Delivering social care in a changing climate

❯ Shelagh Young, Shelagh Young Consulting and Anne Marte Bergseng, ClimateXChange
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Preface

This report is a first step in making an assessment of the social care support sector's resilience to climate change and helping to improve this. It should be noted that the research in the report was commissioned and carried out prior to the coronavirus (Covid-19) pandemic. The report is therefore written using data gathered before the Covid-19 pandemic, and also at a time when the Scottish Government was working with partners to develop a programme to support reform of adult social care support.

The data gathered reflects how social care delivery has previously been affected by relatively short disruption due to extreme weather events. A key finding in the report is that the social care sector – thanks to the extraordinary commitment of staff – flexes at a time of crisis. Some of the challenges faced during extreme weather bear aspects of similarity to those emerging as key factors for responding to the pandemic and during the first steps towards recovery. The report is published with the hope that the findings and recommendations resonate with and can support the recovery and remobilisation of the sector and the ongoing reform work that was underway prior to the pandemic, and can support the wider learning around resilience from the pandemic.

Weather disruption is a 'system stressor' that is projected to increase in the coming decades as the global climate changes. The UK Climate Change Risk Assessment has identified climate change as one of the greatest risks to public health in the UK, and one which will impact vulnerable people disproportionally. This was the backdrop to ClimateXChange commissioning a study of how the social care sector is currently planning for, dealing with and learning from extreme weather events and incremental climate change.

The commitment of staff has been a key theme during the response to the coronavirus pandemic. This study too found it to be a key asset in managing the impact of extreme

weather. While the study is based on relatively short-term weather disruption and the disruption experienced during the pandemic is longer-term, we can expect frequency of extreme weather events in Scotland to increase and there may be value in considering the response to weather disruption alongside that from the pandemic. Impact on staff from increased workload, changes to working patterns, and approaches to dealing with staff shortages are all areas where learning might be shared.

In key areas, learning that will be captured from the pandemic can read across to building the sector's response to climate change – for example, the impact of 'system stressors' on staff and on people whose services and supports are changed or stopped. This study did not find that the impact on staff and support users had been systematically evaluated following the extreme weather events.

One key finding in this report relates to the importance of compiling, updating and sharing priority lists for social care support to enable fast and effective prioritisation of those in greatest need. The direct and indirect impacts for services users who were not on priority lists from services being reduced or withdrawn was outwith the scope of this report. However, in taking forward the recommendations made in the report in relation to priority lists, it may be relevant to consider not only the general experience from responding to the pandemic, but also how 'shielding' lists may have been compiled, shared and followed up.

This is one of the first studies of its kind and represents a first step to building an evidence base around the impacts of climate change on social care delivery. The authors recognise that the joint Scottish Government and COSLA reform of adult social care programme was underway prior to the pandemic. It is also recognised that there has been a commitment by Scottish Ministers to undertake a further wider review of adult social care to address some of the issues that have been emphasised by the experience of the pandemic. With this and the pandemic response in mind, the findings may be useful in shaping future research on the impact of 'system stressors', including projected climate change and extreme weather, on people working in social services and the people they support and unpaid carers. This research identified the following areas as needing a particular focus in future research:

- Impact on inequalities
- Impact of limited or disrupted service on people that use support and unpaid carers
- Impact of changing and increasing workload on staff across social care support
- Impact of emergencies on people using support who are self-funding or using direct payments
- Impact of longer term disruption to supply chains

Executive summary

Aims

This report looks at how providers of social care support at home in Scotland respond to extreme weather events. Based on experience from three case studies of extreme weather, it considers how the sector is planning for, dealing with and learning from such events. The study only looks at support provided in people's homes. It does not address care provided in other settings such as residential care homes.

Providing care "at home or in a homely setting" is Scottish Government policy and is included in the strategies of HSCPs, which share the common purpose of delivering better health and wellbeing outcomes for the people of Scotland[1].

The purpose of this study is to examine current planning and practice in order to make recommendations for improvements to national guidance in anticipation of more frequent extreme weather as a result of climate change.

The UK Climate Change Risk Assessment (HM Government, 2017) has identified climate change as one of the greatest risks to public health in the UK, and one which will impact vulnerable people disproportionally.

Across Scotland, climate change will have different and sometimes very local impacts. Overall, however, there is expected to be an increase in summer heat waves, extreme precipitation events and flooding.

The research is based on interviews with social care providers and with those working in business continuity, emergency planning and community resilience in six geographical focus areas. It also involved desk research, drawing on strategies and plans relevant to the provision of social care support at home which are in the public domain.

The analysis focuses on those changes the sector could implement; it does not set out to answer questions relating to the many and varied challenges in delivering social care support that have been identified elsewhere, such as the impact of demographic changes in Scotland or workforce recruitment issues. Social care support at home is also highly dependent on infrastructure outwith the sector's control, in particular transport and mobile/IT systems. It is beyond the scope of this report to consider the extent to which delivery of care and support should or could be prioritised in developing infrastructure resilience.

In addition, a number of recently proposed reforms could have significant bearing on the findings of this report.

It is important to note that the research took place before the Covid-19 pandemic[2]. Experiences of dealing with the pandemic, and subsequent learning, is likely to be relevant to several of the issues raised in this report, in particular, the impacts on both staff and users of a prolonged period of disruption to planned services and supports.

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[1] https://www.nhsggc.org.uk/patients-and-visitors/community/health-and-social-care-partnerships/#
[2] Some interviews were cancelled as the pandemic response took priority

Findings

While extreme weather is a consideration in social care support, the research suggests planning for more frequent events caused by climate change is not front of mind for current leaders and managers in the sector.

The case studies in this report - Beast from the East in 2018, Storm Frank in 2015 and extreme summer temperatures in 2018 – were relatively short as extreme weather events[3]. In all cases the social care providers had prepared to move to delivering care based on their priority lists. Individual staff were expected to manage travel disruption; managers praised staff for their goodwill, flexibility and high levels of motivation.

Participants were asked how well their current plans, protocols and guidance worked in practice during the case study events. On a scale of 1 (Not at all) to 5 (Very well), none rated at lower than three and most rated at four or five.

However, there has been no testing of the system's ability to maintain services during more frequent adverse weather or events lasting weeks rather than days.

Assessing climate risk

- Climate impacts on delivering social care support at home are not considered in current three-year Integration Joint Board / Lead Agency strategic plans.
- At the individual client level, social care providers routinely assess the home environment for heating capability in cold weather, for example, but there is no evidence of routine assessment for risks relating to overheating or flooding.
- Participants routinely consider and train staff to manage the potential impact of weather events on service-users' health such as ensuring hydration and preventing hypothermia.
- Social care providers are open to increased knowledge exchange and sharing best practice.

Increased workload

- Extreme weather events result in a substantially increased workload for care workers and managers in the care at home sector, mainly because of reduced staffing due to weather-related absenteeism. Work hours increase because staff have longer travelling times and are often caring for unfamiliar clients.
- Extreme weather causes a significant increase in people who use support, and their friends and family, contacting social care providers for information or to raise concerns and complaints. Greater clarity and improved communication about priority listing can help reduce this and the impact on staff time.
- In some cases supporting people who use social care support to prepare for an extreme weather event can be challenging as they may find it difficult to process or retain the information.

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[3] The extensive flooding caused by Storm Frank is still being felt. CREW, the Centre of Expertise for Waters, has identified long-term impacts of flooding on people and communities in the North-east of Scotland following the floods in 2015/2016 https://www.crew.ac.uk/publication/impacts-flooding

Prioritising care and support needs

- In the case study events, some providers moved to working from priority lists following Met Office weather warnings, continuing care and support categorised as critical or essential. We do not have data on the impact of this on clients not on the priority lists.
- Providers have diverging approaches to creating and updating priority lists.

Staff travel and health & safety assessments

- Social care providers are highly dependent on individual staff to manage difficult travel conditions and increased workload during weather disruption.
- Those on the priority lists often have complex needs that require specialist skills, which those staff who can reach them during travel disruption may not have. This makes staff re-deployment more challenging.

Improving the sector's preparedness

The Social Care and Social Work Improvement Scotland (Requirements for Care Services) Regulations 2011 set national level standards for care providers.

Issues that appear to pose risk of undermining those standards and which would benefit from further knowledge exchange and identification of best practice are:

- Processes for compiling and updating priority lists, including a wider range of weather-related risks in the care assessment
- Procedures for sharing priority lists and workload between organisations and teams to maximise service/support levels when conditions limit travel between locations
- Systems for communicating about local situations and impacts on services and supports pro-actively with service-users and their support groups as early as possible to reduce anxiety and the number of enquiries
- Support for staff to risk-assess their travel as essential workers further to general travel warnings for the public, including better information as to when transport services are at risk of interruption
- Processes for monitoring and evaluating the impact on staff of unusually high workloads or work-pattern disruption
- Policies on pay and conditions during severe weather that recognise the range of different and/or additional work
- Further training for social services workers to anticipate and prepare for the potential negative impacts of weather events on the health and wellbeing of service-users and their carers
- Policies on training care workers in specialist skills so that levels of essential and critical care can be maintained when staff absences require redeployment

Contents

1 Introduction

1.1 Aims and scope

This report draws on experience of delivering social care to people in their own homes during and in the immediate aftermath of three adverse weather events: Storm Frank - 28 to 30 December 2015; Beast from the East - February/March 2018; and the summer heatwave and drought in 2018.

It looks at how the social care sector is currently planning for, dealing with and learning from extreme weather events.

Social care support is about supporting people to:

- live independently
- be active citizens
- participate and contribute to our society
- maintain their dignity and human rights[4]

In 2018 there were an estimated 59,809 people in Scotland receiving home care during the census week (ISD NHS Scotland 2019). Considerably more people received a community alarm and/or telecare service, and the numbers of these are rising[5]. In 2015/16, 126,790 people were reported to be in receipt of one of these services (telecare and/or community alarm), increasing to 128,750 people in 2016/17 and an estimated 131,917 people in 2017/18 (a 2.5% increase in provision from the previous year).[6]

However, in terms of home care (i.e. visits from paid carers) the trend from 1998 to March 2017 has been a reduction in numbers of people receiving home care and an increase in the number of hours per client[7]. There are national eligibility criteria, but it is the responsibility of the local authority to apply the criteria in practice[8]. Participants in this research said the trend is towards providing home care to people with increasingly complex needs.

> *"People sometimes think homecare means what it might have done in the past – housework, shopping and so on but now we are talking about a 24/7 service meeting some very complex needs."*
> *Senior manager, HSCP*

> *"We usually get to spend quite a bit of time with clients. That can change in bad weather because of the strain. But when people have high needs – and we mainly work with those types of people nowadays – the tendency is that we are contracted to be with them for longer."*
> *Senior Manager, Commissioned care provider.*

The UK Climate Change Risk Assessment (HM Government, 2017) has identified climate change as one of the greatest risks to public health in the UK, and one which will impact vulnerable people disproportionally.

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[4] https://www.gov.scot/policies/social-care/social-care-support/
[5] https://www.isdscotland.org/Health-Topics/Health-and-Social-Community-Care/Publications/2019-06-11/2019-06-11-Social-Care-Report.pdf? P.40
[6] Insights into Social Care in Scotland Support provided or funded by health and social care partnerships in Scotland 2017/18, p.40
[7] Social Care Services Scotland, 2017. P.3 https://www.gov.scot/publications/social-care-services-scotland-2017/pages/5/
[8] https://www.gov.scot/publications/self-directed-support-practitioners-guidance/pages/6/

Across Scotland, climate change will have different and sometimes very local impacts. Overall, the Scottish Government (Climate Ready Scotland, 2019) is planning for:

- Increase in summer heat waves and extreme temperatures
- Increased frequency and intensity of extreme precipitation events
- Reduced occurrence of frost and snowfall
- Sea level rise bringing increase risk of storm surges and coastal flooding

Scottish Environment Protection Agency (SEPA) estimates that 110,000 further homes, businesses and services will be at risk of flooding over the period until 2080.

This report considers how an increase in extreme weather and incremental climate change is likely to impact social care delivery at home in two main ways:

1. The direct disruptive effects of extreme and adverse weather events on reaching people (e.g. reduced access due to blocked or damaged infrastructure, health & safety risks to staff).
2. The indirect effects of extreme and adverse weather events on people's health and wellbeing.

The analysis focuses on those changes the sector could implement. It does not set out to answer questions relating to the many and varied challenges in delivering social care support that have been identified elsewhere, such as infrastructure resilience, the impact of demographic changes in Scotland or workforce recruitment issues. Social care at home is highly dependent on infrastructure outwith the sector's control, in particular transport and mobile/IT systems. It is beyond the scope of this report to consider the extent to which delivery of care should or could be prioritised in developing infrastructure resilience.

At the same time, there are reforms being proposed (see below) that, if realised, could have significant bearing on the findings of this report. The research took place before the Covid-19 pandemic. Experience of dealing with the pandemic, and subsequent learning, is likely to be relevant to several of the issues raised in this report, in particular, the impacts on both staff and users of a prolonged period of disruption to planned services.

1.2 National policy and legislation

This research was carried out during a period of intense debate around the future of social care in Scotland. At the time of writing, the Scottish Government Adult Social Care Reform Programme, launched in June 2019, was working in partnership with people who use social care support, carers, and key organisations to support reform of adult social care in Scotland. That process led to a shared vision being published which sets out what adult social care support will look like in the future (Scottish Government, 2019).

An inquiry into adult social care was also being carried out by the Scottish Parliament's Health and Sport Committee but scrutiny of submissions received was not complete at time of writing this report[9].

There are statutory social care duties placed on local authorities and, since 2016, Integration Authorities, which determine and inform the assessment of and response to social care needs. Current national policy, primary legislation and associated guidance

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[9] The Committee's inquiry questions and submissions received can be found here: https://www.parliament.scot/parliamentarybusiness/CurrentCommittees/113970.px

is too complex to outline in detail in this report but a summary is provided by the Care Inspectorate.[10]

There are nine national health and wellbeing outcomes which apply to integrated health and social care in Scotland. These outcomes underpin the activities that Health Boards, Local Authorities and Integration Authorities must carry out under the Public Bodies (Joint Working) (Scotland) Act 2014. This Act, which legislated for the integration of health and social care services across Scotland, came into force in 2016. The legislation created 31 integration authorities (IAs) which bring together NHS Boards and local authorities. The IAs are now responsible for the governance, planning and resourcing of social care, primary and community healthcare and unscheduled hospital care for adults. Some areas have also integrated additional services including children's services, social work, criminal justice services and all acute hospital services.

IAs can be structured in two ways - either by establishing an Integrated Joint Board (IJB) or a lead agency. Only Highland deploys the lead agency model. The others all adopted the IJB model in which the Board is the governance body for the relevant Health and Social Care Partnership (HSCP). As such, the IJBs hold accountability for planning and for overseeing delivery of the relevant services. HSCP strategic plans must be refreshed every three years. The planning cycle aligns with policy on planning for children's services

Scotland's Local Authorities and Territorial Health Boards are defined as 'Category 1' responders under the civil contingencies legislation, Civil Contingencies Act 2004 and the Contingency Planning (Scotland) Regulations 2005. This legislation places duties on responders to ensure effective arrangements are in place for planning and responding to emergencies, and the continued delivery of services[11].

The Coronavirus (Scotland) Act 2020 amended some relevant legislation in ways specifically designed to enable local authorities to act more swiftly than usual in facilitating the move of vulnerable adults in need of social care out of acute hospital settings.[12] However, it was not in force at the time of the case studies addressed in this report.

1.3 Organisation of social care delivery

Home care services are provided by local authorities, by private sector care businesses and by Third Sector and not-for-profit organisations including charities and social enterprises. People seeking help from the public sector to meet care needs will undergo a formal social work assessment of need. The outcome, if they are assessed as being eligible for care services, is a care plan. This is held by the relevant care manager within the HSCP (currently usually a social work manager in a local authority). In line with national policy, known as Self-Directed Support (SDS), the majority of people eligible for social care and support have the right to make informed choices on what their support

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[10] https://hub.careinspectorate.com/national-policy-and-legislation/national-strategies-and-frameworks/ and https://www.careinspectorate.com/index.php/new-standards-and-inspections
[11] The relevant legislation for civil contingencies in Scotland is The Civil Contingencies Act 2004 (Contingency Planning) (Scotland) Regulations 2005 http://www.legislation.gov.uk/ssi/2005/494/contents/made
Civil Contingencies Act 2004 and the Contingency Planning (Scotland) Regulations 2005
[12] https://spice-spotlight.scot/2020/03/31/coronavirus-scotland-bill-spice-briefing/

looks like and how it is delivered[13]. Local authorities have a legal duty to offer the majority of people who have been assessed as needing a community care service four options. These are:

- Option 1 - a direct payment, which is a payment to a person or third party to purchase their own support
- Option 2 - the person directs the available support
- Option 3 - the local council arranges the support
- Option 4 - a mix of the above[14]

Of the total number of people receiving social care services/support in 2017/18, an estimated 75% were involved in choosing and controlling their support through one of the self-directed support options. The number of people choosing a direct payment (self-directed support option 1) to purchase the services/support they require continues to increase with an estimated 8,880 people in 2017/18 compared to 8,290 in 2016/17, an increase of 7% (ibid)

34.6% (20,703) of people were receiving home care services through local authorities only, with 41.2% (24,674) provided solely by private sectors and a further 8.9% (5,335) received services purely from the voluntary sector.

11.9% of people who were receiving home care also received housing support. This overlap is relevant because housing support workers have been deployed in emergencies to visit support users who cannot be reached by their regular carers.[15]

2 Methodology

2.1 Case study approach

An initial mapping by Aether[16] in December 2018-January 2019 found little systematic research on risk to or disruption from adverse weather to care at home, or on best practice in managing these impacts. Based on its findings, this analysis draws on experience of delivering social care at home during and in the immediate aftermath of three adverse weather events.

The case study events are:

- Storm Frank - 28 to 30 December 2015. High winds and torrential rain caused serious flooding. More than 100 flood warnings were issued and SEPA's 24/7 contact centre received more than 3,300 calls. In Ballater in Aberdeenshire, more than 300 properties were affected when the River Dee burst its banks. Many homes were evacuated, roads were impassable and power supplies were disrupted. The storm also disrupted transport across a wider area. The local authority reported 12 months later that the impacts

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[13] There are some exceptions to the duty to offer SDS options to people assessed as being in need of care and support. These are detailed here: https://www.audit-scotland.gov.uk/uploads/docs/report/2014/nr_140612_self_directed_support.pdf , p.10

[14] Statutory guidance to accompany the Social Care (Self-directed Support) (Scotland) Act 2013,pp 43-61, see also https://www.sdsscotland.org.uk/wp-content/uploads/2019/09/SDS-Factsheet.pdf

[15] Insights into Social Care in Scotland Support provided or funded by health and social care partnerships in Scotland 2017/18, p.7

[16] https://www.aether-uk.com/

were still being felt but there was no specific reference to the impact on those providing or receiving social care at home. There were people still in temporary accommodation; infrastructure repairs, for example to bridges and roads, were ongoing.

- Beast from the East - February/March 2018. Anticyclone Hartmut, known as the Beast from the East brought exceedingly cold weather to Scotland from 22 February 2018 to 4 March 2018. The central belt experienced acute problems in terms of road travel with people stranded for over a day on the M80. The army was brought into Edinburgh to help significant numbers of NHS clinical and other staff to travel to and from their places of work.
- Summer heat/drought 2018 - Glasgow recorded its warmest ever day in June 2018. The 31.9 degree peak melted parts of the Glasgow Science Centre's roof. Public Health England reported significant excess mortality in the 65+ age group in both 2018 and 2019 linked to heatwaves[17]. No equivalent report on heatwave-related excess deaths was available for Scotland. Dehydration, which can worsen or trigger a number of life-threatening health events, and increased air pollution, which adversely affects people with underlying conditions that impact breathing, are considered to be heat-wave related risks especially for the frail and elderly.

2.2 Geographic areas

The areas chosen were those considered to have been affected seriously by one or more of the weather events described in 1.3.1. These were:

- Aberdeen City
- Aberdeenshire
- Argyll & Bute
- East Lothian
- Edinburgh
- Glasgow
- Midlothian
- West Lothian

Orkney was also included on the basis that travel between islands is quite frequently disrupted by storm conditions rather than because there had been evidence of specific challenges posed by the case study weather events.

2.3 Interviews

Ten interviews were carried out with 11 participants in six out of nine focus areas. This included interviews with managers involved in providing social care as well as those whose primary focus is on business continuity, emergency planning and preparedness, and community resilience.

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[17] PHE heatwave mortality monitoring: Summer 2018, https://assets.publishing.service.gov.uk/governmnent/uploads/system/uploads/attachment_data/file/821711/PHE_heatwave_report_2018.pdf
PHE heatwave mortality monitoring: Summer 2019, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/841320/PHE_heatwave_report_2019.pdf

The interviews were semi-structured and recorded, see interview guide in appendix A.

All participants were asked to focus on the specific case study adverse weather events of which they had knowledge and/or experience. Some participants referred to several relevant adverse weather events and some also spoke about preparation for future events.

Participants were asked if there were any available reports or evaluations relevant to the case studies on which they chose to focus. No such documents were provided. In some cases, participants mentioned business continuity plans but these documents were not provided to help inform this report.

It was not possible to assess the extent to which the impacts of adverse weather varied across groups of social care recipients. Not all the relevant HSPC agreed to take part. Of those that did participate not all provided access to interviewees with an overview of the full range of home care services provided – for example both children's and the full range of adult services. Those interviewed stated they had done no specific evaluative work with service-users or their unpaid carers to assess the impact of the relevant events on them.

2.4 Desk research

This report also draws on information contained in strategies and plans for the case study areas which are relevant to the provision of social care at home and which are available in the public domain. These are:

- Integrated Joint Board and Health and Social Care Partnership (HSCP) strategies
- Children's Services Plans

Background information on general emergency preparedness and planning and specific predicted local impacts of climate change in the case study areas was obtained from:

- Community Resilience Partnership plans and risk assessments
- Climate change adaptation and local climate impact assessment plans
- Local authority severe weather and emergency plans

Information contained in Individual Care Plans and regular reporting from frontline care workers form the basis for planning the levels of social care at home which will be provided in periods of adverse weather. These are confidential documents and therefore did not form part of the desk research.

3 Planning for care at home in adverse weather

3.1 Assessing climate risk

Current three-year HSCP strategies and the separate Children's Services plans do not consider major impacts on services resulting from an increase in the number, duration or range of types of adverse or extreme weather events.

Participants were asked how well their current plans, protocols and guidance worked in practice during the case study adverse weather events. On a scale of 1 (Not at all) to 5 (Very well - we haven't needed to update them significantly) none rated at lower than three and most rated at four or five.

3.2 Assessing weather risk

A majority of participants referred to Met Office weather warnings as a basis for triggering weather-related emergency plans and procedures. However, most also said that, during the case study periods, there was no substitute for local risk assessment as the impacts of adverse weather were highly localised.

> *"[We trigger our plan] when you look out the window and see six inches of snow because these warnings sometimes don't come to fruition in certain places so we wouldn't go based on that blanket warning. It would be on the visual - what does that look like? How safe is it going to be for us to travel?"*
> *Project Manager, Children's Services.*

> *We might not always get a formal warning. When the snow comes it comes and it might be a care worker who tells us there's a problem. We have to deal with highly localised issues."*
> *Senior Manager, Commissioned care provider.*

Commissioned care providers, for example Third Sector organisations or private companies providing care, mentioned the role of the public sector in alerting them to adverse or extreme weather:

> *"We knew it was coming. Based on weather warnings and advice from the local authority."*
> *Team Leader, Third Sector provider*

> *"That's the HSCP. They alert us. We would also be responding to Met Office warnings but local conditions can be quite different."*

> *Local manager, Commissioned care provider*

Participants were not asked about any longer-term planning for an increase in extreme or adverse weather but a minority noted that this was a risk to be considered.

> *"[…] we've been seeing impacts in terms of bad weather for over a decade now – strong winds have been happening a lot more. Storms get named and there seem to be more. It definitely will affect us and we could do a lot more to learn and to get more ready. The A1 closed a couple of times this year. I can't recall that happening that often in the past."*
> *Senior Manager, Commissioned care provider.*

3.3 Planning to address the risks

3.3.1   Systems for prioritising

Care at home is contracted out to commissioned providers or provided directly by the HSCP partners in line with Individual Care Plans (ICPs) drawn up for each service-user. These are based on the initial social work assessment of need (Scottish Government, 2014)[18]. These should be updated as people's needs change and form the basis for decision-making about which clients and which care needs of those clients will be listed as priorities in an emergency.

When there is a risk of significant disruption to normal levels of service, providers plan to work to a priority list. The terms "essential" or "critical" care were used by all participants in describing the levels of priority care for which they plan. This applied to all service-users irrespective of age but reflects the eligibility framework (Scottish Government, 2009) for the provision of adult personal care which lists four risk categories as follows:

- Critical Risk: Indicates that there are major risks to the person's independent living or health and wellbeing likely to require immediate or imminent provision of social care services (high priority).
- Substantial Risk: Indicates that there are significant risks to the person's independence or health and wellbeing likely to require immediate or imminent provision of social care services (high priority).
- Moderate Risk: Indicates that there are some risks to the person's independence or health and wellbeing. These may require provision of some social care services managed and prioritised on an on-going basis or they may simply be manageable over the foreseeable future without service provision, with appropriate arrangements for review.
- Low Risk: Indicates that there may be some quality of life issues, but a low risk to the person's independence or health and wellbeing with very limited, if any, requirement for the provision of social care services. There may be some need for alternative support or advice and appropriate arrangements for review over the foreseeable future or longer term.

Participants were asked for examples of what types of care needs would lead to inclusion on their priority list. There was a high degree of uniformity in the type of care considered to be either essential or critical. Participants named the following:

- People living alone and/or with no alternative means of accessing food and drink.[19]
- People requiring continence care
- People receiving end of life care
- People dependent on regular medication
- People whose condition makes them especially vulnerable in certain weather conditions (e.g. those with brain injuries whose ability to self-regulate body temperature has been compromised)

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[18] Assessment of need and eligibility criteria are defined in legislation dating back to the Social Work (Scotland) Act 1968. The most recent relevant legislation and guidance is contained in the Social Care (Self-directed Support) (Scotland) Act 2013.

[19] This could be simply because of lack of informal carers or because they require specialist support for example with a tube feeding system which delivers nutrients through the abdominal wall into the stomach.

"We have what we call our P1 list of support users that is people completely dependent on us for support, for example, with medication."
Senior Manager, HSCP

"They have a score against them about vulnerability so the most vulnerable would be considered first and their emergency plan put in place because there are people who wouldn't be able to speak to us on the phone by virtue of their illness or their hearing or things like that. Their care plan would have all that kind of information so they would be graded high priority and you kind of work back from there to the people who are least vulnerable. There are some people who might be able to manage for one day – you are not going to die because you can't get a wash. It will depend what your need is."
Local Care Manager, Local Authority.

"…priority would be down to medication, end of life, continence care, capacity."
Local Care Manager, Commissioned care provider.

One participant also described planning for an impact on discharge rates from NHS hospitals:

If we take that decision [to go to the priority list] we would usually stop all hospital discharges in the city but usually by then we would be talking to the hospitals because they can't get people home safely and we can't get there so we have early round the clock discussions ."
Senior Manager, HSCP

The precise triggers and mechanisms for and potential impacts of moving to priority list-based support were not clearly outlined by all participants but this might be due to their role and seniority rather than indicative of the overall situation in their HSCP.

3.3.2   Participants did not indicate there was any systematic information available about any impacts on non-priority support users resulting from changes in support levels. Systems for maintaining and updating lists

The participants described a range of systems and levels of frequency in updating priority lists. Processes for updating ranged from annual reviews to real-time constant updating facilitated by direct entry of data by care workers on the road using digital systems.

An increasingly important aspect of planning is ensuring that the necessary support is in place to keep digital systems running. Digital systems failure is recognised as a risk in relation to both priority lists and general care providing operations. As one participant put it:

"Everything we do now is so reliant on information systems – we don't have any paperwork."
Senior Manager, HSCP

 Whatever the system used for organising data, most participants described planning for checking and updating lists in quick-time at either the warning stage or at the onset of adverse weather. Even where daily or more frequent updates are made possible by networked digital systems, lists are checked with managers and teams in an emergency:

"There is always that risk if you make a judgement just from a spreadsheet as to what is happening you miss something."
Senior Manager, HSCP

Support users who had recently matched with a provider following a social work assessment were identified as being difficult to plan for because the care provider may not have a full picture of their needs:

> *"Social work information is variable – depth not always the same. Developing plans about the amount of support, the people they have in their lives, does it tell us enough about that person? Not always."*
> *Senior Manager, commissioned care provider*

Paper-based reports from frontline care workers are still common which then require data entry into networked digital systems. Participants did not say that this caused any risk in terms of delays in updating although there were examples given of improvements or planned improvements to systems suggestive of some recognition of risk:

> *"Each coordinator for an area has a list of people who are vulnerable and now that list has a highlighter for people who are vulnerable. [It] made that list clearer by putting the people who are […] most vulnerable on a list on a shared drive so people who do not work out of that office have access to that information. […] That was made a firmer arrangement because before they would keep them in different places so you wouldn't know how to find them."*
> *Home Care Manager, Local Authority*

Several participants were asked about plans for list sharing and whether greater sharing of lists might enable them to deploy care staff more efficiently in an emergency across different teams and organisations. Responses showed quite different approaches to list sharing in different areas and organisations:

> *"In our area there is a shared list. There is a winter contingency list for everyone so we all know who the priorities are and who we must get to – that's the Health and Social Care Partnership's list. At least annually we get round the table to discuss and to update it."*
> *Senior Manager, commissioned care provider*

> *"If nursing decides to go to their P1 list it's not necessarily the same as ours and so in the future world that we are planning in terms of real health and social care partnership we need to address that. We would ideally have visibility of both services. […] We should all be talking to each other and making decisions together not just within our individual remits and that will make things better for the community"*
> *Senior manager, HSCP*

> *"At the moment we have an in-house system with each team having its own priority list. We are implementing something new this this year so we will have a company-wide overview."*
> *Senior manager, commissioned care provider*

> *"There will be other people working in the area with different priority lists and we won't know about that. The coordination should be there at case management level in social work but we would not necessarily know about that."*
> *Senior manager, commissioned care provider*

> *"We would just work off our own [list] and the providers would have their own – they would not necessarily know where other clients are."*
> *Project Manager, Children's Services*

This last participant was prompted to reflect on whether planning for list sharing would be beneficial if they or a local provider was at risk of not being able to reach support users:

> *"Yes […] It would be about seeking client permission to say: OK so we know that your provider can't get there but that somebody else had folk in that area. But we would need to share your information with them – are you OK with that? There would be ways of working round it."*
> *Project Manager, Children's Services*

There was no indication in their responses to questions about information sharing that participants felt unable to change or improve systems due to data privacy regulations but this was not a subject explored in interviews. Any sharing of personal information must adhere to data privacy regulations, e.g. GDPR.

3.3.3 Changes in care needs

There can be changes in care needs due to direct impacts of weather on the health and wellbeing of support users. The death rates from respiratory and cardiovascular disease increase substantially in periods of prolonged high temperatures. Exposure to unusually high temperatures can be life threatening in a matter of hours (Astrom et al, 2011)

High risk groups include those likely to be receiving social care: older people (e.g. Astrom et al., 2011; Ebmeier, 2012), those in poor health (Ebmeier, 2012), those with severe physical or mental illness, alcohol or drug dependency, people who are homeless and those taking multiple medications (PHE, 2018)[20].

For those who are reliant on medications, vulnerability can be complex (Westaway et al, 2015).

Low temperature health effects are predominantly in relation to cardiovascular and respiratory problems (Hajat, 2017). The most important risk factor for cold-induced illness and death is old age (Wilkinson et al, 2004).

Participants said that their plans, both in terms of emergency preparedness and priority listing, took direct potential health impacts into account. They indicated that general staff training and current protocols were sufficient in terms of ensuring the ability to address likely health impacts related to predicted changes in weather patterns in Scotland. The examples given were:

- Hot weather potentially leading to overheating in clients with certain brain injuries or who are taking medications that interfere with their capacity to regulate body temperature. Planned for by including advice to care staff on the importance of adequate hydration in basic or additional training and/or in updates and bulletins.
- Hot weather potentially leading to dehydration, especially in older people. Contingency plans for providing water supplies (e.g. bottled water) to frail, elderly clients were mentioned by some participants.
- Cold weather combined with inadequate domestic heating or unsafe behaviour increasing risk of hypothermia. Planning for an increased or changed workload when advance weather warnings allow time for specific preparatory work. This included visiting to ensure support users had adequate food and energy supplies.

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[20] The World Health Organisation (WHO) provides a summary of the public health impacts of rising temperatures and an overview of predicted global health impacts of climate change.

- Cold weather increasing or exacerbating lung conditions such as bronchitis, asthma and pneumonia (D'Amato et al, 2018). This is planned for by ensuring guidance is included in training.
- Mental health issues including stress and anxiety usually linked to disruption of routines and increased social isolation. Planning for an increased or changed workload when advance weather warnings allow time for reassuring and advising support users and informal carers either face to face or by phone.

The impact of flooding on mental health was not mentioned although it is known to cause prolonged damage to mental health (Currie et al, 2019) and there is a predicted increase in flooding.

Participants who raised flooding as an issue or focused on Storm Frank were asked if flood risk features in the assessment of the home environment (a standard element in the single shared assessment (SSA) model in social care.)[21] . They replied "no" or "not that I am aware".

The home environment is assessed routinely in terms of keeping warm in cold weather but participants did not say, when asked, that homes were assessed for any risks relating to overheating. None had seen assessments outlining this.

> *"The quality of information we get from social work is variable and no I don't think I've seen an assessment that looked at temperature except when it comes to keeping a home warm enough."*
> *Senior Manager, commissioned care provider.*

> *"All our care homes have temperature control now. Some were just badly designed and would overheat. But we wouldn't routinely assess people's homes. No."*
> *Senior Manager, HSCP*

This manager mentioned a known problem in the past of overheating due to poor insulation in relation to a specific type of "prefab" home in their area but nonetheless this issue was still not routinely looked at in that area's social work assessments.

3.3.4 Preparing support users

Planning to ensure care needs are not exacerbated or made critical by adverse weather conditions included routine practical actions involving clients and their immediate circles of support.

> *"When you are going into an adverse weather event you've got to think about family members who are going to be worried about elderly relatives living alone. You can de-escalate a situation just by having really good centralised communication […]We would have key managers at head officer to alleviate fears and provide feedback."*
> *Senior manager, commissioned care provider*

> *"[When] I know staff are highly unlikely to get to work […] we would just put out an early call perhaps even the day before so families have got a bit more time perhaps to prepare themselves and their children for that usual routine not*

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[21] The SSA model is established in agreements between Scottish Government and COSLA, which includes in its membership the majority of local authorities in Scotland. Its implementation started with older people's care in 2002.

happening.
Project Manager, Local authority

Extreme weather events cause significant increase in users, and their friends and family, contacting social care providers for information. Some providers planned for providing staff cover to pre-empt this information need. Examples given were of redeployment of managers and administrative staff to make and to receive calls rather than the recruitment of additional staff.

> *"When you've got good communications in place particularly with family members, who will naturally be anxious, that could really provide a supportive solution and given them confidence because if you don't communicate you can guarantee they will be on the phone to everybody and their aunt because they are so worried."*
> *Senior Manager, commissioned care provider*

Participants described plans for contact with support users, their informal carers/family and with staff teams, which were dependent to a high degree on fully functioning mobile and landline phone services.

> *"If mobile systems went down we would have a real problem. In our recent business continuity exercise we focused a lot on communications. Not just with and between staff but also with services users and their families. There is a lot of anxiety when bad weather is forecast."*
> *Senior Manager, commissioned care provider.*

There were also examples of preparing users by ensuring they understood and were prepared for the risks posed by adverse or extreme weather. This included offering advice about safety, ensuring stocks of fuel for heating, candles for lighting and maintaining a well-stocked freezer along with a supply of tinned and other long-life food supplies. Some participants in rural areas described much of this as being a routine measure included in planned visits. Others said this was additional workload which is anticipated but carried out on an emergency basis by the existing staff.

> *"When we have enough warning we will go out, make sure someone's freezer is stocked up, make sure they know what might be going to happen. People with autism for example might need us to help them understand what is going to happen and that they mustn't go out."*
> *Local care manager, commissioned care provider*

> *"We check to see if everything is safe and warm in their own houses. And keep checking because things can change."*
> *Senior Manager, commissioned care provider*

Preparing users for extreme weather when they have difficulty processing or retaining information was described as a specific challenge:

> *"When people's needs are affected by lack of routine or lack of being able to understand what might be dangerous, it is hard. You might think making sure they have warm outdoor clothes ready so if they do go out they are safer that's a good idea. But if you leave those clothes out it could be misunderstood. It could work to encourage people to get dressed up and go out when really you've been saying "stay in – don't go out". It takes a lot of consideration to work out what to do for the best."*
> *Team Leader, commissioned care provider*

3.3.5 Planning for staff absenteeism

A key reason given for planning for a reduction of service, based on the priority list, is an anticipated shortage of staff caused by travel difficulties during adverse and extreme weather.

> *"[…] the staff are coming from […] about 30 miles away – I know these staff are highly unlikely to get to work because the supervisor knows they would struggle."*
> *Project Manager, Children's Services*

> *We have had problems in terms of family expectations – when an area is too difficult to reach or we are missing staff because they cannot get to work – whether due to weather or illness – we will have to prioritise.*
> *Senior Manager, HSCP*

Some participants described planning measures they had taken to help minimise the loss of staff during periods of adverse weather.

> *Staff are based in clusters in the places where they are needed. […] We have staff living in rural areas and if they can't get to where they would normally work we just sort of swap about so if they cannot get to somebody, somebody else can. So they don't have great distances to travel if that's possible."*
> *Home Care Manager, Local Authority*

> *"78% of our staff are employed in the communities where they work so think of the benefit of that in employment. So actually, social care workers are quite unique, they do think about their service-users and if they are just 5 minutes along the road they just get there but think about if they had to criss-cross the city I am sure that would be a whole different issue."*
> *Senior Manager, HSCP*

Participants pointed to the advantages of employing staff who live close to support users.

> *"78% of our staff are employed in the communities where they work so think of the benefit of that in employment. So actually, social care workers are quite unique, they do think about their service-users and if they are just 5 minutes along the road they just get there but think about if they had to criss-cross the city I am sure that would be a whole different issue."*
> *Senior Manager, HSCP*

 However, when asked if recruiting on the basis of home location was aligned with or specifically provided for in organisational recruitment policies, none outlined or indicated they were aware of a policy which specifically allowed for this. Most said it was not or probably was not in their recruitment policies.

> *"No. You'd have to give it [the job] to the right person."*
> *Project Manager, Children's Services*

It is outwith the scope of this study to assess to what extent local recruitment could be considered in the context of overall workforce planning.

The participant above went on to outline a comparative advantage for support users who can recruit a personal assistant or other carer directly under the terms of the self-directed support system:

> *"Where a child has a PA they probably would be based quite close to where the family lives. […] It tends to be that folk are known by other families. It's kind of*

like word of mouth goes round in the smaller communities that folk are looking for that type of support. Personal assistants that do work after school and in the school holidays might actual be pupil support so they know the child in school and they will put themselves forward for that extra piece of work. […] they maybe don't have to advertise the post. They know that Johnny down the road is looking for that kind of work and they may be a right match for their child."
Project Manager, Children's Services

There were risks identified when someone chooses to purchase and manage their own support under the policy of Self-Directed Support (Scottish Government, 2014). For example, when the usual care provider cannot sustain the service due to loss of staff, those providing emergency cover can be left unclear about a client's care needs. This was expressed most strongly in relation to private care providers contracted independently by support users:

"I can think of where we got a call [,,,] a responder went out […]there will be a homecare folder […] if it's a private carer there's not necessarily any detail so isn't clear how that's dealt with and how to cover that. I remember at the time thinking "Gosh how do you find out who this carer is?".
Local Manager, commissioned care provider

This concern was expressed most strongly in relation to support users who cannot easily communicate their care needs but was also noted in relation to children with good levels of family support:

"There are a couple of families who choose providers who are not on our framework but they're complete responsible for that contract between themselves and that provider. We support them to do that but […] I don't know how that would work in terms of what would happen if their staff could not attend. I am assuming that they would just let the family know directly.
Project Manager, Children's Services

3.3.6 Using the Priority Services Register (PSR)

Participants raised the importance of the energy industries' Priority Services Register (PSR) in relation to priority list planning and meeting critical and essential care needs. Water and energy suppliers must operate the PSR under the terms of their licence which also places a duty on them to pro-actively identify potentially vulnerable customers. Water supply was not a theme explored in interviews except in relation to hot weather as there were no examples given of loss of supply during the events discussed.

People reliant on electrically powered medical equipment at home, such as kidney dialysis machines or ventilators, will obviously be particularly adversely affected by power outages. However, wider health and wellbeing issues, such as room temperature or even anxiety over high bills in cold weather, were cited as reasons for encouraging clients to register on the PSR.

"We link in with the energy providers so we know that power is being provided to vulnerable residents. We give info to SSE about the people we support. We try to make sure people register as vulnerable people with the energy companies or if we can do that for them we will. We check to see if everything is safe and warm in their own houses. And keep checking because things can change."
Senior Manager, commissioned care provider

"Over the years there's never been a major outage of power that's been for a long length of time […] The energy companies do a good job."
Local manager, Local Authority

Participants gave several positive examples of swift restoration of energy supplies at their request on behalf of vulnerable clients. However, the benefits of registration in terms of the extent of the additional help or consideration on offer to those who qualify and register was not clear, possibly because it varies across suppliers (Ofgem, 2013).

Participants did not always know if their clients had or had not registered or what benefits they might expect from that registration. Ofgem has reported concerns voiced by consumer groups about the variable standards of support on offer under the terms of the PSR. It stated that small and medium sized energy companies were getting better at identifying vulnerability but expressed concern that the percentage of their customers on the PSR was still relatively low. One specific concern is that vulnerability is often defined by energy companies in terms of age which is not, in itself, a reliable indicator (Ofgem, 2013). There are also low rates of registration.

In 2019 Citizen's Advice Scotland made several recommendations for improving the way the PSR works (CAB Scotland, 2019).

3.3.7 Community support

The Scottish Government and local authorities are working to boost community resilience and volunteering. Feedback on these initiatives was mixed. Social care providers said they mainly catered for people with complex needs which could not be addressed by untrained volunteers. However, some gave examples of when community support had helped maintain services and reduce staff workloads during extreme events.

Examples given included:

- Ferrying equipment, medication and care workers to clients' homes or to pick-up points
- Supporting isolated and lonely clients through small neighbourly acts of kindness
- Ensuring access to clients' homes by clearing and gritting paths and lending 4 x 4 vehicles (see below)
- Partnering with organisations which deploy volunteers such as the Red Cross

"We partnered with Red Cross to pass on people we couldn't see so they could do a welfare check and we also partner with other parts of social work to do non-essential visits."
Senior Manager, HSCP

3.4 Access to people's homes

Travel disruption can affect rural and urban settings differently; planning takes this into account:

- In urban areas the higher density of staff can help ensure that contact with clients is maintained (even if this means a reduced number of visits) as it is simpler for staff to work flexibly across different neighbourhoods (Wistow et al, 2017).
- Road closures/transport disruption impact urban areas and rural areas differently: A higher number of individuals/households are likely to be affected

in urban areas, but in rural areas access issues can have a greater impact due to lack of alternative access. This is particularly the case for remote rural locations (e.g. Curtis et al 2018, Oven et al., 2012, Wilbanks and Keates, 2010).

Several participants described having to plan for longer vehicle journey times in anticipation of road closures. One commented on longer-term damage to infrastructure which now requires planning for additional journey time:

> *"More recently it's been flooding that's been more challenging. Locally there have been quite a few bridges that have been out of commission which has taken a longer route. […] that bridge still hasn't been repaired so there still is extra time to get to […]one service-user and you are talking about only 10 to 15 minutes extra time per day.*
> *Home Care Manager, Local Authority*

The extent of the impact will depend on the location, e.g. social care users located on steep slopes may be particularly impacted by snow (Wistow et al., 2015).

The majority of participants said that extreme weather planning is based on care staff being expected to use their normal mode of transport to reach support users' homes. If that is impractical, they are expected to find alternative means of transport. This usually means walking from the nearest point accessible by car.

> *"We had staff doing a two- hour walk each way up a hill because there had been no gritters and there was no snow plough."*
> *Local Care Manager, commissioned care provider*

In one example, plans were in place for the provision of a small number of alternative vehicles:

> *"In some of the rural locations we have alternative transport – most staff use their own transport but in some areas that are hard to reach we've got vans. Fleet vans."*
> *Local Care Manage, Local authority*

When access to a client with critical care needs cannot be achieved safely by the care worker, plans are based on the involvement of the emergency services. The two options described were:

- Notifying emergency circumstances of the need to evacuate a client to a place where care can be provided (e.g. a residential care home, a hospital or an alternative domestic residence).
- Enrolling emergency services in enabling a care worker to gain regular and ongoing access to the client's home as needed.

None of the participants articulated plans of action for when clients might be advised to evacuate from their homes, for example due to flooding, but who refused to leave. Emergency services can only remove someone from their home without their consent if they lack the capacity to make that decision for themselves (Age Scotland, 2020).

There was one example given of care providers planning to use community volunteers to help transport carers to people's homes.

> *"We've got this group – people who own 4 x 4 vehicles and through the senior management team we are able to access a list of people. It's an arrangement of people who live in the area who have 4 x 4s who are prepared to be used in an*

emergency."
Local care manager, Local authority

There are other plans either in place or being developed by other local authority teams, usually in partnership with Community Councils.

> *"[about the flooding]…there was a whole community initiative then and there are now community plans which the local authority has helped pull together. That would be the HSCP which is involved in that."*
> *Local Care Manager, Local authority*

> *"The work of engagement is ongoing – as the Beast from the East impact fades we need to keep people aware that being ready matters. Some areas are on top of this at community level – they take pride in having "always" helped themselves. Others are not getting on board to that extent."*
> *Resilience Manager, Local Authority*

3.5 Workforce health and safety

Plans for continuing to provide essential social care at home rely heavily on care workers self-assessing levels of risk. Participants emphasised that they would not place unreasonable demands on staff:

> *"We never force people to come to work but we encourage staff to do a risk assessment."*
> *Home Care Manager, Local Authority*

> *"I think we would be erring on the side of caution and saying to folk they shouldn't take an unnecessary risk […] a lot of employees live outwith wherever the services are taking place."*
> *Project Manager, Children's Services*

Planning to ensure staff were able to operate safely in adverse weather situations involved a variety of approaches.

> *"Quite often if there is bad weather forecast social work will send out a bulletin. It's not just weather – in our area major road accidents can affect us."*
> *Local Manager, commissioned care provider*

> *"Within the council there would be an adverse weather policy and that would be recirculated at the time when we were getting these yellow and amber warnings just to remind people of what their responsibilities are."*
> *Project Manager, Children's Services*

> *"We've provided grips that fit on your shoes – ice grips I suppose they are called – we provide all the staff with them."*
> *Home Care Manager, Local Authority*

The most commonly described planned methods were:

- Keeping severe weather policies for employees up to date
- Involving frontline care teams in business continuity and emergencies planning exercises
- Including advice and guidance on policies in staff training and ongoing awareness raising.
- Issuing seasonal bulletins and reminders – regularly or with severe weather warnings

- Providing emergency briefings emerging from inter-agency or cross-departmental emergency meetings.
- Providing relevant equipment - this included clothing and footwear (e.g.slip-on shoe grips) as well as equipment designed to facilitate safer working for staff working alone (e.g. ELK lifting devices which are inflatable cushions enabling an individual to lift a client into a sitting position following a fall.)
- Direct advice from managers – for example, managers discussing the weather-related risk assessments being made by staff and advising against a specific visit if necessary.

Severe weather policies were not requested in the course of this work. Several participants described what their policies covered. Examples include:

- Advice on personal safety – for example wearing suitable clothing and footwear, keeping food, a shovel and warm blanket in vehicles.
- HR advice on procedures and terms and conditions when severe weather affects an employee's ability to get to work.

One HSCP participant said they could track vehicles and individual workers by means of in-car and handheld devices.

> *"We've got a special type of vehicle we use. The cars have all got a kit for bad weather. They've got silver blankets, a snow shovel, an amount of food […] and we've got tracking so we know where they are, which the trade unions don't necessarily like, but we would only use it when it comes to staff safety."*
> *Senior Manager, HSCP*

Planning for staff health and safety in emergencies across the whole HSCP workforce is made more complicated by the fact that these are partnerships involving different employers with staff terms and conditions and HR policies which have not been harmonised. This was explained by a participant which has put considerable effort into updating HR policies following the Beast from the East:

> *"We have a new policy which specifies how you respond to different weather events and whether it is a yellow, amber or red warning – for example with red weather warnings it specifies how you will be treated and how you will be paid. […] In the HSCP we have two distinct organisations with different polices and pay systems. You might end up in a position with different t & c between health and social care staff."*
> *Senior Manager, HSCP*

Participants were asked about planning for training in advanced driving skills or any equivalent training for driving in adverse conditions. None were aware that any had been included in plans or provided by their organisations or in organisations commissioned by them to provide care.

> *"I don't know because most of our work is outsourced. I don't know if the provider would offer that sort of training such as driving in difficult conditions. I'm not convinced that they would because I've never heard them talk about it."*
> *Project Manager, Local Authority*

4 Challenges in delivering social care

4.1 Increased workload

4.1.1 Working hours

Participants described staff working highly flexibly and working longer hours than usual in order to meet the essential care needs of priority support users[22]. There were also examples given of staff making efforts to keep visiting non-priority clients.

> *"Our teams are very motivated and they will try to keep up regular visits if they can, going above and beyond. That has led to some concerns about working hours. We need to look at that."*
> *Senior Manager, commissioned care provider*

> *"It resulted in some staff doing more than their own shifts and some not being able to get to their work."*
> *Local manager, commissioned care provider*

Additional workload was also involved in informing support users about any changes to their usual support services.

The main reasons given for longer working hours were:

- Staff having to reach clients on foot when roads were impassable
- Staff taking on additional shifts when colleagues were unable or unwilling to work (for example when conditions where they live made travel to work not feasible or too risky).
- Staff relocating, for example, staying overnight in a hotel, in order to sustain services in areas made less accessible by adverse weather.

> *"I know on that day we were out trudging about – I know the manager stayed in […] instead of travelling home – she got on her boots and she went out there. It would have been seriously affected if we hadn't have pulled out all the stops."*
> *Local Manager, commissioned care provider.*

- The additional workload inherent in supporting clients whose needs are unfamiliar (i.e. reading case notes, carrying out unfamiliar tasks)

> *"[…] there were people coming in who hadn't met the person before – reading their file to get to know them. That's extra work. They are not going to be as efficient as they normally could be and the person they are supporting won't be used to that either and that can affect their behaviour."*
> *Local Manager, commissioned care provider*

- Staff being redeployed to work in residential care homes, sometimes on an additional shift or overtime basis in addition to normal workloads, during periods of staff shortage. One participant explained that this had led to a

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[22] A Fair Work Convention Report in 2019 found 1 in 3 care workers already did at least 5 hours of paid overtime a week and 1 in 6 did unpaid overtime each week. It quotes a previous survey from 2017 showing that 27% of Scotland's female social care workforce worked for over 41 hours a week (including overtime) and an additional 11% of the female care workforce worked for over 50 hours weekly https://www.fairworkconvention.scot/wp-content/uploads/2018/11/Fair-Work-in-Scotland%E2%80%99s-Social-Care-Sector-2019.pdf

major review of terms and conditions which was nearing completion at the time of this interview.

Staff becoming stranded due to areas becoming suddenly inaccessible. The example provided was tidal flooding leading to a temporary road closure.

"[The] road was closed due to high tide. A lot of our staff go down there for the early shift and there was no way they were going to get back in time that day – they had to stay down there. Not all people have a lot of cash so we made sure we set up an invoice with a local café so they could get a drink and something to eat, […] It was for about an hour and a half but if you are looking to provide care that sort of delay is important. We would absolutely pay them – if it was something bigger - a bigger cost we would go to the commissioner."
Local Manager, commissioned care provider.

4.1.2 Communication with clients, friends and family

Social care providers reported that adverse weather warnings during the case study periods had triggered increased anxiety in clients and their friends and relatives, especially those who lived some distance away from the person receiving care at home. This was manifested in an increase in phone calls to the care provider.

"The overall main point of contact will be head office – key manager would brief the team from there although we will have managers out and about too. We also staff up too so that a manager and a small team can provide feedback both to staff and to families and service-users. It is less of a strain later on if we make calls out at an early stage to reassure people."
Senior Manager, commissioned care provider

This was considered challenging for three main reasons:

- It had workload and service delivery implications as high call traffic consumed significant staff time.
- It could block phone lines needed for other vital communications.
- There were examples of adverse weather damaging infrastructure making it impossible to notify those dependent on landline-based telecommunications of any changes to services or to reassure them.

Working to priority lists also caused reactions from users and their families.

"Some parents [were] not happy we were refusing to go and pick their child up, some people we support were not happy because times were changed. Sometimes we might usually do a short drop-in visit more than once a day and because of travel difficulties we would try to stay on in the house but we have been told: "You should go away and come back later.""
Local Care Manager, commissioned care provider

"Family and sometimes service-users themselves are not always very understanding about this. We have a problem with a sense of entitlement and we get a lot of letters complaining – that's not about people coming to any real harm but about not getting what they felt they were entitled to get."
Senior Manager, HSCP

4.1.3 Management time

A high level of demand was placed on management time during the case study periods. The majority of participants described additional workload linked to priority lists. These

have to be checked speedily in emergencies even where digital systems keep them very regularly updated:

> *"What we would do is disseminate that list to managers and say – right this is your P1 list you tell us if that is still right and is there anyone you need to add to this because it's not right?"*
> *Senior Manager, HSCP*

There was also additional work involved in staying in contact with staff working in difficult and potentially dangerous conditions. This included checking on staff safety, briefing temporary or redeployed staff and working to cover for absent staff:

> *"[We were] checking in and making sure they were OK and the managers [were] doing that with their teams – making sure everyone was safe. Making sure that they had got home."*
> *Local manager, commissioned care provider.*

> *"We have a support pool of casual workers for want of a better term. A bank of staff. We can call on these relief staff to make sure care is delivered."*
> *Senior Manager, commissioned care provider.*

> *"If we couldn't get staff to the people they normally support we just swapped things over. People drive as far as they could – like a relay. Handing on supplies so another person could take it on foot. Managers would go out too to cover any gaps."*
> *Team Leader, commissioned care provider*

Workload generated by inter-agency and other emergency co-ordination meetings also involves management time:

> *"We are the contracted provider which has to step in if others cannot meet their client's needs. Our priority lists are held on a team basis but these feed up to two managers and both would be involved in any emergency inter-agency meetings which were convened so that they could share a consolidated list with others."*
> *Senior Manager, commissioned care provider.*

One participant described altering the length of their senior management emergency meetings to enable other vital work to get done:

> *"The meetings were too long and we weren't getting enough time to implement the actions decided on or to communicate important things across teams."*
> *Senior Manager, HSCP*

Managers also led and contributed to communications with support users, informal carers and families:

> *"Parents and carers we might send text messages. We don't use an app to broadcast messages that's a personal message from each carer or from managers."*
> *Senior Manager, commissioned care provider*

One participant described managers responding to travel difficulties by using their own vehicles on an informal basis during the Beast from the East:

> *"We would deploy home carers or vehicles or whatever resource we can find to go and collect prescriptions. […] we have asked managers to use their own vehicles. There's a few of us here with 4 x 4s and that's the quickest way of*

doing it."
Senior Manager, HSCP

This participant also reported being on the verge of requiring managers to step in to deliver frontline services during the Beast from the East due to higher than anticipated levels of staff absenteeism. This was described as resulting from a combination of incorrect messaging on pay and conditions from outside the organisation (i.e. when a Scottish Government Minister announced that people should stay at home and that they would be paid) and the general conditions:

> *"There were people saying they were not going to come in and what was the point if they were going to get paid anyway. And you can understand that because schools were closed and they had their own caring responsibilities. We were seriously considering senior managers having to come in to do some of that work."*
> *Senior Manager, HSCP*

4.1.4 Mobile network and landline outages

Concern was expressed about the potential failure of mobile telecommunications in adverse weather conditions but there were no examples of loss of mobile telecoms service during the case study periods**.** However, during the Beast from the East and Storm Frank some case study areas suffered damage to phone landlines and power outages.

One participant described problems with telecare systems linked to this which generated significant additional workload:

> *"We did discover that, of course, telecare doesn't work if there's no phone line so that's another pressure. You have to get to see people if you can't check on them when an alarm goes off or you hear nothing."*
> *Local Manager, commissioned care provider*

There has been substantial growth in home-based monitoring and alarm services known collectively as telecare systems. Much of the current telecare provision is used by people with low levels of social care needs. The systems are designed, for example, to trigger an alarm if someone who normally lives independently falls, suddenly stops moving around their home or when someone with a cognitive impairment such as dementia leaves their home unexpectedly.

These systems are backed up by 24/7 responder services which are responsible for visiting clients or alerting emergency services when an alarm is triggered and there is either evidence of an adverse incident or no response. Loss of connection, if there is no other means of contact, for example via a friend or relative, must be responded to by a visit.

4.2 Access to people's homes

4.2.1 Travel & other warnings aimed at the public

Managers referred to staff decision-making and confidence in their own or their manager's risk assessments being undermined by travel warnings and advice aimed at the general public. This had caused anxiety amongst staff and additional challenges for managers.

> *"It caused a problem with our staff and the message was contrary to what we asked them to do. We have an issue with these signs saying "don't travel, don't come to work, don't do this" […] if these staff don't come to work and we have*

to scale back and there are people we still have to visit.
Senior Manager, HSCP

There was also a statement by Scottish Government that if you can't get to work you will still get paid and that was contrary to our policy. We say go to a different location if that's possible or take leave. In the space of a couple of hours that was completely overturned and that led to more people than expected not coming to work."
Senior Manager, HSCP

"For colleagues driving conditions were really difficult. And there were challenges to common sense and worries about what they would face. We got the national guidance "don't go out". Then [there are the] vulnerable people who depend on our support. It's a mixed message to our workers."
Senior Manager, commissioned care provider

Motorway electronic signage was described as a problem because the blunt warnings in necessarily short messages sometimes contradicted advice given by managers. Staff who had previously been advised, or had concluded themselves, that it was safe to make a home visit were reported to have returned to base or sought further advice as a result of these messages.

There was also frustration expressed about in-house HR advice in larger organisations which did not make it clear that generic advice to "all staff" was secondary to specific advice from managers to essential workers such as care staff.

4.2.2   Vehicle use and safe travel

The dominant mode of transport, especially in rural areas, is care worker's own cars. No examples were given of this causing problems although it was acknowledged that, due to the relatively low pay of care workers, many of these are likely to be older vehicles.

Managing staff safety was described more often as a matter of consultation and communication rather than of training:

"We make sure staff are safe – we have had the most terrible floods and we need to make sure staff are safe when they are driving. We use mobile phones to keep in touch. People know what to do in the event of any difficulties. We also contact them to make sure they are not taking risks. We don't want staff having to go to the Nth degree to keep the service going if that will harm them. We don't do any special training – no."
Senior Manager, commissioned care provider

The majority of participants mentioned the limitations of most vehicles, both fleet cars and those owned by care workers. Although some organisations invest in fleet vehicles for care worker use, these are not usually 4 x 4 vehicles or chosen with adverse weather in mind:

"The cars aren't anything special – far from it."
Local Manager, commissioned care provider

Blocked roads and steep hills often prevented care workers from reaching clients except on foot.

"We had problems not just with snow but trees down blocking roads. Things like that. Staff just had to get as close to the villages as they could by driving and then get out and walk – that was to take in medication as well as providing personal care."
Team Leader, commissioned care provider

In the most difficult circumstances recalled, the 2010-11 winter snowfall, entire rural areas were cut off to all but the most robust vehicles. A comparison was drawn by participants from Argyll & Bute between this event, which lasted many weeks and cut off the Kintyre peninsula for over five days, and the Beast from the East during which the impacts on access were less severe and lasted only two to three days.

> *"[…] we weren't able to get out and that involved the coastguard and they had special vehicles taking meals in and there was power down and everything – that was certainly five days and that was the most difficult time."*
> *Local Manager, commissioned care provider*

Several participants mentioned good levels of service from local authority highways teams in terms of enabling access to support users by car:

> *"… really good contacts with our road gritting teams. We would ask someone to specifically go out and grit areas with a high older people population – steps not just roads. They deploy teams at strategic points around the city. It's very good actually."*
> *Senior Manager, HSCP*

> *"[…]up here the roads are cleared pretty promptly."*
> *Project Manager, Children's Services*

Few participants managing social care delivery mentioned a role for communities and volunteers in relation to improving access. This was raised by a local authority participant focused on matters relating to emergencies and community resilience:

> *"There was a need for oxygen supplies with local community alerting us to road conditions and us ensuring that road gritting/clearing took places so the supply could get through. Having the single point of contact through the emergency centre provision helped with those sorts of issues and enabled communities to feed information in to help build the picture of what was needed and where."*
> *Resilience Manager, Local Authority*

4.2.3 Travel on foot

Icy paths and steps posing risks of slips and falls were of some concern but not expressed as a major health and safety risk by managers. There were no examples provided of adverse or extreme weather causing harm to staff during the case study periods.

> *"If it's walking distance we ask them to walk, but not if they have their own health needs."*
> *Team Leader, commissioned care provider*

Some described providing slip-on shoe grips for care workers to use but they said there was low take-up and use of these by care workers.

> *"My manager at one time had handed out grips that click on to your shoes but there wasn't much uptake to be honest."*
> *Local Manager, commissioned care provider*

Fast, responsive local authority gritting teams were identified as a major asset in terms of minimising risk to care workers on foot. Some had treated paths and steps as well as specific roads at the request of social care managers.

4.2.4 Public transport

Public transport is used by care workers to reach clients, especially in urban areas. It is also used by those care workers supporting clients to engage in community activities.

The main challenges identified were:

- Early closure of public transport services
- Intermittent "stop/start" of services posing risk of becoming stranded
- Lack of easy access to reliable information on services

This was described as causing care workers additional stress. It was also identified as a challenge in terms of maintaining normal routines for clients whose care at home includes supported social activity outside the home.

One participant also raised this as an issue for management in relation to staff health and safety:

> *"[on duty of care to staff] the decision to send people home due to weather isn't a quick decision. Usually by the time the decision is made Scotrail and all the other transport services have closed down. We are sending people home without anywhere safe to go. It is a real bugbear of mine. They close without any consideration of other services."*
> *Senior Manager, HSCP*

4.2.5 Mitigating risks to support users

In assessing the impact of the case study events on the ability to sustain essential and critical care to priority clients no participants said they had been unable to provide a satisfactory level of care due to restricted access. However, several participants mentioned information sharing between teams and across organisations as an area of risk when access problems required deployment of staff who were not familiar with the relevant support users.

One example was given in which this had happened on a cross-organisational basis during extreme weather, although not as a result of any of the case study events:

> *"I remember […] we were all working together, keeping in contact ensuring people were supported. Highlighting anyone we were concerned about. […] What happened there is people were literally cut off – all services. It didn't matter what organisations, statutory or voluntary, they worked together. There was no other way. Going to support people we didn't normally have because they were other organisation's clients so we didn't have the luxury of support plans and risk assessments and things like that."*
> *Local Care Manager, commissioned care provider*

4.3 Staff health and safety

In periods of adverse weather, social care managers are reliant on individual and highly local risk assessments by care workers who may be based some distance from their managers.

> *"No, [risk assessment guidance not written down] if somebody's opened their curtains in the morning and looked out and there is 3ft of snow or 3ft of water and it wouldn't be safe to go out that's a personal risk assessment – they would then contact the manager and they would then discuss the risk. People have different assessments, different attitudes but there is a conversation so they*

don't say there been some flakes of snow so I'm not going out."
Care Manager, Local Authority

Participants reported that national and regional weather warnings were too general or inaccurate in nature to tell managers anything about local conditions. Managers valued the local knowledge of staff, especially in rural areas. For example, staff were thought to be likely to know enough about local road conditions to make safe decisions about driving.

Participants described high levels of staff motivation as both an asset and a challenge. There was concern expressed that the reliance on risk assessment by individual care workers combined with their strong concern for client wellbeing could lead to them taking unacceptable risks and/or breaching policy:

> *"…some people were saying they would move in with the client for a few days to make sure they had support throughout and we were saying "you can't do that" as it would count as one shift and then it's a problem with working hours."*
> *Team Leader, commissioned care provider*

The participant was not asked and did not indicate whether the objections raised were on cost or staff welfare grounds. There has been a great deal of debate around care worker sleepovers since 2014 when the Employment Appeal Tribunal (EAT) ruled that sleepovers are deemed '**working** time'. This ruling was overturned on appeal. A policy of paying at least the National Minimum Wage for sleepover hours has been agreed in Scotland. (CCPS, 2018)

Participants did not report serious adverse effects on the health of their teams during or immediately after the case study periods. Most expressed confidence in their service's ability to cope over longer periods of disruption but were clear that this had not been tested in recent times.

5 Evaluation and learning

Participants were asked whether the case study events had led them to review relevant plans, protocols and guidance. One specific question was whether they had gathered feedback from support users and their informal carers (both priority and non-priority clients) to help improve service design.

None of the care providers had gathered feedback from support users or their informal carers specifically to evaluate the impact of the case study extreme weather events. Some pointed to regular customer surveys but did not have examples of where these had yielded useful advice for future planning for adverse or extreme weather. One participant said that pro-active suggestions from parents and informal carers had helped them adjust activities to the benefit of young support users with disabilities during the Beast from the East but these were ideas offered, not sought by the care providers.

> *"One solution – and this was suggested by parents in the middle of it – was to bring some of them out to our local base where we created an activity area just to get them out of their houses. Some of them had like cabin fever you know – just wanted to get out and to see other people or do an activity they would normally do."*
> *Team Leader, commissioned care provider*

There were no examples given of formal evaluation, learning or review sessions following the case study events outwith discussions in team meetings. Participants were asked if they recalled any written reviews or reports and the majority said no. Where such a report was mentioned the participant was not able to find it.

However, the majority of participants were aware of or had participated in events designed to test or to improve preparedness such as emergency simulation exercises or business continuity planning sessions.

5.1 Increased organisational workload

Redeployment of staff to support clients outwith their normal caseload is time consuming due to the need for staff to familiarise themselves with case notes.

> *"When staff can't get to work easily we have to put people in who haven't met that person before. Reading the file and getting to know them is a lot of work. They are not going to get it done in the time they normally would."*
> *Local Care Manager, commissioned care provider*

> *"…going to support people we didn't normally have because they were other organisation's clients so we didn't have the luxury of support plans and risk assessments and things like that."*
> *Local Care Manager, commissioned care provider*

Shorter organisational and cross-organisational emergency meetings were commented on as being more effective than longer meetings because they allowed more time for cascading vital information to frontline teams without too much delay.

> *"We had to change the emergency meetings. They were too long and they stopped managers from getting out of the room for long enough and soon enough to pass on vital information. It's things like that which you learn from the actual situation. It is quite hard to work that out – even when you do annual exercises as we do."*
> *Senior Manager, HSCP*

Community volunteer activity was mentioned by a minority of participants as having positive impacts on reducing workload. This was both in terms of helping to meet the needs of support users and on improving local access. Examples given included:

- Ferrying equipment, medication and care workers to client's homes or to pick-up points.
- Supporting isolated and lonely clients through neighbourly acts of kindness.
- Clearing and gritting paths.
- Partnering with organisations which deploy volunteers such as the Red Cross.

"We partnered with Red Cross to pass on people we couldn't see so they could do a welfare check and we also partner with other parts of social work to do non-essential visits."
Senior Manager, HSCP

However, due to the complex needs of those on the priority lists, community volunteers were not considered to be significant assets in terms of providing care to these support users.

5.2 Changes in care needs

Review meetings about individual support users are often the locus for team learning. The term "review" is also applied to meetings held with support users and their carers.

Behaviour observed during heatwaves was raised as an example. In this case a manager recognised a need for knowledge about the impact of hot weather on health and wellbeing to be emphasised with staff and to support users and informal carers:

"Going out on a boiling day – if it was over 30 degrees they should not be going anywhere but even here where that doesn't happen often they need to be careful and we have to educate peers and parents as they don't understand about the way you regulate body temperature. They can be unawares and that's hard for us. We would mention it in a review, in our teams but also with families and carers."
Team Leader, commissioned care provider.

5.3 Maintaining access to people's homes

Continuation of near normal levels of service was most likely to be achieved where care workers lived in or close to the communities where they worked.

A key aspect of preparedness is the ability to deploy staff flexibly during adverse weather. There are two main barriers to maximum flexibility in deploying staff:

- Staff home location – those who lived close to the communities served by the care provider were less limited by access issues posed by adverse weather.
- Staff training – those without specialist skills training, for example in the use of certain feeding systems or types of continence care, could not cover fully for absent colleagues whose priority list clients required these skills.

The point about skills was made most strongly in relation to commissioned, especially small and private sector, care providers whose pool of staff is often quite small.

"We continually insist they should have a more robust plan. Quite often it is just because someone has gone sick – that the carer has gone into hospital. The

care is usually so complex, so special they say there is no way we can fix this so they just give it back to the in-house provider."
Senior Manager, HSCP

"Some smaller agencies might have a problem with untrained staff. If all your staff are not trained in the highest level of care, for example, how to deal with someone with a feeding PEG, then you cannot just switch around and redeploy staff and sometimes you are just going to not be able to provide support. I do feel that when people are self-funded or have their own budget they are directed to agencies by local authorities that don't always seem suitable to me."
Team Leader, commissioned care provider

Some managers had realised they had staff who did not understand fully that they were classified as essential workers making essential journeys. Specific guidance and briefings of staff were identified as a means of reducing the risk of confusion when the general travel advice is to stay at home.

"Bit of alarm that some of our staff in HSCP don't recognise they are essential so we adapted our management briefings to make it absolutely clear. More on the social work side than the health side."
Senior Manager, HSCP

Local highways departments were very reliable colleagues in helping to maintain access to people's homes but community volunteers were valuable too. They cleared and gritted paths and minor roads which enabled care staff to access more clients safely. They were also a good source of information about local conditions.

"… the local community [was] alerting us to road conditions […] Having the single point of contact through the emergency centre provision helped with those sorts of issues and enabled communities to feed information in to help build the picture of what was needed and where […] local doctor came to express appreciation for people who had shovelled snow from paths around the health centre."
Resilience Manager, Local authority

Accessing formally constituted emergency 4 x 4 voluntary driver schemes was considered useful by one participant and time consuming by another. This participant went on to say that swifter deployment was achieved through informal use of manager's own vehicles and those of informal volunteers known to the care worker.

5.4 Workforce terms and conditions

During the case study events agreed longer hours of work could trigger an overtime payment but this was not paid at the same rate as that offered for taking on additional shifts, for example, in residential care homes.

There was concern that this represented unfairness in policies on staff terms and conditions, and had proved divisive and demotivating to staff.

"What happened was if a residential worker turned up for their allocated shift they would be paid their normal rate. If a worker covered something that was not their allocated shift they would be paid triple time. So staff who walked for hours though the snow would be paid their normal rate and someone from just around the corner would get triple rates. […]Our concern was that we had lost the goodwill because we do depend on that."
Senior Manager, HSPC

One HSPC reported having addressed this perceived unfairness in pay and conditions by negotiating a revised policy with the relevant staff representatives, including Trades Unions. They noted that this had been a lengthy process.

There was no evidence that the impact of increased workloads on staff health and safety had been monitored or evaluated specifically in the aftermath of the case study events. However, some participants expressed concern about the potential impacts on staff of the additional workload as noted above, delivering social care through the case study events was dependent on the goodwill, flexibility and high levels of motivation of the existing workforce. Participants were not asked to assess the likelihood of being able to maintain services on this basis during longer periods of adverse weather. This is a theme requiring further exploration.

6 Findings and conclusions

6.1 Key findings

6.1.1 HSCP strategies

Planning for an increase in adverse and extreme weather conditions was not front of mind for current leaders and managers in the social care sector. The current three-year Health and Social Care Partnerships' strategies do not address climate impacts on delivering social care at home; neither does planning at the individual client level. At the same time, however, participants routinely consider and train staff to manage the health impacts of weather events on support users such as ensuring hydration and preventing hypothermia.

6.1.2 Assessment of home environments

More frequent flooding is already being experienced in parts of Scotland and more frequent and longer periods of warm weather are forecast. Social care assessments, which, under the current assessment model include a requirement to assess the home environment, do not identify homes that are at risk of flooding. They routinely assess heating capability in cold weather, but participants asked about hot weather and its impacts, did not have experience of homes being assessed for risks relating to overheating. These are impacts which could be assessed within current policies and practice. However, staff might need further training to be able to make such assessments.

6.1.3 Priority lists

In all the case studies, the extreme weather meant social care was delivered to clients on priority lists - those who have essential and critical care needs. We do not have data on the impact of clients not on the priority lists. The case study events were of relative short duration with two to three days of disruption.

There is a lack of a shared systematic approach to creating priority lists of people whose critical and essential care needs must be met. The status of support users in terms of priority listing does not appear to be communicated clearly or routinely enough to them or their unpaid carers, family and friends before or during a period of adverse weather. This leads to an increase in concerns and complaints at times when care at home has to be curtailed. Participants said greater clarity and improved communication about priority listing could help reduce concerns and complaints, the stress caused to support users, and the drain on management time.

6.1.4 Data-sharing

Data-sharing between teams and between organisations would be helpful in maximising support and minimising risk to support users in adverse circumstances but it is not done routinely and not planned for in every organisation. Participants identified that issues around inadequate record-keeping and information sharing might pose a risk, in particular, when a third party has to step in as the provider of last resort, perhaps because a small or independent care provider cannot sustain services due to staff absence.

6.1.5 Flexibility and commitment of staff

All participants emphasised the flexibility, commitment and motivation of their staff. This ensured that clients on the priority lists had their needs met during the weather events. The majority of participants stated that their services benefit from staff living in the communities they serve. This makes a significant contribution to continuing a good level

of service in difficult travel conditions, but is not planned for or part of organisational recruitment policies.

The reliance on highly motivated staff, often working alone and for long hours covering for absent colleagues and walking to homes made temporarily inaccessible by road, to maintain services may not be sustainable over a longer period of disruption.

6.1.6   Staff terms and conditions

Longer hours of work agreed during extreme weather could trigger an overtime payment that was below the rate offered for taking on additional shifts, for example in residential care homes. This perceived unfairness in pay and conditions has been addressed in some organisations. There was no evidence that the impact of increased workloads on staff had been monitored or evaluated and this is an area in which identifying and sharing best practice would be beneficial.

Staff and support users would benefit from clarification of the essential nature of homecare worker's roles. General travel warnings designed to deter road travel were reported to have led to confusion amongst staff and increased absenteeism.

6.1.7   Community support

Scottish Government and local authorities are investing in significant work to boost community resilience and volunteering. However, due to the complex needs of those on the priority lists, community volunteers were not considered to be significant assets in terms of providing care to the most vulnerable support users. The ability of care workers to access more robust vehicles (e.g. 4 x 4s), for example, through community volunteer driver schemes, in order to minimise the need for time-consuming journeys on foot, was variable. However, volunteers had played a part in ensuring access to clients' homes, for example, by gritting and clearing paths.

6.2 Improving the sector's preparedness

The case studies do not show how social care services could or would be maintained through more frequent or longer-lasting serious episodes of adverse and extreme weather. Delivering social care through the case study events was dependent on the goodwill, flexibility and high levels of motivation of the existing workforce. Maintaining services on this basis during adverse weather events in which the impacts are experienced for weeks or months at a time, rather than days, is likely to be extremely difficult and lead to unsustainable working hours with negative effects on the workforce.

It is possible that greater partnership working between HSCP leadership or other care providing organisations and public sector colleagues on wider resilience planning and community engagement, and volunteering could bring benefits to support users and their informal carers. Community volunteering did not, in the view of participants, play a major role in maintaining services during the specific events under consideration. Participants were not asked whether they felt it could or should do in the future, especially for those users who are not on priority lists.

For a number of issues improved knowledge exchange and identification of best practice could improve the sector's preparedness for more frequent or longer periods of extreme weather:

- Processes for compiling and updating priority lists, including a wider range of weather-related risks in the care assessment
- Procedures for sharing priority lists and workload between organisations and teams to maximise service levels when conditions limit travel between locations

- Systems for communicating about local situations and impacts on services pro-actively with support users and their support groups as early as possible to reduce anxiety and the number of enquiries
- Support for staff to risk-assess their travel as essential workers further to general travel warnings for the public, including better information as to when transport services are at risk of interruption
- Processes for monitoring and evaluating the impact on staff of unusually high workloads or work-pattern disruption
- Policies on pay and conditions during severe weather that recognise the range of additional work
- Further training for care workers to anticipate and prepare for the potential negative impacts of weather events on the health and wellbeing of support users and their carers
- Policies on training care workers in specialist skills so that levels of essential and critical care can be maintained when staff absences require redeployment

6.3 Further research

This is one of the first studies of its kind and represents a first step to building an evidence base around the impacts of climate change on social care delivery. The authors recognise that the joint Scottish Government and COSLA reform of adult social care programme was underway prior to the pandemic. It is also recognised that there has been a commitment by Scottish Ministers to undertake a further wider review of adult social care to address some of the issues that have been emphasised by the experience of the pandemic.

With this and the pandemic response in mind, the findings may be useful in shaping future research on the impact of 'system stressors', including projected climate change and extreme weather, on people working in social services and the people they support and unpaid carers.

This research identified the following areas as needing a particular focus in future research:

- Impact on inequalities
- Impact of limited or disrupted service on people that use support and unpaid carers
- Impact of changing and increasing workload on staff across social care support
- Impact of emergencies on people using support who are self-funding or using direct payments
- Impact of longer term disruption to supply chains

7 Appendix A: Interview guide

1	Did [*relevant extreme weather event*] have any impact on the delivery of care at home in your area?
2	On a scale of 1-5 how severe were the impacts on your ability to deliver good enough care at home (1 = mild, everyone had their needs met despite some delays to 5 = severe, we could not provide a suitable level of care for a day or more.
3	What were those impacts? (prompt if necessary: How severe? Over what period of time? How many clients were involved? In specific areas or widely? (ask them to clarify if necessary))
4	What other impacts did you encounter or hear about?
	Thinking about the challenges which have arisen for your service as a result of [*relevant extreme weather event*] I am going to ask about some specific matters.
5	What changes, if any, in people's needs did you become aware of?
6	Thinking about workforce - what challenges have you encountered in terms of balancing a duty to staff in terms of health and safety and meeting the needs of people being cared for at home? [Prompt if necessary e.g. icy pavements and steps, risk of road travel in storm conditions, staff refusing to carry out work for any weather-related reason]
6A	How have you tried to address this?
7	What challenges have you encountered in terms of disruption to travel? For example, road and bridge closures affecting car travel and cancellation of public transport services?
7A	How have you tried to address this?
8	What challenges have you encountered related to other impacts of this/these weather events? For example, disruption to power supplies or communications systems. *[NB this might be particularly relevant if some of the care at home depends on digital/telecare type systems]*
8A	How have you tried to address this?
9	Thinking about the role of the community - friends/family/informal carers - to what extent have you or the people who use your services needed to or been able to draw on additional input from the community to help keep people safe and well at home during the extreme weather event?
10	Have you experienced or carried out any research into whether care at home bought out of direct payments has any positive or negative impacts in terms of continuity and quality of care during extreme weather events?

	If YES please tell us more about your findings
11	Did you have plans, protocols and guidance in place BEFORE the weather event which were intended to ensure you were prepared for all the issues that arose?
12	How well did these work in practice? (Propose a ranking scale: 1= Not at all to 5=very well we haven't needed to update them significantly
13	Has anyone written up any reports or reviews into the event and the aftermath which you would share with us?
14	Has your experience lead you to review your plans, protocols or guidance to organisations, managers or staff involved in providing care at home?
15	Are you developing or do you intend to develop revised plans/protocols/guidance to help ensure care providing staff and people receiving care at home are not adversely affected by extreme weather events in the future? If YES please tell us more about this.
16	Have you or do you expect to draw on the experience of other care providing organisations in developing your planning for extreme weather events?
17	Would you like to be able to learn more from others? If so what would help with that?
18	Have you drawn on feedback from people receiving care at home and/or their paid and unpaid carers to help you develop your capacity to respond to future similar events?
19	Have you or do you intend to take specific measures as a result of that feedback?
20	*For commissioners:* What has your experience and learning from extreme weather events led you to consider in terms of changing anything in your commissioning and procurement processes? *Prompt if necessary:* For example, have you looked more at the geographical proximity of the staff to the client, have you considered increasing the time allocated for visits, required suppliers to evidence or carry out additional staff training (e.g. advanced driving skills, awareness of health issues which can be worsened by heat/dehydration/air pollution and how to spot and address them) or demonstrate they work in line with protocols which take adverse weather conditions into account?
21	*For operational managers:* What has your learning from extreme weather events led you to consider in terms of changing your practice and ensuring staff have the skills and guidance needed to keep clients safe and well-supported throughout extreme weather events?
22	Any other comments or observations

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climateXchange

Scotland's centre of expertise connecting climate change research and policy

info@climatexchange.org.uk
+44(0)131 651 4783
@climatexchange_
www.climatexchange.org.uk

ClimateXChange, Edinburgh Centre for Carbon Innovation, High School Yards, Edinburgh EH1 1LZ