the home with a long-term health condition that limits their day-to-day activities were:

- More likely to report the changes were disruptive.
- Less likely to report improvements in health conditions associated with condensation, mould and damp after the changes.
- Less likely to report that if there is a person in the home who uses an asthma inhaler, they have needed to use that inhaler less since the changes.

Table 11 Impact of long-term health conditions on outcomes

Outcome	Impact of long-term health conditions on outcomes
How disruptive were the changes when they were carried out?	People who report there is a person in the home with a long-term health condition that limits their day-to-day activities were **1.6 times more likely** to report the changes were at least somewhat disruptive when they were carried out, compared to people who report there is not a person in the home with a long-term health condition that limits their day-to-day activities. People who prefer not to say whether there is a person in the home with a long-term health condition that limits their day-to-day activities were **2.3 times more likely** to report the changes were at least somewhat disruptive when they were carried out, compared to people who report there is not a person in the home with a long-term health condition that limits their day-to-day activities.
Compared to before the measures, does the house feel more, or less, damp?	There was no statistically significant relationship between whether people report there is a person in the home with a long-term health condition that limits their day-to-day activities, and whether people report the house feeling less damp after the measures.
Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	There was no statistically significant relationship between whether people report there is a person in the home with a long-term health condition that limits their day-to-day activities, and whether people report taking less measures to reduce condensation, mould and damp after the measures.
Compared to before the measures, is the home now colder or warmer?	There was no statistically significant relationship between whether people report there is a person in the home with a long-term health condition that limits their day-to-day activities, and whether people report their home being warmer after the measures.
Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	People who report there is **not** a person in the home with a long-term health condition that limits their day-to-day activities were **2.0 times more likely** to report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures, compared to people who report there is a person in the home with a long-term health condition that limits their day-to-day activities.
Compared to before the measures, how much do you spend on energy?	There was no statistically significant relationship between whether people report there is a person in the home with a long-term health condition that limits their day-to-day activities, and whether people report a decrease in the amount they spend on energy after the measures.
Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	There was no statistically significant relationship between whether people report there is a person in the home with a long-term health condition that limits their day-to-day activities, and whether a person in their home with asthma has needed to use their asthma inhalers less, after the changes.
How satisfied were you with the response of your housing provider?	There was no statistically significant relationship between whether people report there is a person in the home with a long-term health condition that limits their day-to-day activities, and whether people were satisfied with the response of their housing provider.
How satisfied have you been with the information you have been given about the measures?	There was no statistically significant relationship between whether people report there is a person in the home with a long-term health condition that limits their day-to-day activities, and whether people were satisfied with the information they were given about the measures.
How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?	There was no statistically significant relationship between whether people report there is a person in the home with a long-term health condition that limits their day-to-day activities, and whether people were satisfied that the measures addressed any concerns they had about condensation, mould and/or damp.

The presence of a child under 5

Which of the following age groups normally live in your home?

Possible responses included in the analysis:

- People reporting there is at least 1 child under 5 normally living in the home.
- People reporting there are no children under 5 normally living in the home.

People who said they would prefer not to answer this question (<5% of the sample) were excluded from the analysis.

Overall summary

People who reported there is a child under 5 who normally lives in the home were:

- Less likely to report they were satisfied with the response of their housing provider.
- Less likely to report they were satisfied with the information they were given about the measures.

Table 12 Impact of long-term health conditions on outcomes

Outcome	Impact of presence of a child under 5 on outcomes
How disruptive were the changes when they were carried out?	There was no statistically significant relationship between whether people report there is a child under 5 who normally lives in the home, and whether people report the changes were at least somewhat disruptive.
Compared to before the measures, does the house feel more, or less, damp?	There was no statistically significant relationship between whether people report there is a child under 5 who normally lives in the home, and whether people report the house feeling less damp after the measures.
Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	There was no statistically significant relationship between whether people report there is a child under 5 who normally lives in the home, and whether people report taking less measures to reduce condensation, mould and damp after the measures.
Compared to before the measures, is the home now colder or warmer?	There was no statistically significant relationship between whether people report there is a child under 5 who normally lives in the home, and whether people report their home being warmer after the measures.
Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	There was no statistically significant relationship between whether people report there is a child under 5 who normally lives in the home, and whether people report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures.
Compared to before the measures, how much do you spend on energy?	There was no statistically significant relationship between whether people report there is a child under 5 who normally lives in the home, and whether people report a decrease in the amount they spend on energy after the measures.
Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	There was no statistically significant relationship between whether people report there is a child under 5 who normally lives in the home, and whether a person in their home with asthma has needed to use their asthma inhalers less, after the changes.
How satisfied were you with the response of your housing provider?	People who report there is **not** a child under 5 who normally lives in the home were **2.0 times more likely** to report that they were at least somewhat satisfied with the response of their housing provider, compared to people who report there is a child under 5 who normally lives in the home.
How satisfied have you been with the information you have been given about the measures?	People who report there is **not** a child under 5 who normally lives in the home were **1.9 times more likely** to report that they were at least somewhat satisfied with the information they were given about the measures, compared to people who report there is a child under 5 who normally lives in the home.
How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?	People who report there is **not** a child under 5 who normally lives in the home were **2.0 times more likely** to report that they were at least somewhat satisfied that the measures addressed any concerns they had about condensation, mould and/or damp.

The presence of a child between 5 and 16

Which of the following age groups normally live in your home?

Possible responses included in the analysis:

- People reporting there is at least 1 child between 5 and 16 normally living in the home.
- People reporting there are no children between 5 and 16 normally living in the home.

People who said they would prefer not to answer this question (<5% of the sample) were excluded from the analysis.

Overall summary

People who reported there is a child between 5 and 16 who normally lives in the home were:

- Less likely to report they were satisfied with the response of their housing provider.
- Less likely to report they were satisfied with the information they were given about the measures.

Table 13 Impact of long-term health conditions on outcomes

Outcome	Impact of presence of a child between 5 and 16 on outcomes
How disruptive were the changes when they were carried out?	There was no statistically significant relationship between whether people report there is a child between 5 and 16 who normally lives in the home, and whether people report the changes were at least somewhat disruptive.
Compared to before the measures, does the house feel more, or less, damp?	There was no statistically significant relationship between whether people report there is a child between 5 and 16 who normally lives in the home, and whether people report the house feeling less damp after the measures.
Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	There was no statistically significant relationship between whether people report there is a child between 5 and 16 who normally lives in the home, and whether people report taking less measures to reduce condensation, mould and damp after the measures.
Compared to before the measures, is the home now colder or warmer?	There was no statistically significant relationship between whether people report there is a child between 5 and 16 who normally lives in the home, and whether people report their home being warmer after the measures.
Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	There was no statistically significant relationship between whether people report there is a child between 5 and 16 who normally lives in the home, and whether people report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures.
Compared to before the measures, how much do you spend on energy?	There was no statistically significant relationship between whether people report there is a child between 5 and 16 who normally lives in the home, and whether people report a decrease in the amount they spend on energy after the measures.
Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	There was no statistically significant relationship between whether people report there is a child between 5 and 16 who normally lives in the home, and whether a person in their home with asthma has needed to use their asthma inhalers less, after the changes.
How satisfied were you with the response of your housing provider?	People who report there is **not** a child between 5 and 16 who normally lives in the home were **1.8 times more likely** to report that they were at least somewhat satisfied with the response of their housing provider, compared to people who report there is a child between 5 and 16 who normally lives in the home.
How satisfied have you been with the information you have been given about the measures?	People who report there is **not** a child between 5 and 16 who normally lives in the home were **1.9 times more likely** to report that they were at least somewhat satisfied with the information they were given about the measures, compared to people who report there is a child between 5 and 16 who normally lives in the home.
How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?	People who report there is **not** a child between 5 and 16 who normally lives in the home were **1.8 times more likely** to report that they were at least somewhat satisfied that the measures addressed any concerns they had about condensation, mould and/or damp.

The presence of a person 65 years or over

Which of the following age groups normally live in your home?

Possible responses included in the analysis:

- People reporting there is at least 1 person 65 years and over normally living in the home.
- People reporting there are no people 65 years and over normally living in the home.

People who said they would prefer not to answer this question (<5% of the sample) were excluded from the analysis.

Overall summary

People who reported there is a person 65 years and over who normally lives in the home were:

- More likely to report they were satisfied with the response of their housing provider.
- More likely to report they were satisfied with the information they were given about the measures.

Table 14 Impact of long-term health conditions on outcomes

Outcome	Impact of presence of a person 65 years or over on outcomes
How disruptive were the changes when they were carried out?	There was no statistically significant relationship between whether people report there is a person 65 years and over who normally lives in the home, and whether people report the changes were at least somewhat disruptive.
Compared to before the measures, does the house feel more, or less, damp?	There was no statistically significant relationship between whether people report there is a person 65 years and over who normally lives in the home, and whether people report the house feeling less damp after the measures.
Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	There was no statistically significant relationship between whether people report there is a person 65 years and over 5 who normally lives in the home, and whether people report taking less measures to reduce condensation, mould and damp after the measures.
Compared to before the measures, is the home now colder or warmer?	There was no statistically significant relationship between whether people report there is a person 65 years and over who normally lives in the home, and whether people report their home being warmer after the measures.
Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	There was no statistically significant relationship between whether people report there is a person 65 years and over who normally lives in the home, and whether people report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures.
Compared to before the measures, how much do you spend on energy?	There was no statistically significant relationship between whether people report there is a person 65 years and over who normally lives in the home, and whether people report a decrease in the amount they spend on energy after the measures.
Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	There was no statistically significant relationship between whether people report there is a person 65 years and over who normally lives in the home, and whether a person in their home with asthma has needed to use their asthma inhalers less, after the changes.
How satisfied were you with the response of your housing provider?	People who report there is a person 65 years and over who normally lives in the home were **1.7 times more likely** to report that they were at least somewhat satisfied with the response of their housing provider, compared to people who report there is not a person 65 year and over who normally lives in the home.
How satisfied have you been with the information you have been given about the measures?	People who report there is a person 65 years and over who normally lives in the home were **1.9 times more likely** to report that they were at least somewhat satisfied with the information they were given about the measures, compared to people who report there is not a person 65 year and over who normally lives in the home.
How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?	People who report there is a person 65 years and over who normally lives in the home were **1.7 times more likely** to report that they were at least somewhat satisfied that the measures addressed any concerns they had about condensation, mould and/or damp.

Level of concern before the measures

How concerned were you about condensation, mould or damp in your home?

Possible responses included in the analysis:

- Not at all concerned/slightly concerned/somewhat concerned (these 3 options were combined into 1 category for analysis)
- Moderately concerned/extremely concerned (these 2 options were combined into 1 category for analysis).

People who said they don't know the answer to this question (5% of the sample) were excluded from the analysis.

Overall summary

People who reported they were at least moderately concerned about condensation, mould or damp in their home before the measures were:

- More likely to report the changes were disruptive.
- Less likely to report the house feeling less damp after the measures.
- Less likely to report taking less action to reduce condensation, mould and damp after the measures.
- Less likely to report a decrease in the amount they spend on energy.
- Less likely to report they were satisfied with the response of their housing provider.
- Less likely to report they were satisfied with the information they were given about the measures.

Table 15 Impact of level of concern before the measures on outcomes

Outcome	Impact of level of concern before the measures on outcomes
How disruptive were the changes when they were carried out?	People who reported they were at least moderately concerned about condensation, mould or damp in their home before the measures were **2.5 times more likely** to report the changes were at least somewhat disruptive when they were carried out, compared to people who were less than moderately concerned about condensation, mould or damp in their home before the measures.
Compared to before the measures, does the house feel more, or less, damp?	People who reported they were **less than** moderately concerned about condensation, mould or damp in their home before the measures were **1.7 times more likely** to report the house feeling less damp after the measures, compared to people who were at least moderately concerned about condensation, mould or damp in their home before the measures.
Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	People who reported they were **less than** moderately concerned about condensation, mould or damp in their home before the measures were **2.1 times more likely** to report taking less measures to reduce condensation, mould and damp after the measures, compared to people who were at least moderately concerned about condensation, mould or damp in their home before the measures.
Compared to before the measures, is the home now colder or warmer?	There was no statistically significant relationship between whether people report they were at least moderately concerned about condensation, mould or damp in their home before the measures, and whether people report their home being warmer after the measures.
Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	There was no statistically significant relationship between whether people report they were at least moderately concerned about condensation, mould or damp in their home before the measures, and whether people report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures.
Compared to before the measures, how much do you spend on energy?	People who reported they were **less than** moderately concerned about condensation, mould or damp in their home before the measures were **2.7 times more likely** to report a decrease in the amount they spend on energy after the measures, compared to people who were at least moderately concerned about condensation, mould or damp in their home before the measures.
Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	There was no statistically significant relationship between whether people report they were at least moderately concerned about condensation, mould or damp in their home before the measures, and whether a person in their home with asthma has needed to use their asthma inhalers less, after the changes.
How satisfied were you with the response of your housing provider?	People who reported they were **less than** moderately concerned about condensation, mould or damp in their home before the measures were **3.4 times more likely** to report that they were at least somewhat satisfied with the response of their housing provider, compared to people who were at least moderately concerned about condensation, mould or damp in their home before the measures.
How satisfied have you been with the information you have been given about the measures?	People who reported they were **less than** moderately concerned about condensation, mould or damp in their home before the measures were **2.7 times more likely** to report that they were at least somewhat satisfied with the information they were given about the measures, compared to people who were at least moderately concerned about condensation, mould or damp in their home before the measures.
How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?	People who reported they were **less than** moderately concerned about condensation, mould or damp in their home before the measures were **2.8 times more likely** to report that they were at least somewhat satisfied that the measures addressed any concerns they had about condensation, mould and/or damp.

Number of mitigation approaches taken before measures implemented

Before the recent measures, which if any of the following did you do in order to try to reduce the impact of condensation, mould and/or damp?

The 6 approaches reported as being adopted by 20% or more of people before the measures were implemented were included in this analysis:

- Turn up the heating
- Open windows or doors
- Use extractor fan in the bathroom and/or kitchen
- Use a dehumidifier
- Open trickle vents
- Avoid drying clothes indoors

The number of these approaches each person reported using was summed to give a continuous predictor variable.

Overall summary

People who reported they were taking a higher number of mitigation approaches before the measures were implemented were:

- More likely to report using less approaches to reduce condensation, mould and damp after the measures.
- Less likely to report they were satisfied with the response of their housing provider.

Table 16 Impact of level of concern before the measures on outcomes

Outcome	Impact of number of mitigation approaches taken before measures implemented on outcomes
How disruptive were the changes when they were carried out?	There was no statistically significant relationship between the number of mitigation approaches a person reports taking before the measures, and whether they report the changes were at least somewhat disruptive.
Compared to before the measures, does the house feel more, or less, damp?	There was no statistically significant relationship between the number of mitigation approaches a person reports taking before the measures, and whether they report the house feeling less damp after the measures.
Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	People who report taking a higher number of mitigation approaches before the measures were **more likely** to report using less approaches to reduce condensation, mould and damp after the measures. For each additional approach they were using beforehand, they were **1.2 times more likely** to be reporting using less afterwards.
Compared to before the measures, is the home now colder or warmer?	There was no statistically significant relationship between the number of mitigation approaches a person reports taking before the measures, and whether people report their home being warmer after the measures.
Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	There was no statistically significant relationship between the number of mitigation approaches a person reports taking before the measures, and whether people report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures.
Compared to before the measures, how much do you spend on energy?	There was no statistically significant relationship between the number of mitigation approaches a person reports taking before the measures, and whether people report a decrease in the amount they spend on energy after the measures.
Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	There was no statistically significant relationship between the number of mitigation approaches a person reports taking before the measures, and whether a person in their home with asthma has needed to use their asthma inhalers less, after the changes.
How satisfied were you with the response of your housing provider?	People who report taking a higher number of mitigation approaches before the measures were **less likely** to report that they were at least somewhat satisfied with the response of their housing provider. For each additional approach they were using beforehand, they were **1.2 times less likely** to be report being satisfied.
How satisfied have you been with the information you have been given about the measures?	There was no statistically significant relationship between the number of mitigation approaches a person reports taking before the measures, and whether people were satisfied with the information they were given about the measures.
How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?	People who report taking a higher number of mitigation approaches before the measures were **less likely** to report that they were at least somewhat satisfied that the measures addressed any concerns they had about condensation, mould and/or damp. For each additional approach they were using beforehand, they were **1.2 times less likely** to be report being satisfied.

Duration the issues existed for

When did you first start noticing these issues?

Possible responses included in the analysis:

- Less than a year ago
- Around 1 year ago
- Around 2 years ago
- Around 3 years ago
- Around 4 years ago, or more

The response of less than a year ago was then used as the reference category in the analysis. People who said they don't know the answer to this question (13% of the sample) were excluded from the analysis.

Overall summary

People who reported they reported they first noticed the issues around 4 year ago, or more, were:

- More likely to report the changes were disruptive.
- Less likely to report the house feeling less damp after the measures.
- Less likely to report taking less action to reduce condensation, mould and damp after the measures.
- Less likely to report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures.
- More likely to report a person in their home with asthma has needed to use their asthma inhalers less, after the changes
- Less likely to report they were satisfied with the response of their housing provider.
- Less likely to report they were satisfied with the information they were given about the measures.

People who reported they reported they first noticed the issues around 3 years ago were:

- Less likely to report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures.
- Less likely to report they were satisfied with the response of their housing provider.
- Less likely to report they were satisfied with the information they were given about the measures.

People who reported they reported they first noticed the issues around 2 years ago were:

- Less likely to report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures.
- Less likely to report they were satisfied with the response of their housing provider.

People who reported they reported they first noticed the issues around 1 years ago were:

- Less likely to report they were satisfied with the response of their housing provider.

Outcome	Impact of duration the issues have existed for on outcomes
How disruptive were the changes when they were carried out?	People who reported they first noticed the issues around 4 years ago, or more, were **1.8 times more likely** to report the changes were at least somewhat disruptive when they were carried out, compared to people who first noticed the issues less than a year ago.
Compared to before the measures, does the house feel more, or less, damp?	People who reported they first noticed the issues around 4 years ago, or more, were **1.8 times less likely** to report the house feeling less damp after the measures, compared to people who first noticed the issues less than a year ago.
Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	People who reported they first noticed the issues around 4 years ago, or more, were **2.9 times less likely** to report taking less measures to reduce condensation, mould and damp after the measures, compared to people who first noticed the issues less than a year ago.
Compared to before the measures, is the home now colder or warmer?	There was no statistically significant relationship between the duration the issues existed for, and whether people report their home being warmer after the measures.
Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	People who reported they first noticed the issues around 2 years ago were **3.2 times less likely** to report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures, compared to people who first noticed the issues less than a year ago. People who reported they first noticed the issues around 3 years ago were **2.3 times less likely** to report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures, compared to people who first noticed the issues less than a year ago. People who reported they first noticed the issues around 4 years ago, or more, were **3.1 times less likely** to report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures, compared to people who first noticed the issues less than a year ago.
Compared to before the measures, how much do you spend on energy?	People who reported they first noticed the issues around 4 years ago, or more, were **3.6 times less likely** to report a decrease in the amount they spend on energy after the measures, compared to people who first noticed the issues less than a year ago.
Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	People who reported they first noticed the issues around 4 years ago, or more, were **4.2 times more likely** to report a person in their home with asthma has needed to use their asthma inhalers less, after the changes, compared to people who first noticed the issues less than a year ago.

Outcome	Impact of duration the issues have existed for on outcomes
How satisfied were you with the response of your housing provider?	People who reported they first noticed the issues around 1 year ago were **1.9 times less likely** to report that they were at least somewhat satisfied with the response of their housing provider, compared to people who first noticed the issues less than a year ago. People who reported they first noticed the issues around 2 years ago were **2.5 times less likely** to report that they were at least somewhat satisfied with the response of their housing provider, compared to people who first noticed the issues less than a year ago. People who reported they first noticed the issues around 3 years ago were **3.6 times less likely** to report that they were at least somewhat satisfied with the response of their housing provider, compared to people who first noticed the issues less than a year ago. People who reported they first noticed the issues around 4 years ago, or more, were **4.1 times less likely** to report that they were at least somewhat satisfied with the response of their housing provider, compared to people who first noticed the issues less than a year ago.
How satisfied have you been with the information you have been given about the measures?	People who reported they first noticed the issues around 3 years ago were **2.0 times less likely** to report that they were at least somewhat satisfied with the information they were given about the measures, compared to people who first noticed the issues less than a year ago. People who reported they first noticed the issues around 4 years ago, or more, were **2.0 times less likely** to report that they were at least somewhat satisfied with the information they were given about the measures, compared to people who first noticed the issues less than a year ago.
How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?	People who reported they first noticed the issues around 4 years ago, or more, were **2.3 times less likely** to report that they were at least somewhat satisfied that the measures addressed any concerns they had about condensation, mould and/or damp.

Month when work completed

When were the works completed?

People were asked to specify the month works were completed, and these were then categorised for analysis as follows:

- Summer 2023 – Completion in August 2023 or earlier.
- Autumn 2023 – Completion in September, October or November 2023.
- Winter 2023/24 – Completion in December 2023 or January or February 2024.
- Spring 2024 – Completion in March 2024.

People who said they don't know the answer to this question or said works were completed outside this time range were excluded from the analysis.

Overall summary

There were no associations identified between when the works were completed, and any of the outcomes looks at.

Table 17 Impact of month when works completed on outcomes

Outcome	Impact of month when works completed on outcomes
How disruptive were the changes when they were carried out?	There was no statistically significant relationship between when the works were completed, and whether people report the changes were at least somewhat disruptive.
Compared to before the measures, does the house feel more, or less, damp?	There was no statistically significant relationship between when the works were completed, and whether people report the house feeling less damp after the measures.
Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	There was no statistically significant relationship between when the works were completed, and whether people report taking less measures to reduce condensation, mould and damp after the measures.
Compared to before the measures, is the home now colder or warmer?	There was no statistically significant relationship between when the works were completed, and whether people report their home being warmer after the measures.
Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	There was no statistically significant relationship between when the works were completed, and whether people report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures.
Compared to before the measures, how much do you spend on energy?	There was no statistically significant relationship between when the works were completed, and whether people report a decrease in the amount they spend on energy after the measures.
Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	There was no statistically significant relationship between when the works were completed, and whether a person in their home with asthma has needed to use their asthma inhalers less, after the changes.
How satisfied were you with the response of your housing provider?	There was no statistically significant relationship between when the works were completed, and whether people were satisfied with the response of their housing provider.
How satisfied have you been with the information you have been given about the measures?	There was no statistically significant relationship between when the works were completed, and whether people were satisfied with the information they were given about the measures.
How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?	There was no statistically significant relationship between when the works were completed, and whether people were satisfied that the measures addressed any concerns they had about condensation, mould and/or damp.

Age of survey respondent

What is your age?

People were asked to specify their age in categorical ranges. Categories with less than 10% of people selecting them were combined with neighbouring categories, to give the following age bands:

- 18-35
- 36-45
- 46-55
- 56-65
- 66 or higher

The range of 18-35 was then used as the reference category in the analysis. People who said they prefer not to say in response to this question were excluded from the analysis.

Overall summary

Survey respondents aged 66 years or higher were:

- More likely to report they were satisfied with the response of their housing provider.
- More likely to report they were satisfied with the information they were given about the measures.

Table 18 Impact of age of survey respondent on outcomes

Outcome	Impact of age of survey respondent on outcomes
How disruptive were the changes when they were carried out?	There was no statistically significant relationship between the age of the survey respondent, and whether people report the changes were at least somewhat disruptive.
Compared to before the measures, does the house feel more, or less, damp?	There was no statistically significant relationship between the age of the survey respondent, and whether people report the house feeling less damp after the measures.
Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	There was no statistically significant relationship between the age of the survey respondent, and whether people report taking less measures to reduce condensation, mould and damp after the measures.
Compared to before the measures, is the home now colder or warmer?	There was no statistically significant relationship between the age of the survey respondent, and whether people report their home being warmer after the measures.
Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	There was no statistically significant relationship between the age of the survey respondent, and whether people report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures.
Compared to before the measures, how much do you spend on energy?	There was no statistically significant relationship between the age of the survey respondent, and whether people report a decrease in the amount they spend on energy after the measures.
Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	There was no statistically significant relationship between the age of the survey respondent, and whether a person in their home with asthma has needed to use their asthma inhalers less, after the changes.
How satisfied were you with the response of your housing provider?	Survey respondents aged 66 or higher were **2.6 times more likely** to report that they were at least somewhat satisfied with the response of their housing provider, compared to people aged 18-35.
How satisfied have you been with the information you have been given about the measures?	Survey respondents aged 66 or higher were **4.3 times more likely** to report that they were at least somewhat satisfied with the information they were given about the measures, compared to people aged 18-35.
How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?	Survey respondents aged 66 or higher were **3.4 times more likely** to report that they were at least somewhat satisfied that the measures addressed any concerns they had about condensation, mould and/or damp.

Ethnicity of people living in the home

Which of the following ethnic groups normally live in your home?

People were asked to specify all the different ethnicities represented in people normally living in the home. These were then categorised as:

- Respondents self-reporting only white people living in the home
- Respondents self-reporting only non-white people living in the home
- Respondents self-reporting both white and non-white people living in the home

It was not possible to me more granular than this in the analysis, as 69% of households reported all the people living in them as being white, with no other single ethnicity reported for more than 7% of the sample households.

People who said they prefer not to say in response to this question were excluded from the analysis.

Overall summary

Households containing only people self-reporting as non-white were:

- More likely to report the changes were disruptive.
- More likely to report the house feeling less damp after the measures
- More likely to report their home being warmer after the measures
- More likely to report a decrease in the amount they spend on energy after the measures

Table 19 Impact of ethnicity of people living in the home on outcomes

Outcome	Impact of ethnicity of people living in the home on outcomes
How disruptive were the changes when they were carried out?	People living in households containing only people self-reporting as non-white were **1.9 times more likely** to report the changes were at least somewhat disruptive when they were carried out, compared to people living in households containing only people self-reporting as white.
Compared to before the measures, does the house feel more, or less, damp?	People living in households containing only people self-reporting as non-white were **1.6 times more likely** to report the house feeling less damp after the measures, compared to people living in households containing only people self-reporting as white.
Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	There was no statistically significant relationship between the self-reported ethnicity of people living in the home, and whether people report taking less measures to reduce condensation, mould and damp after the measures.
Compared to before the measures, is the home now colder or warmer?	People living in households containing only people self-reporting as non-white were **1.8 times more likely** to report their home being warmer after the measures, compared to people living in households containing only people self-reporting as white.
Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	There was no statistically significant relationship between the self-reported ethnicity of people living in the home, and whether people report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures.
Compared to before the measures, how much do you spend on energy?	People living in households containing only people self-reporting as non-white were **2.3 times more likely** to report a decrease in the amount they spend on energy after the measures, compared to people living in households containing only people self-reporting as white.
Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	There was no statistically significant relationship between the self-reported ethnicity of people living in the home, and whether a person in their home with asthma has needed to use their asthma inhalers less, after the changes.
How satisfied were you with the response of your housing provider?	There was no statistically significant relationship between the self-reported ethnicity of people living in the home, and whether they were at least somewhat satisfied with the response of their housing provider.
How satisfied have you been with the information you have been given about the measures?	There was no statistically significant relationship between the self-reported ethnicity of people living in the home, and whether they were at least somewhat satisfied with the information they were given about the measures.
How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?	There was no statistically significant relationship between the self-reported ethnicity of people living in the home, and whether they were at least somewhat satisfied that the measures addressed any concerns they had about condensation, mould and/or damp.

Number of people living in the home

How many people normally live in your home, including you?

Responses were categorised as follows for this analysis:

- 1 person living in home
- 2 people living in home
- 3 people living in home
- 4 people living in home
- 5 or more people living in home

1 person living in the home was then used as the reference category in the analysis. People who said the preferred not to say (1% of the sample) were excluded from this analysis.

Overall summary

People living in multi-person households were:

- Less likely to report their home being warmer after the measures.
- More likely to report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures.
- More likely to report a person in their home with asthma has needed to use their asthma inhalers less, after the changes.
- Less likely to report being satisfied with the response of their housing provider.
- Less likely to report being satisfied with the information they were given about the measures.

Table 20 Impact of number of people living in the home on outcomes

Outcome	Impact of number of people living in the home on outcomes
How disruptive were the changes when they were carried out?	There was no statistically significant relationship between the number of people living in the home, and whether people report the changes were at least somewhat disruptive.
Compared to before the measures, does the house feel more, or less, damp?	There was no statistically significant relationship between the number of people living in the home, and whether people report the house feeling less damp after the measures.
Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	There was no statistically significant relationship between the number of people living in the home, and whether people report taking less measures to reduce condensation, mould and damp after the measures.
Compared to before the measures, is the home now colder or warmer?	People who reported there were 3 people living in the home were **3.4 times less likely** to report their home being warmer after the measures, compared to people who reported there was 1 person living in the home.
Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	People who reported there were 5 people living in the home were **2.2 times more likely** to report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures, compared to people who reported there was 1 person living in the home.
Compared to before the measures, how much do you spend on energy?	There was no statistically significant relationship between the number of people living in the home, and whether people report a decrease in the amount they spend on energy after the measures.
Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	People who reported there were 2 people living in the home were **4.8 times more likely** to report a person in their home with asthma has needed to use their asthma inhalers less, after the changes, compared to people who reported there was 1 person living in the home.
How satisfied were you with the response of your housing provider?	People who reported there were 3 people living in the home were **2.8 times less likely** to report being at least somewhat satisfied with the response of their housing provider, compared to people who reported there was 1 person living in the home. People who reported there were 4 people living in the home were **2.3 times less likely** to report being at least somewhat satisfied with the response of their housing provider, compared to people who reported there was 1 person living in the home. People who reported there were 5 people living in the home were **1.9 times less likely** to report being at least somewhat satisfied with the response of their housing provider, compared to people who reported there was 1 person living in the home.
How satisfied have you been with the information you have been given about the measures?	People who reported there were 2 people living in the home were **1.6 times less likely** to report being at least somewhat satisfied with the information they were given about the measures, compared to people who reported there was 1 person living in the home. People who reported there were 3 people living in the home were **2.0 times less likely** to report being at least somewhat satisfied with the information they were given about the measures, compared to people who reported there was 1 person living in the home. People who reported there were 5 people living in the home were **2.9 times less likely** to report being at least somewhat satisfied with the information they were given about the measures, compared to people who reported there was 1 person living in the home.

Outcome	Impact of number of people living in the home on outcomes
How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?	People who reported there were 2 people living in the home were **1.9 times less likely** to report being at least somewhat satisfied that the measures addressed any concerns they had about condensation, mould and/or damp. People who reported there were 3 people living in the home were **2.2 times less likely** to report being at least somewhat satisfied that the measures addressed any concerns they had about condensation, mould and/or damp. People who reported there were 4 people living in the home were **2.1 times less likely** to report being at least somewhat satisfied that the measures addressed any concerns they had about condensation, mould and/or damp. People who reported there were 5 people living in the home were **2.7 times less likely** to report being at least somewhat satisfied that the measures addressed any concerns they had about condensation, mould and/or damp.

Type of housing

Which of the following best describes your home?

Housing was categories as follows for this analysis:

- Terraced
- Semi-detached
- Flat

Flats were then used as the reference category in the analysis. People who gave other responses (which as detached housing) were excluded from this analysis (these other types accounted for only 10% of responses).

Overall summary

People living in semi-detached houses were:

- Less likely to report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures.

Table 21 Impact of month when works completed on outcomes

Outcome	Impact of month when works completed on outcomes
How disruptive were the changes when they were carried out?	There was no statistically significant relationship between the type of housing a person was living in, and whether people report the changes were at least somewhat disruptive.
Compared to before the measures, does the house feel more, or less, damp?	There was no statistically significant relationship between the type of housing a person was living in, and whether people report the house feeling less damp after the measures.
Compared to before the recent measures, how often do you do anything to try to reduce condensation, mould and damp?	There was no statistically significant relationship between the type of housing a person was living in, and whether people report taking less measures to reduce condensation, mould and damp after the measures.
Compared to before the measures, is the home now colder or warmer?	There was no statistically significant relationship between the type of housing a person was living in, and whether people report their home being warmer after the measures.
Compared to before the measures, are the health conditions you and others in your home associated with condensation, mould and damp now...?	People living in semi-detached houses were **1.8 times less likely** to report that any health conditions they and others in the home have associated with condensation, mould and damp get better after the measures, compared to people living in flats.
Compared to before the measures, how much do you spend on energy?	There was no statistically significant relationship between the type of housing a person was living in, and whether people report a decrease in the amount they spend on energy after the measures.
Since the changes, how often has this person (or these persons) in your home had to use an asthma inhaler...?	There was no statistically significant relationship between the type of housing a person was living in, and whether a person in their home with asthma has needed to use their asthma inhalers less, after the changes.
How satisfied were you with the response of your housing provider?	There was no statistically significant relationship between the type of housing a person was living in, and whether they were satisfied with the response of their housing provider.
How satisfied have you been with the information you have been given about the measures?	There was no statistically significant relationship between the type of housing a person was living in, and whether they were satisfied with the information they were given about the measures.
How satisfied are you that these measures address any concerns you had about condensation, mould and/or damp?	There was no statistically significant relationship between the type of housing a person was living in, and whether they were satisfied that the measures addressed any concerns they had about condensation, mould and/or damp.

Appendix D: Interview topic guide

Note: This is a topic guide rather than a script. The interview is conducted as a conversation, and the questions are a guide for the interviewer in steering the conversation and making sure we cover what's needed. We start with quite open questions and then use prompts to dig into more detail.

Section 1: Background

1. Could you tell me about your home and your household?
2. Could you tell me about your relationship with your Housing Association?
3. How do you find your home? Is it comfortable?
4. Is there anything that prevents you from making it more comfortable?

Section 2: Mould and damp baseline

5. Have you ever experienced any issues with mould, damp or condensation in this property?
6. Has this been a long-term issue, or has it arisen more recently (e.g. last 2–3 years)?
7. Do/did these issues have an impact upon your health or others in the home, including mental health?
8. (If relevant) Have you raised these issues with your doctor?
9. Do/did you do anything at home to try to reduce mould and damp?
10. Have you made any changes to your home or installed anything to try to reduce mould, damp and condensation?
11. Have you reported your concerns to your housing provider?
12. (If relevant) Are/were you satisfied with their response?

Section 3: SHQF interventions

13. What were the measures that were carried out?
14. Do you recall receiving information about the measures that were carried out?
15. Did you feel that the measures would respond to your needs?
16. How was the process of installing the measures? [give specific measures if info provided in the survey]
17. Are you happy with the result?
18. Are there any other aspects of your home that need improvements?
19. Have the changes had an impact on your health?
20. Have the changes had any other impact on your home life?
21. Have the changes had any impact on how easy it is to keep your home warm and dry?
22. Is there anything you would like to tell us about your experiences in your home and with the recent programme of works?

Appendix E: Interviewees

	Property type	Maleeasures	Age band	Gender	Years in home	No. in home	Child under 18?	Long-term health or disabilities affecting one or more residents	Ethnicity
1	End terrace	Work on roof, walls, windows, doors and/or porch / Ventilation and/ or fans /	26-35	Female	5-10	3	Y	N	White - English, Welsh, Scottish, Northern Irish or British
2	Flat	Work on roof, walls, windows, doors and/or porch	56-65	Female	5-10	2	N	Y	White - English, Welsh, Scottish, Northern Irish or British
3	Terrace house		46-55	Female	Over 10	4	N	Y	Asian or Asian British - Indian
4	End house	Ventilation and/or fans /	46-55	Female	1-2	3	N	Y	White - English, Welsh, Scottish, Northern Irish or British
5	Flat	Work on roof, walls, windows, doors and/or porch	56-65	Female	5-10	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British
6	Flat	New bathroom / mould removal and/or treat-ment	36-45	Female	3-4	1	N	Y	Any Other Maleixed background
7	Terrace house	Work in bathroom	46-55	Female	Over 10	4	Y	Y	Black or Black British - African
8	Flat	Work on roof/walls/ Ventilation and/or fans/ mould removal and/or treatment	56-65	Female	5-10	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British
9	Semi-detached house	Insulation improvements	56-65	Female	Over 10	4	N	N	Black or Black British - Caribbean
10	Semi-detached house	Ventilation and/or fans / Maleould removal and/or treatment	46-55	Female	5-10	4	Y	Y	White - English, Welsh, Scottish, Northern Irish or British

	Property type	Maleeasures	Age band	Gender	Years in home	No. in home	Child under 18?	Long-term health or disabilities affecting one or more residents	Ethnicity
11	Flat	Insulation improvements	56-65	Male	5-10	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British
12	End terrace	Ventilation and/or fans/ Maleould removal and/ or treatment	26-35	Female	3-4	3	Y	Y	White - English, Welsh, Scottish, Northern Irish or British
13	House	Work on roof, walls, windows, doors and/or porch New kitchen and/or bathroom Ventilation and/or fans/ Maleould removal and/ or treatment	46-55	Female	Over 10	2	Y	Y	prefer not to say
14	Terraced house	Insulation improve-ments/ Ventilation and/or fans/ Maleould removal and/ or treatment	36-45	Female	Over 10	3	N	N	White - English, Welsh, Scottish, Northern Irish or British
15	Flat	Stated no work had been done	26-35	Female	5-10	3	Y	Y	White - English, Welsh, Scottish, Northern Irish or British
16	Semi-detached house	Insulation improvements / Maleould and/or treatment /work on outside walls	26-35	Female	1-2	4	Y	Y	Mixed or multiple ethnic groups - White - English, Welsh, Scottish, Northern Irish or British* and Black Caribbean
17	Flat	Maleould removal and/ or treatment	36-45	Female	1-2	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British

	Property type	Maleeasures	Age band	Gender	Years in home	No. in home	Child under 18?	Long-term health or disabilities affecting one or more residents	Ethnicity
18	Flat	Work on roof, walls, windows, doors and/ or porch / Maleould removal and/or treat-ment	56-65	Female	5-10	1	N	Y	Other ethnic group - English, Scottish or Welsh Gypsy
19	Semi-detached	Work on roof, walls, windows, doors and/ or porch / Ventilation and/or fans/ Maleould removal and/or treat-ment	46-55	Female	Over 10	2	Y	Y	White - English, Welsh, Scottish, Northern Irish or British
20	End terrace	Maleould removal and/ or treatment	56-65	Female	Over 10	2	N	Y	White - English, Welsh, Scottish, Northern Irish or British
21	Flat	Ventilation and/or fans/ Maleould removal and/ or treatment	66-75	Female	Over 10	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British
22	bungalow	Work on roof, walls, windows, doors and/ or porch / New kitchen and/or bathroom/ Maleould removal and/ or treatment	66-75	Male	5-10	1	N	N	White - English, Welsh, Scottish, Northern Irish or British
23	Flat	Maleould removal and/ or treatment	26-35	Female	1-2	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British
24	semi-de-tached house	Work on roof, walls, windows, doors and/or porch	56-65	Female	Over 10	4	N	Y	Asian or Asian British - Pakistani

	Property type	Maleeasures	Age band	Gender	Years in home	No. in home	Child under 18?	Long-term health or disabilities affecting one or more residents	Ethnicity
25	Flat	Insulation improvements	36-45	Male	5-10	2	N	Not provided	White - English, Welsh, Scottish, Northern Irish or British
26	Flat	New kitchen and/or bathroom	Not pro-vided	Female	Over 10	1	N	Y	prefer not to say
27	semi-de-tached house	Ventilation and/or fans/ Maleould removal and/ or treatment	66-75	Male	Over 10	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British
28	Flat	Ventilation and/or fans	18-25	Female	5-10	1	N	Y	Mixed or multiple ethnic groups - White - English, Welsh, Scottish, Northern Irish or British* and Black Caribbean
29	Flat	New kitchen and/or bathroom /Ventilation and/or fans/Maleould removal	56-65	Male	5-10	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British
30	Flat	Ventilation and/or fans / mould removal	66-75	Female	Over 10	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British
31	bungalow	mould removal	46-55	Female	<1	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British
32	Flat	Work on roof, walls, windows, doors and/or porch	46-55	Female	Over 10	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British

	Property type	Maleeasures	Age band	Gender	Years in home	No. in home	Child under 18?	Long-term health or disabilities affecting one or more residents	Ethnicity
33	Flat	Repair or upgrade of heating (e.g. boiler or heaters)/ Ventilation and/or fans	56-65	Female	Over 10	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British
34	Flat	Ventilation and/or fans/ mould removal	46-55	Male	Over 10	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British
35	Flat	Ventilation and/or fans/ mould removal	56-65	Female	3-4	1	N	Y	Prefer not to say
36	End terrace	Ventilation and/or fans/ mould removal	36-45	Male	Over 10	4	Y	Y	White - English, Welsh, Scottish, Northern Irish or British
37	Terraced house	Ventilation and/or fans/	56-65	Female	Over 10	2	N	Y	White - English, Welsh, Scottish, Northern Irish or British
38	Flat	Ventilation and/or fans/	56-65	Male	Over 10	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British
39	Flat	Work on roof/ Maleould detector installed – indicated still awaiting fans	46-55	Male	Over 10	1	N	Y	White - English, Welsh, Scottish, Northern Irish or British
40	terraced house	Ventilation and/or fans/ mould removal	26-35	Female	5-10	5	Y	Y	White - English, Welsh, Scottish, Northern Irish or British
41	Flat	Ventilation and/or fans/ Insulation improvements	66-75	Male	Over 10	2	N	Y	White - English, Welsh, Scottish, Northern Irish or British

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