Rapid evidence review of measures to prevent and mitigate the risk of COVID-19 in social care

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Key messages

The main aim of this report is to provide an updated compilation of international evidence describing measures that have been put in place to prevent and mitigate against the risk of COVID-19 transmission in social care settings. International policy and service responses to the COVID-19 pandemic appear to have initially focused more on hospital care settings, specifically intensive care units, and the policy and service responses to social care settings tended not to be prioritised in the same way. Research also seems to have followed this pattern with considerable focus initially on general population and hospital studies, then more research emerging on care home settings and there is still relatively little research published (although more could now be underway) on other social care settings such as day care, supported housing and domiciliary care.

An important theme throughout this report is the importance, even in very urgent situations where there may be a lack of clear evidence to inform decision making, of ensuring that decision making is informed by a robust ethical framework and that, as far as possible, a systemic approach is taken to considering the implications of decisions, across all aspects of health, social care and society.

The most recent rapid review of the evidence on visiting in care homes concluded that there was no evidence in the research literature that visitors had introduced infections to care homes although this was in the context of restrictions on visitors in most countries. It did however identify evidence that, during the first waves, the wellbeing of care home residents had been negatively affected including high levels of loneliness and depression. It appears that restrictions on, and sometimes the closure of, other aspects of social care have had similar, unintended negative consequences, including for carers but the international research evidence is still developing. Recent advice on preventing infection, essential visiting and human rights in care homes issued by the Association of Directors of Adult Social Services (ADASS) in November 2020 highlights the need to balance, “the safety afforded by controlling infection with the rights of the individual and the detrimental effect on people’s emotional, mental and physical wellbeing of not having contact with people they need and the outside world.” (ADASS, 2020, p. 2).
There are a range of international studies on how the social care workforce has been disproportionately affected by COVID-19, the impact of working in this context, and also examples of how countries are attempting to better support and fund social care. There does seem to be a growing recognition and acceptance that current funding arrangements and service models in social care need to be fundamentally reformed.
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Introduction
The importance of considering the evidence for measures to prevent and mitigate the risk of COVID-19 in social care has recently been powerfully summarised by the Social Care Institute of Excellence which stated “COVID-19 has had a devastating impact on social care. By June 2020 there had been more than 30,500 excess deaths among care home residents, and social care staff have been more than twice as likely to die from COVID-19 as other adults. Deep-rooted inequalities in society have also been amplified by the crisis, as have the sector’s fragile finances and the low pay and conditions experienced by many care workers.” (2020a, p. 1) There are a number of reasons which increase the risks in social care including: the physical proximity needed to provide much of social care; the settings and circumstances in which social care tends to be provided, especially congregated and communal settings but also domiciliary workers visiting multiple homes; and the people who need social care are more likely to have health needs and social circumstances which mean that COVID-19 is a greater threat to their health and wellbeing (Green et al., 2020). The main aim of this report is to provide an updated compilation of international evidence describing measures that have been put in place to prevent and mitigate against the risk of COVID-19 transmission in social care settings.

Objectives
• To provide an updated summary of a list of actions that have been reported describing measures adopted by different countries to prevent and manage infections of COVID-19 in care homes.
• To provide a summary of a list of actions that have been reported describing measures adopted by different countries to prevent and manage infections of COVID-19 in other adult social care services and,
• To include any emerging evidence retrieved during the search about the effectiveness of measures that have been introduced in preventing or mitigating against COVID-19 transmission and,
• Include any emerging evidence retrieved during the search about the impact of measures that have been introduced for people using social care services or on the delivery or design of social care services.
There are three key resources which provide the context for this report.

The first report was a review, completed for the International Long Term Care Policy Network, on 11th May 2020, of International examples of measures to prevent and manage COVID-19 outbreaks in residential care and nursing home settings. It analysed reports from 15 countries (Australia, Austria, Brazil, Canada, China, Germany, Hong Kong, Ireland, Israel, Italy, Netherlands, Slovenia, South Korea, Spain and the United States) and also considered policy documents for England. It emphasised the need for a co-ordinated response across all levels of government, and health and social care. It also presented a range of specific findings that included:

- “Timely data on the impact of COVID-19 in care homes is essential to ensure that opportunities for preventing large numbers of deaths are not missed.
- Evidence of asymptomatic transmission and atypical presentation of COVID-19 in geriatric populations should be reflected in guidance documents and testing policies.
- While there are infections local to care homes, regular testing of residents and staff will be essential, ideally followed by contact tracing and effective isolation.
- Most countries have restricted visitors but this policy alone has not protected care homes from infection. Countries are increasingly considering how to make visits safer, recognizing their impact on wellbeing.
- Staff pay and living conditions may be an important barrier to effective infection controls, particularly if staff do not have access to sick pay or need to work in multiple facilities (or live in crowded accommodation).
- Access to healthcare and palliative care (in terms of personnel, medicines and equipment) needs to be guaranteed, particularly for homes without nursing or medical staff.
- Not all care homes are suitable as isolation facilities. Technical support and alternative accommodation may be required in some cases.
- Measures to address the psychological impact of the pandemic on both staff and residents need to be put in place, particularly as many staff and residents will have experienced trauma and grief. For some residents, particularly those with dementia, the disruption in their normal lives by the measures may have significant negative impacts.” (p. 2)
The measures it considered included actions to support care homes in preparing and dealing with outbreaks: national task forces to coordinate COVID-19 response in care homes; strike forces/rapid response teams; reducing care home occupancy to facilitate management of potential outbreaks; loosening regulation and inspections; and funding to boost staff numbers, funding for additional workforce supply and to supplement viability of care homes. It also reviewed measures to provide COVID-19 infections from entering a home: isolation within facility for all residents; measures to restrict visitors to care homes; measures to reduce risk of staff passing on infections to residents; and measures to ensure that new or returning residents do not bring in the infection. Another aspect of the international review considered measures to monitor potential infections: systematic symptom monitoring; testing care home residents and staff; and training of care staff in recognizing symptoms and atypical symptoms. It also provided examples of measures to control infection once it has entered the facility: contact tracing and isolation based on contact; isolation measures; and ensuring access to health care for residents who have COVID-19. It also considered how to manage staff availability and wellbeing which included: Government (local, national or regional) taking over funding/running of care home; funding to boost staff numbers; retention bonus paid to staff; recruitment of additional staff; rapid response teams; loosening staff regulations; supporting care home staff with accommodation and practical measures; and psychological support to care home staff who may have experienced traumatic situations. Finally it reviewed measures to compensate for the impact of physical distancing in care homes which included methods to combat loneliness in residents.

The second resource was a parallel review, also completed for the International Long Term Care Policy Network, on 19th May 2020, of international measures to support community-based care (Dawson et al., 2020). It summarised reports from 14 of countries (Australia, Austria, Brazil, China, England, Germany, Hong Kong, Ireland, Israel, Italy, Netherlands, Slovenia, South Korea, and the United States) and produced a number of key findings that are included below:

- “Community-based care faces unique challenges during the COVID-19 pandemic compared to other parts of the long-term care continuum.”
Several countries have taken steps to prevent the spread of COVID-19 infections in community-based care including the closure of adult day centres and other service providers.

Continuity of care is of upmost importance. A disruption of care and support could have serious negative impacts on individual health and well-being due to increased risk of loneliness and social isolation.

The dispersed nature of community based care suggests that direct governmental action and oversight may be more difficult to provide than for residential care settings such as care homes or nursing facilities.

Efforts to maintain continuity of care in community-based care include government financial support to home care workers; recruitment of volunteers and family members to act as paid carers; and the provision of remote psychological supports to home care workers.

Some countries have taken steps to move patients and home care workers to residential care settings. The redistribution of home care workers and individuals in need of care to residential care settings is likely to produce unintended results and may not be a suitable option for all populations such as persons living with dementia.

Few countries are specifically reporting data on infections and deaths among users of home care. An exception to this is Australia.

Overall evidence of national measures to support community-based care is still lacking for most countries.” (p. 2)

The measures it reviewed included: guidance for home care workers; closures of day care and community centres; changes in the delivery of home-based services. There were also a range of measures to ensure continuity of care and staff wellbeing including: measures to support care providers; recognition of staff as essential workers; providing care for people who can no longer access usual care in their own home; additional workforce supports; recruitment of volunteers, additional staff, and family members as carers; pay and condition improvements to boost staff numbers. The report also highlighted some non-profit sector and community-led responses including the redeployment of home care workers to residential care. Finally, measures taken to provide psychological support for care workers were outlined. As the report
acknowledges there was little available evidence to determine which or what combination of these measures was effective.

The third key resource which provides the context for this rapid evidence review is the report of the Rapid Learning Initiative into the Transmission of COVID-19 into and within Care Homes in Northern Ireland which was completed by a Department of Health Task and Finish Group. It focused on Northern Ireland during the period of 6th February 2020 until 31st July 2020 and specifically on care home settings. It adopted an inclusive approach: to learn from the changes that already been implemented; identify the impact of those interventions; and so develop recommendations to inform the further development of policy and practice. The views of residents, families, staff and care home provider organisations were considered as part of that process. It concluded with recommendations in six key themes:

- “Technology – Leverage technology to keep people, knowledge and learning connected;
- Information – Manage information and guidance to and from Care Homes more efficiently and effectively;
- Medical Support – Provide consistent medical support into the Care Homes;
- Health and Wellbeing – Enhance the health and wellbeing interventions for residents, families and staff;
- Safe and Effective Care – Enhance safe and effective practices including access to training for Care Home staff; and
- Partnership – Enhance partnership working across all organisations.” (p. 26)

The focus of this rapid review is therefore on the evidence that has emerged internationally since July 2020 and the possible implications for the Northern Ireland context, but if there is key evidence identified from before then we have referred to it. The scope of this review is wider than the Rapid Learning Initiative as, in addition to care home settings, the evidence for measures in day care, supported living and domiciliary care (including self-directed support) will also be considered. These measures can be broadly grouped into three main types: measures to prevent or restrict face to face contact; measures to reduce the risk of infection when contact is necessary; and interventions to address the potentially negative impact of the COVID-19 measures. The review will then summarise the relevant developments and evidence
to support carers and the workforce. Specific evidence relating to data and monitoring will also be highlighted. Finally some of the possible longer term implications for social care will be discussed. In each section the area of social care will be broadly defined, the international evidence will be analysed and then the possible implications will be discussed. There are some key themes which are considered throughout the sections of the report and these are: the effectiveness of interventions; developments in the use of technology and other innovations; and any issues of inequalities and human rights.

It should be noted that a specific review of the evidence related to domiciliary care has also been completed by the Office of Social Services and that will provide a more in-depth review of that aspect of social care. There are also a range of sources of regularly up-dated guidance, research and training on COVID-19 and social care. These include the Social Care Institute of Excellence’s *Coronavirus (COVID-19) advice for social care* which can be accessed at [www.scie.org.uk/care-providers/coronavirus-covid-19](http://www.scie.org.uk/care-providers/coronavirus-covid-19) and for Northern Ireland specific advice there are the relevant resources on the Department of Health’s website which can be accessed at [www.health-ni.gov.uk/coronavirus](http://www.health-ni.gov.uk/coronavirus) and [www.health-ni.gov.uk/topics/social-services](http://www.health-ni.gov.uk/topics/social-services). The BMJ also provides a regularly updated online resource of all the relevant health care advice, guidance and evidence at [bestpractice.bmj.com](http://bestpractice.bmj.com). Before the findings of this rapid review are presented the methodology for how the review was conducted will be outlined.
Methodology
The approach used to identifying and reviewing the relevant evidence was a rapid review. Rapid Reviews provide more thorough syntheses than narrative reviews, and are valuable where a robust synthesis of evidence is required, but the time or resources for a full systematic review are not available. The reviewers develop, and then specify, search strategies in collaboration with key stakeholders. Searches can include sources of unpublished data. The design follows the UK Government’s Social Research Unit and the World Health Organization’s guidance on conducting Rapid Reviews to inform policy.

The key features of the Rapid Review methodology are summarised below:

Searching: Searching is the process of locating evidence that might be relevant to the review questions. We developed a targeted, focused search strategy for the Review questions.

Search strategy: For this review, we searched the following databases, which are those most relevant to the review questions and which provide the most efficient way of identifying the greatest number of relevant studies within the short timeframe for this project: CINAHL (EbscoHOST), International Bibliography of the Social Sciences, MEDLINE (OvidSP), MEDLINE In-process and Other Non-Index Citations (Ovid SP), PsycINFO, PubMed, SCIE, Social Policy and Practice, Social Sciences Citation Index and EconLit.

Grey literature searches: We also searched key websites to identify reports and official documents relevant to addressing the risk of COVID-19 in social care.

Date of publication: We included studies published since July 2020 but seminal research from before then has been referred to when relevant.

Language of study: We only included studies published in English which is a limitation but a reflection of the urgency of the process.

Key words: The following key words were used to search the databases.
Coronavirus OR COVID-19 OR SARS-CoV-2 OR pandemic AND social care OR care home OR day care OR supported living OR domiciliary care OR carers OR workforce
**Screening:** Screening was conducted to determine which of the located studies/sources were directly relevant to the review questions. That is, we assessed each identified study to determine whether it should be included in the review. Given the breadth of potentially relevant literature we have strategically selected studies and reviews to provide evidence on specific issues, especially on innovations and effectiveness, but this is not a comprehensive, systematic review of all of the relevant studies on each measure which would not have been possible in the time available.

It is important to note that reviews of evidence usually prioritise the inclusion of randomised controlled trials which allow the causal links between interventions and outcomes to be tested. For interventions to address the risk of COVID-19 there have been time and ethical barriers to such research and so it is more challenging to establish if any associated outcomes are as the direct result of a specific measure.

**Quality assessment:** Quality assessment involves evaluating the quality and methodological rigour of the primary research or evidence that is included in the review. This helps in making judgements about the level of confidence that we can have in the findings of the included studies. Any important quality issues have been highlighted.

**Data extraction:** We developed a spreadsheet of the key data from the included research in a spreadsheet which is available on request.

**Data synthesis:** Data synthesis is the process by which we have identified trends and made tentative conclusions from across the body of evidence reviewed.

**Database development:** We used standard reference management software (EndNote) to develop the database of relevant literature.
Findings

Summary of included studies
The search strategy identified 552 resources which were potentially relevant and 164 were included in the review. These included: guidelines, reviews of evidence, research that focused on specific populations and settings. Not all are referred to individually as there was some overlap and duplication in findings. In addition there were a number of other relevant resources which were identified in the course of developing the review.

General measures
There are a range of general prevention measures which are not specific to social care but are still relevant. The evidence for each of these measures is summarised and updated at bestpractice.bmj.com. These measures include: washing hands often with soap and water; avoiding close contact with people; covering mouth and nose when coughing or sneezing and discarding the tissue safely; seeking health care early if they have any symptoms; staying at home and self-isolating if they are sick; clean and disinfect frequently touched surfaces; wear a face mask in accordance with guidance. Jones at al. (2020) in an article published in August, have attempted to estimate how the risk of transmission may vary depending on a range of factors – setting, occupancy level, contact time and whether face coverings are worn. They highlight that other factors, such as the viral load of an infected person, people’s susceptibility to infection, and whether people are coughing or sneezing should also be considered but their figure below provides a help way to illustrate the issues:
Figure 1: Risk of SARS-CoV-2 transmission in different settings (considering only asymptomatic individuals)
COVID and the build environment
Evidence dictates that, throughout history, disease has influenced changes in urban design. Dating back to Roman times, each major pandemic has led to modification and transformation in the built environment as a response to change health behaviours, and help prevent and limit infectious disease (Pinheiro & Luís, 2020). From the development of Roman water supply systems to distribute safe drinking water, changes to sanitation and using isolation and quarantine measures to prevent the spread of disease, in the aftermath of the Black Death, a more considered approach was given to the design of English cities allowing for more organised public spaces, to improving ventilation and drainage systems in Hong Kong following the SARS-CoV-1 pandemic. The effective management of wastewater treatment is still a current and relevant issue as coronavirus can spread through faecal-oral routes, and proper management of the urban water cycle is critical for containing the spread of the virus (Naddeo & Liu, 2020). Regular wastewater testing also provides the opportunity to gather data and could act as an early warning system, identify infection hotspots and monitor the efficacy of control and spread of the virus (Sharifi & Khavarian-Garmsir, 2020). Architecture and engineering have their role in applying learning from pandemics to improve the built and social environment, reduce the risk of transmission and promote health and wellbeing. A number of responses during COVID has highlighted opportunities to tackle potential risks and improve the living environment that is particularly relevant to long-term and social care.

Engineering solutions may be an option to help the prevention of airborne transmission and particularly in public buildings and healthcare settings such as care homes Xu and colleagues (2020) identify two basic principles that should be considered to minimise the cross infection between different rooms and occupants:

1. A full fresh air ventilation system should be used or alternatively the maximum amount of fresh air applied to the system
2. Recirculated air should go through a high efficiency filter before use

Colburn recommends measures to prevent infection through air sanitisation in heating, ventilation and air-conditioning systems (Colburn, 2020).
COVID has changed how we work and live, perhaps permanently. It will have implications for urban planning and the design and use of buildings and spaces. The need for an emergency architecture response within healthcare has been beneficial and buildings that could be adapted quickly to create quarantine/isolation facilities, temporary hospitals and field hospitals has relied on lightweight and adaptable structures (e.g. the NHS Nightingale Hospital in London’s ExCeL convention centre).

There is also discussion in the literature about the need for urban planning to consider horizontal expansion (rather than vertical) to help limit the spread of infection and reduce city density by enhancing village and city suburbs (Megahed & Ghoneim, 2020) although the evidence for the link between density and viral spread is conflicting (Hamidi, Sabouri, & Ewing, 2020; Sharifi & Khavarian-Garmsir, 2020). Architecture has long promoted the mixed use of cities to accommodate modern life but the advent of large out of town shopping facilities over the last two decades, many city centres remain empty as shops continue to close. ‘Shop local’ has been promoted as part of the COVID response, stressing not only the importance of supporting local businesses but also to limit the transmission of infection in crowded spaces.

This move towards decentralisation also could apply to building size – the option of building smaller units, health facilities and schools etc. could help to strengthen local centres and communities. The accelerated move towards e-commerce, shopping centres may become less important while creating the potential for creating a decentralised network of smaller green spaces, connected by cycle paths, footpaths and other sustainable ways of travel making it easier for people to access fresh air. There appears to be a public (and political) appetite to transform infrastructure and promote green transport and these changes could bring significant physical health benefits. During the early stages of lockdown, London dramatically transformed its carbon emissions and air quality improved significantly and this has been sustained over time; in October 2020, decreases of more than 40% have been recorded in major routes in London (https://www.theguardian.com/environment/2020/oct/08/covid-19-lockdowns-global-air-quality-india-london-uk).

Other infrastructure and urban landscaping considerations relevant for social care include:

- Urban farms – growing food in care settings (which also has therapeutic possibilities)
• Fewer cars, more cycle and walking routes (important for the connection between mental and physical health)
• Self-sufficiency – renewables, greener energy, cost efficiencies
• Refocusing on green spaces (link between green spaces and mental wellbeing)
• Low-rise buildings
• Improving air quality – greater natural light, improved ventilation, fewer toxic substances in the building process), incorporating plants and other natural materials
• Skylights, large windows, rooftop terraces, balconies, courtyards – providing access to light, views and fresh air are all important components of wellbeing

Building materials will also be important including the use of hygienic and anti-bacterial materials that are easy to sanitise (Megahed & Ghoneim, 2020). The rapidly changing Artificial Intelligence (AI) economy also provides huge potential to increase touchless technology that can help limit the spread of disease (Pinheiro & Luís, 2020). 80% of infectious diseases are transmitted by touching polluted surfaces and the search for more contactless pathways is important. Technology that can control space temperature is also being developed to automatically clean to kill bacteria and other viruses.

China relied on mobile cabin hospital facilities (Andany & Daneman, 2020); 14 mobile cabin hospitals were established within the first month of the outbreak and over 12,000 patients were treated there. In North America and Europe, a more common approach to treatment for mild-moderate COVID has been home isolation with remote monitoring by telephone or virtual platforms but mobile cabin management allows for intensive clinical monitoring with 24/7 oversight. Another key benefit with mobile cabins is the ability to isolate and prevent community transmission. Further comparative research is needed to compare home care and mobile cabin hospitals on clinical outcomes, reduction in household admission, cost-effectiveness, over-medicalisation of mild-moderate symptoms and risk to healthcare workers.

Empty hotel rooms have also been commissioned to provide isolation facilities in a monitored environment and telemedicine used to monitor patients remotely in Rome. Detailed guidance of how this system was set up, the process for identifying suitable patients and procedures for managing, supporting and discharged are discussed (Bruni, Lalvani, &
Similarly, parts of the manufacturing industry also responded and were able to diversify production to meet urgent COVID-19 related needs producing ventilators, surgical masks and hand sanitiser as some examples (Madurai Elavarasan & Pugazhendhi, 2020). At the time of writing at the end of October 2020, the Western Health and Social Care Trust has made an urgent appeal for care home volunteers because of high levels of staff shortages (https://www.bbc.co.uk/news/uk-northern-ireland-foyle-west-54733091); how wider society can be mobilised to provide support in terms of crisis may need to be incorporated into emergency planning arrangements.

**Technology**

In the context of touch-free technology, a vast range of supports that can be used in social care settings is constantly under development. These include systems that can sustain people’s independence and enable ‘age in place’ such as:

- **Telecare** – including personal alarms, sensor and activity trackers, memory aids
- **Telemonitoring** – wearable or implanted technology that can monitor blood pressure, heart rate etc.
- **Telemedicine** – phone or video contact between health and social care professionals and service users
- **Digital records**
- **Automated triage technology** that rely on algorithm-led apps and devices to track needs

Madurai Elavarasan and colleagues (2020) look to how technology can be used and specifically explore AI for diagnosis and treatment, machine learning to process electronic patient data to inform management decisions in healthcare and how supply chain management (medication, PPE etc.) can be improved using technology.

There is some good advice available about managing a range of conditions remotely, including Eccleston and colleagues’ discussion about distance assessment and treatment with technology for chronic pain (Eccleston et al., 2020) which for many will be exacerbated by COVID. They present evidence for the efficacy and harm of telemedicine and digital
interventions and set out some practical recommendations for the rapid introduction of remotely supported pain management including:

- Understanding the technology options
- Complementary resources
- Reinforce positives
- Experiential learning
- Setting goals
- Being flexible

The use of pulse oximeters to measure oxygen levels are recommended for use in multi-patient settings to aid decision-making but are not a substitute for clinical assessment (Palmer, 2020). They can be useful in triaging potentially hypoxic patients in the home or in GP settings and help determine whether further assessment is required. The skills and equipment for healthcare staff to measure heart rate, blood pressure and pulse oximetry should be made and training provided to enable this to be done competently (British Geriatrics Society, 2020).

Banskota et al. (2020) assessed 15 different Smartphone Apps targeted at older adults that could help reduce social isolation and help lockdown residents in care homes or assisted living facilities stay connected with family members and that promoted physical and mental wellbeing. They included common apps for social networking such as FaceTime and Skype, apps, food and drink apps that could offer no-contact delivery options.

However, technology cannot replace the significance and importance of human contact nor meet every care need of individuals accessing social care services. How technology is used to reduce physical contact to allow time for social and therapeutic interactions could be prioritised.

**Ethics**

Having a robust ethical framework for decision making is always important in social care but, in difficult circumstances when there is a need for relatively rapid decision making and a lack of clear evidence to inform choices, it is crucial.
On 19th March 2020, the Department of Health and Social Care (2020a) in England produced *Responding to COVID-19: the ethical framework for adult social care*. It asserts that “Equal concern and respect should be given to all individuals, their families and carers, and communities, as well as the professionals and volunteers that we will be relying on to ensure the delivery of our services and ambitions.” (p. 2) It sets out eight key ethical principles that should be considered, alongside existing professional codes of conduct and the wider legal and policy context, to inform decision making. It also acknowledges that “Where resources are constrained and there are surges in demand, it may not be feasible to consider all the principles...Each principle must be considered to the extent possible in the context of each circumstance with appropriate risk management and considerations of individual wellbeing, overall public good and available information and resources.” (p. 3) The principles are:

1. “Respect. This principle is defined as recognising that every person and their human rights, personal choices, safety and dignity matters.

2. Reasonableness. This principle is defined as ensuring that decisions are rational, fair, practical, and grounded in appropriate processes, available evidence and a clear justification.

3. Minimising harm. This principle is defined as striving to reduce the amount of physical, psychological, social and economic harm that the outbreak might cause to individuals and communities. In turn, this involves ensuring that individual organisations and society as a whole cope with and recover from it to their best ability.

4. Inclusiveness. This principle is defined as ensuring that people are given a fair opportunity to understand situations, be included in decisions that affect them, and offer their views and challenge. In turn, decisions and actions should aim to minimise inequalities as much as possible.

5. Accountability. This principle is defined as holding people, and ourselves, to account for how and which decisions are made. In turn, this requires being transparent about why decisions are made and who is responsible for making and communicating them.
6. Flexibility. This principle is defined as being responsive, able, and willing to adapt when faced with changed or new circumstances. It is vital that this principle is applied to the health and care workforce and wider sector, to facilitate agile and collaborative working.

7. Proportionality. This principle is defined as providing support that is proportional to needs and abilities of people, communities and staff, and the benefits and risks that are identified through decision-making processes.

8. Community. This principle is defined as a commitment to get through the outbreak together by supporting one another and strengthening our communities to the best of our ability.” (pp. 3-7)

On 5\textsuperscript{th} June, the Department of Health (2020a) in Northern Ireland produced the more detailed COVID-19 Guidance: Ethical Advice and Support Framework. It specified that:

- “This guidance and framework must be interpreted using a rights based approach taking into account as a minimum the principles of: respect; fairness; minimising harm; working together; flexibility; keeping things in proportion; reciprocity and good decision-making.
- Whilst the overarching ethical aim is to provide the greatest good for the greatest number, in situations where demands are high and resources finite, each individual case should be weighed on its merits. There are no blanket exclusions.
- The important underlying principle of compassion should be applied. In every instance, the desire to maximise the benefits to the population must be balanced with the duty to care for each individual and to treat others as we would wish to be treated.” (p. 5)

Although these ethical frameworks are positive and helpful, it is still necessary at times, in situations where information is limited, there is immediate urgency and there may be tensions between different rights and principles, for decisions to be made that are difficult and are a matter of trying to get the best balance possible. This is particularly complex when decisions to protect some people’s rights, health and social wellbeing may risk infringing the rights, and possibly the health and social wellbeing of others but, as the COVID-19 Guidance: Ethical
"Advice and Support Framework" states, these decision making processes should always be “fair, open and compassionate.” (p. 4)

It is also important to acknowledge that the range of measures to attempt to prevent and reduce the risk of COVID-19 have involved considerable infringements of human rights that have disproportionately affected some groups. Parliament’s Joint Select Committee on Human Rights provided a helpful summary of the issues on 21st September: “The central aim of the Government’s response to the Covid-19 outbreak in the UK has been to protect lives. The right to life is protected in law in Article 2 of the European Convention on Human Rights. This requires the state to take appropriate steps to safeguard lives. However, inevitably, attempts to save lives through government actions including the restriction of movements, gatherings, and school closures have engaged numerous other rights. Many have experienced the widest and deepest set of government interferences with their rights in their lifetimes.

In the most recent advice issued by ADASS (ADASS, 2020) has applied a human rights perspective to preventing infection and essential visiting in care homes. They make the following recommendations to local authorities:

- “work to support care providers ensure they are not applying ‘blanket bans’ on visiting
- Support care providers to develop proportionate guidance that balances risks of infection, with rights to private and family life
- Be conscious of the unintended consequences that can arise as a result of restrictions being applied. (For example, families making decisions to take a loved one home at the end of life, is likely to result in a higher demand for community based support.)
- Support providers to ensure that visiting policies use a dynamic risk assessment process, which take into account people’s personal circumstances, as well as the vulnerability of residents in the care home and the home’s actual environment
- Support providers to develop visiting policies that ensure people – residents and families – having full information about the risks and benefits of visiting versus not being visited and seek explicit consent to any restrictions.” (p. 4)

Some groups have been particularly at risk from Covid-19. In order to ensure respect for the right to life it is crucial to ask whether the steps taken have done enough to protect the lives
of those most vulnerable to the disease. The death rates for older people and those from black, Asian and ethnic minority groups amongst others have been startlingly high in comparison to other groups. The allocation and prioritisation decisions for personal protective equipment (PPE) have been, and will continue to be, crucial, in order to protect those most at risk. These decisions must be evidence-based and non-discriminatory.

In October 2020, Amnesty International’s report *As if expendable* identified a number of concerns about the UK Government’s decisions in relation to how people in care homes had been protected, especially at the beginning of the pandemic. This included: mass discharges from hospitals to care homes; insufficient guidance and supply of PPE; inadequate assessment of care homes’ capacity and emergency planning; insufficient testing; the inappropriate imposition of Do Not Attempt Resuscitation orders; restrictions on access to hospital; and suspension of oversight and governance procedures. Most of these issues have subsequently been addressed, at least to some extent, but are still important to acknowledge.

There has been a disproportionate impact of some of the measures taken to stop the spread of the disease on certain people in our society, such as children whose right to education was engaged by school closures and those in detention with autism and/or learning difficulties who were denied family visits during this time. This balancing act is a difficult one, but it is vital that the Government can justify the steps it has taken including the necessity and proportionality of interferences with rights through the measures taken. Assessments of the proportionality of measures must be up-to-date, based on the latest scientific evidence, and formulated as a result of a precautionary approach to minimising overall loss to life. Importantly, the Government must be transparent in justifying its decision-making, including in explaining how it has balanced competing interests and the evidence on which the balancing decision has been made.” (p. 1)

As Sabatello et al. (2020, p. 1523) have highlighted, the context of COVID-19 has raised some very difficult issues but “responses to the pandemic must be bound by legal standards, principles of distributive justice, and societal norms of protecting vulnerable populations...to ensure that inequities are not exacerbated, and should provide a pathway for improvements to ensure equitable access and treatment in the future.”
It is interesting and important to try to understand and learn from the process of evolving decision making which did appear to initially prioritise protecting Intensive Care Beds, and hospitals more generally, without due consideration of what the possible consequences could be for social care settings, especially care homes. Daly outlines the systemic/structural and political and socio-cultural factors that contributed to the ‘slow, late and inadequate COVID-19 policy response for care homes’ (Daly, 2020, p. 8).

**Figure 2:** Key lines of explanation

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**Specific service user groups**
There are also a number of sources of guidance and evidence of general and specific measures for social care services although these tend to be focused on a specific service user group. They include:
Older people
Aging and comorbidities increase the susceptibility to viral infection and epidemiological studies have also identified gender differences in incidence and mortality with males experiencing higher mortality than females, which increases with advancing age (Conti & Younes, 2020). Common symptoms across age are fever, cough and sputum, less common symptoms were runny nose, headache and diarrhoea. In older patients, more dyspnea (shortness of breath) and tachypnea (abnormally rapid breathing) was higher in non-survivors and fever and headache more common in survivors (L. Wang et al., 2020). The British Geriatrics Society also highlight that COVID-19 cases in care home residents often manifest in non-respiratory symptoms including worsening or new confusion or diarrhoea (Palmer, 2020). Wang and colleagues also identified that atypical presentation in older adults may include delirium, low-grade hyperpyrexia, and abdominal pain. Routine blood tests are widely used in diagnosing and monitoring patients but significant differences in patients were found in survivors compared to deceased older patients.

Perrotta and colleagues (Perrotta et al., 2020) highlight the additional risks faced by older people in long-term care, and advise these measures must take account of the impact restrictive measures can have psychologically on a patient who may feel “abandoned, frightened, and perhaps not even able to understand the situation or remember the safeguard procedures” and can increase the risk of depression and delirium in some patients. This is particularly relevant for patients with cognition problems or dementia. This situation can also cause trauma, lead to accelerated cognitive decline and increased risk of suicide. In China, guidance on providing psychological and psychiatric support has been issued including provision of free counselling services for elderly patients with dementia and their caregivers. The authors recommend an individualised approach for treating older people.

Intellectual Disabilities
People with intellectual disabilities may be more vulnerable to coronavirus infection because of the higher rates of physical and mental health co-morbidities and an ongoing disparity in healthcare provision (Alexander et al., 2020). NICE published guidance on the care and treatment of people with COVID and recommended the use of the Clinical Frailty Score in clinical decision-making for critical care treatment for complications. This score was designed
for use in the elderly and is a subjective measure of help needed for daily living tasks, concern about applying this framework in ID patients was raised and NICE updated their guidance to specify that this scale should not be used for patients with ID, ASG and long term disability and recommended an individualised assessment of frailty and needs. Specific concerns were also raised in England about possible inappropriate use of do not attempt resuscitation (DNAR) or cardiopulmonary resuscitation (DNACPR) orders where individuals had IDs or autism and NHS England sought to clarify that IDs should never be a reason for issuing at DNACPR order. Following Public Health England guidance, many people with IDs should be identified as being at risk or very high risk of severe illness from COVID-19. Cuypers and colleagues (Cuypers et al., 2020) review learning from the 2017-18 flu epidemic in the Netherlands where mortality in the ID population was three times higher than the general Dutch population and excess mortality rates were different for people with and without ID across sex, age and underlying causes of death and these potential risk factors could not be drawn from general population statistics. They conclude that high quality data collection in this population group is essential detect patterns in infection and mortality. Alexander and colleagues set out a range of guidelines for providing care and treatment for people with IDs in both community and inpatient settings. These include:
Figure 3: Reducing risk and protecting individuals with IDs during the COVID-19 pandemic

- Hospital passports – ensure these are up to date and include physical health problems including risk factors such as smoking history, heart disease history, respiratory problems, BMI and other conditions such as mental health problems, dysphagia, sensory problems. All people with disabilities are entitled to reasonable adjustments and details of these should be included in the hospital passport.

- Individual COVID-19 care plans – an individual plan should be prepared for each person in your care, setting out specific risk factors and their associated needs. Issues associated with diagnostic overshadowing, views of parents/family members/carers, reasonable adjustments, communication needs, specialist mental health support, anticipatory care plans, any end of life discussions should be included. Associated strategies for hand hygiene, infection control, social distancing and isolation should also be included.

- The role of families and carers – clinicians should be active in explaining hygiene issues. Appropriate precautions and protocols should be developed for monitoring symptoms and providing isolation if COVID is contracted. Many people with IDs will have difficulty explaining how they are feeling, families and carers should be vigilant
about changes in presentation. Tools such as the Distress and Discomfort Assessment Tool (https://www.stoswaldsuk.org/how-we-help/we-educate/education/resources/disability-distress-assessment-tool-disdat/) can be employed by carers to record symptoms of distress

- Decision-making capacity – questions of capacity may arise regarding someone’s ability to make a decision to isolate/take appropriate action and this may involve an assessment of capacity. Routine and structure may be important and protecting individuals from infection while maximizing quality of life will be require a balanced approach. Community learning disabilities teams should work with families, and where necessary, consider issuing letters to families, and carers that can be shown to the police or public health officials as appropriate e.g. engaging in exercise/activities that may require multiple support staff).

- Social distancing – strict social distancing guidelines should be followed. Staff should wear PPE and consideration given to balance the needs to reduce social isolation and regular activities and routines.

- Ceiling of care/treatment escalation plans - a ceiling of care/treatment escalation plan should be developed to document care planning. The purpose of this plan is to identify the wishes of the individual, their families and their carers in the case of a deterioration of physical health due to developing COVID-19. It is to provide guidance to the attending clinicians and should not replace clinical judgment.

- Mental health and challenging behaviour – the current restrictions will likely to have caused distress for many people with IDs which may lead to a worsening of mental health symptoms and it will be important to monitor behaviour and mental state. Community learning disabilities teams will have a proactive role in supporting families at home and where necessary video-conferencing training could be provided to homes or residential settings. Services must recognise the importance of normal human emotional expression during times of stress and this should not be pathologised.

- Medication - psychotropic medications should be reviewed in accordance with NICE guidelines and attention paid to side effects such respiratory depression and cardiac effects.
Mills and colleagues (Mills et al., 2020) describe their approach to outbreak management in a healthcare organisation for intellectual and development disability in the US. A multi-disciplinary team of medical, clinical, compliance, risk management, human resources, legal, communications and operations leaders formed an Outbreak Preparedness and Action Committee. Standard prevention and control measures were introduced including comprehensive training, additional cleaning, streamlining procurement and distribution of PPE, employee symptom screening/testing and limiting visitors. Of the 11,540 individuals in their care, 122 with IDD developed symptoms and were placed in quarantine. In each case, a nurse assessed the individual’s clinical stability, worked with local and regional operational leadership to evaluate whether the patient would be able to maintain isolation protocols along with practical considerations that the home could offer. They conclude that people living in congregate care settings can benefit from a coordinated approach to infection control, case identification and cohorting and complying with this guidance, only 15 people required hospitalisation.

Moving beyond the immediate impact of the pandemic, the community network of support for people with ID must continue to be adequately funded to continue to play their valuable role which includes the recognition of the value of the workforce typically characterised by low pay and poor benefits (Thompson & Nygren, 2020).

People with disabilities
In July, Ireland’s Antimicrobial Resistance and Infection Control Team (AMRIC, 2020) presented guidance on support safe care and ‘NOT creating barriers to care’ within disability services during the outbreak which stressed the importance of individual risk assessment and balancing the rights and care of people with disabilities. They set out processes to manage the risk of infection using standard precautions regarding hygiene and use of PPE and increasing staff awareness of early recognition of symptoms in both service users and staff. Specific guidance was then offered in respect of residential services and day services and some of the practical implications of supporting people with intellectual disabilities. They were keen to support ongoing continuation of disability service activities and supporting both visitors to facilities, home visits and continued day activities where possible. Practical considerations around visiting included:
• Pre-arranged times
• 2 named visitors may visit but only one visitor per person at a time
• Limit total number of visitors in each area at each time (generally 2)
• Consider time that reduces footfall
• Apply practical application to smaller house settings with individual and family needs

During an outbreak, all but necessary and pre-arranged visiting (e.g. but not limited to end of life) will be suspended and permitted visitors will have their temperature checked on arrival.

People experiencing homelessness
Boston’s Health Care for the Homeless Program (Baggett et al., 2020) introduced a city wide care model for this vulnerable group. The approach included symptom screening at shelter front doors, accelerated testing at pop-up sites, and facilities to isolate and quarantine symptomatic people. A comprehensive track and trace system was also introduced. Following a large outbreak in one shelter 3 weeks into their operational programme, several adaptations were made involving a reduction in symptom screening (given the high number of asymptomatic people), contact tracing and quarantining were phased out as it was assumed that exposure was universal in the shelters and isolation and management venues were rapidly expanded to accommodate positive cases. Universal testing continues to be the most effective way to mitigate for infection in this vulnerable group. Benavides and Nukpezah (Benavides & Nukpezah, 2020) illustrate the importance of government-wide approaches to helping vulnerable populations in the current crisis. While central government can provide support through social security and diverting economic support to regional institutions, delivery at local level must be managed at devolved level and incorporate the third sector and other organisations to ensure that help is directed quickly and effectively.

Mental health
Identifying groups that may be more vulnerable during isolation and quarantine should be considered. A cross-sectional study of two psychiatric emergency rooms in Lombardy, Italy (Capuzzi et al., 2020) found that people living in psychiatric residential treatment facilities (odds ratio [OR] 1.78, 95% CI 1.05–3.01; \( p=0.031 \)), cannabis addiction ([OR] 1.76, 95% CI 1.06–2.90; \( p=0.028 \)) and a diagnosis of obsessive compulsive disorder ([OR] 10.94, 95% CI 2.29–
52·27; \( p=0.003 \) were all statistically significant predictors of emergency psychiatric consultations during lockdown. Concern also has been raised in respect of maintaining treatment and monitoring the physical health needs of mental health service users with medical comorbidity, for example, respiratory diseases are more common in patients with schizophrenia than the general population (X.-H. Wang, Yu, Zhu, Yin, & Cui, 2019). Cui and colleagues (Cui, Wang, & Wang, 2020) recommend the development of AI techniques to improve online consultations and using large data analysis and algorithms to improve policy making. A telephone survey of psychiatric patients in India (Muruganandam, Neelamegam, Menon, Alexander, & Chaturvedi, 2020) showed low levels of knowledge about COVID-19 symptoms, three quarters of the 123 people interviewed were not worried about contracting the virus and 20% had stopped taking their medication highlighting the importance of appropriate and targeted public health messaging and ongoing supervision during the crisis.

**Forensic mental health settings**

The risks in other mental health populations may also not have been considered fully. Simpson and colleagues (Simpson et al., 2020) conducted a literature search on pandemic/outbreak management in forensic mental health settings over a 20 year period (2000-to date) and found some useful guidance but no published experience of implementing the recommended approaches. They describe their experience of responding to outbreaks and the development of isolation units within two forensic mental health units and conclude that assertive testing, cohorting and isolation units are appropriate responses within the challenges of secure settings. Patients with psychiatric illness may be particularly vulnerable to airborne infection, they may not be able to consistently follow behavioural advice, often live in close contact with others or in places where infection control is more challenging such as shelters, group homes and other residential facilities. Inpatient psychiatry settings are generally designed around communal spaces.

**Palliative care**

Analysis of death data in England and Wales found that in the first 10 weeks of the pandemic, deaths in care homes increased by 220% compared to home (+77%), hospital (+90%) and hospice (-20%) deaths (Bone, Finucane, Leniz, Higginson, & Sleeman, 2020). Estimates that 44% of COVID-19 deaths occurred among people who would have been in the last year of
their life. The authors stress the importance of ensuring the availability of integrated palliative care in severe COVID-19 settings in both the community and hospitals. Harasym et al. (Harasym et al., 2020) conducted qualitative interviews with community-based and palliative care specialist doctors who visit care home facilities in Alberta, Canada. They explored the barriers and facilitators to providing optimal end of life care within these settings. Motivation barriers included families’ lack of frailty knowledge, unrealistic expectations and emotional reactions to grief and uncertainty. Practical barriers involved a lack of symptom assessment tools, lack of palliative care knowledge, training and mentorship. A lack of dedicated spaces for death and bereavement were also a problem, alongside inadequate staffing and mental health and spiritual services to support the residents.

**Care home settings**

**Definition**

Care homes provide accommodation and personal care for people who need extra support in their daily lives. Personal care might include help with eating, washing, dressing, going to the toilet or taking medication. Some care homes also offer social activities such as day trips or outings (Age UK, 2020). There are two main types of care home: residential homes and nursing homes. Residential homes provide accommodation and personal care, nursing homes also provide personal care but there will always be 1 or more qualified nurses on duty to provide nursing care. Some nursing homes offer services that may need more care support including severe learning disabilities and/or physical disabilities or complex medical conditions (NHS, 2020).

**International developments and evidence**

A systematic review (Salcher-Konrad et al., 2020) of the findings of 49 international studies reported a wide variation in incidence rates (between 0.0% to 71.7% among residents, and 0.4% and 64.0% among staff at affected homes). It acknowledges that it is early evidence but identifies four measures which may have worked in containing COVID-19 outbreaks in care homes:

- “Early detection and rapid response after detection of index case;
• Systematic testing of all residents and staff: high prevalence of asymptomatic and presymptomatic cases that would not be detected by a) symptoms screening, and b) one-off testing (if infection has already spread beyond index case);
• Moving high-risk contacts of cases out of the facility; and
• Isolating cases by removing them from the facility or creating separate wards within the facility.” (Salcher-Konrad and Comas-Herra, 2020, p. 1)

The World Health Organization has developed general guidelines for patient management in long-term care settings (World Health Organization, 2020). The main recommendations include:

• produce a training protocol and nursing management;
• assure well-defined rules for containing visits and social distancing;
• provide adequate resources to contain the spread of the infection, in any case, ensure good palliative support therapy if the residents are infected;
• Provide support for health care workers and caregivers, guaranteeing physical, psychological, and mental security to work well, preventing excessive anxiety and worries.

In Australia, the Royal Commission into Aged Care Quality and Safety’s special report on Aged care and COVID-19, published in September 2020, mentioned a number of initiatives to facilitate visits, contact and quality of life. These included: arrangements to coordinate and screen visitors; walking and exercise programmes; staff within facilities to promote and improve communication between residents and families; training programmes for family members in the use of PPE and how to promote the safety of visits.

Another international example identified in the rapid review was from the Department of Health in the US state of Minnesota (Arling and Arling, 2020) which supplied all care homes with a comprehensive COVID-19 Toolkit (containing guidelines for contact tracing, risk assessment, protective equipment, testing, cohorting, and family visits) and set out clear five point plan for its approach:

1. Expand testing for residents and workers in long-term care facilities.
2. Provide testing support and troubleshooting to clear barriers faster.
3. Get personal protective equipment to facilities when needed.
4. Ensure adequate staffing levels for even the hardest-hit facilities.
5. Leverage our partnerships to better apply their skills and talents.

(Minnesota Department of Health, 2020, p. 8)

There may also be potential learning from research and initiatives focused on in-patient settings for example Angelino et al. (Angelino, Lyketsos, Ahmed, Potash, & Cullen, 2020) describe the rapid design and implementation of a regional inpatient psychiatric unit for patients testing positive for asymptomatic SARS-CoV-2. Using a recently decommissioned unit with some medical facilities (oxygen and suction available in all rooms) and a sally port (air-lock type) entrance with two sets of double doors to provide entry space for visitors and space to prepare before entry into the unit. A number of adjustments were made:

- They created a negative pressure environment to reduce droplet-borne contagions and used the sally port as a place to put on/take off PPE worn inside the unit (the air-lock doors enabled this)
- Staff are rotated every 2 hours to avoid lengthy shifts wearing full PPE, and the nurse to staff patient ratio is 2:6 with one dedicated psychiatrist and some use of tele-psychiatry
- iPads in strong protective cases are used for video visits, watch videos or play games
- Anything other than 1:1 therapy is a challenge
- Vital signs are monitored every 6 hours

A number of similar units have now been developed across the States.

In Canada, while mortality rates in care homes are far higher than in the general population, there has also been variation in deaths at a regional level in long-term care (Liu et al., 2020). Examination of the difference in rates between Ontario (higher) and British Columbia (BC) concluded that long-term care homes in BC were in a better baseline position at the outset to prepare for the pandemic. Demonstrating greater co-ordination between long-term care, hospitals and public health, higher levels of funding with more care hours for residents, fewer
shared rooms, more non-profit facilities and more comprehensive inspections all contributed to lower mortality rates. Long-term care facilities in BC were also quicker to respond and announced a single-site LTC work policy, deploying specialist teams to LTC homes with outbreaks, universal mask use and reducing the threshold for declaring an outbreak. In contrast, Ontario provided LTC with operational flexibility allowing a reliance on contract staff and volunteers that could have compromised safety and increased transmission rates. Recommendations include:

- All care homes must have comprehensive plans for preventing and managing infectious disease outbreaks
- Regular and unannounced inspections should be conducted
- Care homes must be provided with adequate PPE and everyone who comes into contact with residents should be adequately trained in its use and infection control measures
- Staff must have the option of full-time work with equitable wages, benefits, pandemic work supports including sick leave and mental health support
- One-site work policies should be sustained beyond the pandemic
- All home must have the capacity to isolate residents in the event of an outbreak, if this isn’t possible they should be moved to a hospital or another setting where isolation is feasible
- Plans should ensure that technology and other means facilitate continued connection between isolated relatives and loved ones including visits from designated family members supported with PPE and education about infection control and prevention.

In the Netherlands, a mixed-methods cross-sectional study was conducted to explore the reintroduction of visiting in nursing home settings. The results, from a representative sample of 26 nursing homes, suggested that the benefits of the additional personal contact between residents and family were very positive for wellbeing, that compliance with guidance was at least sufficient, and that there were no additional infections reported.

In Canada, there have been some restrictions introduced to limit care workers to working at one site. Duan et al. (2020) reported that this may have a dramatic impact on the availability
of staff as nearly a quarter of workers had been working at more than one site. British Columbia has introduced a centralised approach to manage staffing shortages but Duan et al. suggest in the longer term, better working conditions for care workers, will be needed.

Chen and colleagues’ (2020) analysis of federal and state policy response in the US categorises these into four key areas:

1. Preventing virus transmission – including visitation restrictions, PPE guidance and testing requirements
2. Expanding facilities’ capacities including the expansion of physical space for isolation purposes and the workforce
3. Relaxing administrative requirements
4. Reporting COVID-19 data

Highlighting the importance of reporting and monitoring data cannot be underestimated. Recommending that data should be used to systematically identify and help facilities that are struggling and provide immediate assistance to facilities facing an outbreak. This support could be increasing the number of health care personnel, providing sick leave for staff, additional equipment and access to isolation spaces and training. This approach would also be relevant to other residential facilities including supported living environments. As with the Canadian example, this could also provide the opportunity to review outdated policies and introduce procedures that could improve patient outcomes such as the use of advanced practitioners and professionals who specialise in nursing home practice (Ryskina, Yuan, & Werner, 2019). In a similar vein, analysis of registered nurse (RN) staffing levels in Californian nursing homes (Harrington et al., 2020) had a direct relationship coronavirus infection levels; nursing homes with total RN staff levels under the recommended minimum standard (0.75 hours per resident per day) had twice the probability of having COVID-19 infections.

The European Centre for Disease Prevention and Control has produced the fifth update in their guidance for *Infection prevention and control and preparedness for COVID-19 in healthcare settings*, key messages include:

- The mainstays of infection prevention and control are administrative measures, physical distancing, hand hygiene, and appropriate use of PPE
- Staff, visitors and patients should apply physical distancing, hand hygiene and respiratory hygiene, and wear face masks when physical distancing is not possible.
- In areas with community transmission of COVID-19, frontline healthcare workers should wear medical face masks when caring for patients or residents during all routine activities.
- Gloves and gowns are recommended when there is a risk of exposure to body fluids and in settings in which contamination is presumed to be high, such as where aerosol-generating procedures are performed. When used, gloves and gowns should always be changed after each patient contact.

Other aspects of care

Nutrition
Holdoway raises the importance of nutritional management in patients during and following COVID illness (Holdoway, 2020). COVID symptoms including respiratory issues, loss of taste of smell, fever and fatigue and weakness can affect dietary intake and social distancing, self-isolation and reduced support can limit assistance with food preparation, carer support at mealtimes, limit shopping and prevent social interactions around food. Patients recovering from COVID are likely to have additional nutritional needs and underlying malnutrition could impair the immune system and leave people at risk of other infections. Recommending screening for malnutrition is recommended and a three patient leaflets have been produced to support patients and their carers to access dietary advice. Guidance on the use of oral nutrition supplements is also discussed.

Learning from the first wave of infection
The response in care homes differed across the UK nations and Northern Ireland had the lowest proportion of excess care home deaths at this early stage of the pandemic (https://www.belfasttelegraph.co.uk/news/northern-ireland/ni-had-uks-lowest-proportion-of-excess-care-home-deaths-early-in-pandemic-39532733.html).

Planning
The first recorded UK death in a care home was reported on 20th March and deaths peaked in the week ending 24th April. Guidance for reducing transmission in residential settings was issued on 13th March and prior to this care homes were considered low risk environments.
English legislation and guidance did not allow for care homes to reduce capacity which may have accelerated infection and mortality rates. We also know that throughout the UK, hospital patients were discharged to care homes without being tested. Delays to the issue of specific guidance and policy will have played the role in tackling infections. An action plan for social care was issued on 15th April and, “Reading the action plan suggests that at that stage the UK policy was in control mode rather than prevention mode. Indeed, one could question whether there ever was a prevention phase for care homes” (Daly, 2020, p. 5).

Testing
By mid-April, testing was offered to social care staff but the number of tests were limited to 30,000 and on the 11th May a separate digital portal was established for care home testing. “What is clear is that the four main opportunities for prevention of transmission to care homes – through early lockdown of care homes, the non-transferral of COVID-19 and other patients from hospitals, measures to monitor and test, measures to prevent staff from spreading the virus – either came too late or were missed altogether.” (Daly, 2020, p. 5)

PPE
There is evidence that care homes were not prioritised for PPE provision and the first care-home specific guidance was delayed to mid-May before that identified supply routes and advice on the use of PPE. In contrast, Northern Ireland were able to mobilise the supply and distribution of PPE quickly.

Prevention and infection control
Evidence is also emerging of the unintended negative impact of restrictions. In a report published in July, Suarez-Gonzalez (2020) summarised the findings from three studies focusing on people with dementia, in community settings, which highlighted the negative impact of confinement and isolation on their mental and physical health. That summary acknowledged that there was little available research evidence on the impact on those in care home settings but it was anticipated that the restrictions on visitors would have a negative impact on the health and wellbeing of residents with dementia.
It has also been argued that effective infection control measures can be put in place to facilitate visiting. In an open letter to the Nursing Times on 16th October 2020 a group of people involved in infection prevention and control stated “Restrictions are being imposed in relation to COVID-19 across too many nursing, care and residential homes in the UK and beyond, in the name of infection prevention and control... it is possible to both protect people from infectious disease through infection prevention and control while enabling safe, compassionate, human interaction, including physical contact between loved ones.” (Storr, 2020, p. 1)

The Health Foundation (2020a) have made the basic but important point that COVID-19 can be introduced into care home settings by staff, visitors and residents (coming from community and hospital settings). This reinforces the need for effective testing, especially due to the problem of asymptomatic infections among care home staff and residents (Comas-Herrara, 2020).

In England, regular testing of care home staff (weekly) and residents (monthly) did not begin until early July 2020 (Department of Health and Social Care, 2020b). The Social Care Sector COVID-19 Support Taskforce: final report, advice and recommendations (Department of Health and Social Care, 2020c) published on 18th September 2020 highlighted that an important risk in outbreaks of COVID-19 is the movement of staff and referred to the Vivaldi research project (published on the 3rd July) which had reported that homes were more than twice as likely to have an outbreak if there was staff movement (to other work settings) (Department of Health and Social Care, 2020d).

The Department of Health and Social Care’s (2020e) ‘Adult social care: our COVID-19 winter plan 2020 to 2021’, for England, which was published on 18th September 2020, sets out commitments to ongoing testing, free PPE, flu vaccination, a new Adult Social Care Dashboard to present up to date data, and plans for how local outbreaks should be managed. In August 2020, the Department of Health and Social Care also set up a webpage at https://www.gov.uk/guidance/overview-of-adult-social-care-guidance-on-coronavirus-covid-19 which brings together all the relevant and up to date guidance on social care. This includes guidance on: infection control; supporting staff members at higher risk from COVID-19;
reducing contact between staff; reducing workforce movement between care homes and minimizing risk for care workers; testing; financial support; what should be done to manage any outbreaks; caring for patients discharged from hospital or another social care facility; visiting; managing care workers; securing PPE; help for holders of direct payments, commissioners and care providers; information for social care providers on mental health and wellbeing and financial support; information for unpaid carers; and the COVID-19 ethical framework for adult social care.

In an evidence paper for the Scientific Advisory Group for Emergencies (SAGE) on 21st September 2020, the potential impact of two of the possible measures of most direct relevant to care home settings was summarised (Figure 4):

**Figure 4:** Measures aimed at high-risk settings e.g. hospitals and care homes

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Prohibition of visitors to hospitals and care homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on COVID transmission</td>
<td>Low impact on transmission (high confidence)</td>
</tr>
<tr>
<td>Direct impact on COVID deaths &amp; severe disease</td>
<td>Low impact on deaths and severe infections as most introduction of care homes is probably via staff. Nevertheless, if infection does get into care homes the impact can be devastating. Moderate confidence. Testing of visitors is a potential mitigation option.</td>
</tr>
<tr>
<td>Non-COVID impact (incl. social and psychological; exlc. Economic)</td>
<td>Moderate to high. Substantial social and emotional impact on residents and, for end of life patients in particular, relatives. Could be mitigated by allowing very limited number of visits.</td>
</tr>
<tr>
<td>Implementation issues</td>
<td>Consider differentiated implementation by type of care and ability to support safe visiting, e.g. maternity vs A&amp;E vs ICU. Clinical contexts differ in their preparedness/capacity to support infection control with respect to visitors.</td>
</tr>
</tbody>
</table>

Measures aimed at high-risk individuals

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Shielding of high-risk individuals in their homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on COVID transmission</td>
<td>Low impact on transmission (high confidence)</td>
</tr>
<tr>
<td>Direct impact on COVID deaths and severe disease</td>
<td>Moderate impact on deaths and hospitalisations. Low confidence. Impact of shielding from Spring wave difficult to assess.</td>
</tr>
<tr>
<td>Non-COVID impact (incl. social and psychological; exlc. Economic)</td>
<td>Moderate to high. Substantial social and emotional impact affected individuals. Significant equity issues re. age, BAME, disability; this includes extended kin networks and intergenerational households.</td>
</tr>
<tr>
<td>Implementation issues</td>
<td>Substantial support (financial, social, informational, emotional) needed for people with limited support networks, low financial resources, other needs. Adherence, health and trust will suffer if people are not given the resources</td>
</tr>
</tbody>
</table>
they need to adhere safely. Equally, support is needed for those supporting, the shielders in terms of avoiding exposure and getting tested.

Consider the role of language around vulnerability to avoid experiencing shame or stigma due to need to shield.

On 23rd September, the Social Care Working Group (SCWG) provided the Scientific Advisory Group for Emergencies with an update paper on the situation in care homes. This perhaps the most directly relevant, up-to-date summary of the evidence relevant to measures in care homes and so some of the key sections are included below:

1.1...Multiple interventions have now been implemented in care homes nationwide including testing and isolation on discharge from hospital, IPC [Infection Prevention Control] training and free PPE supplies for the winter period, cohorting of residents and of staff, wage payment of staff to encourage self isolation, visiting policies and daily operational data reporting through Capacity Tracker...

2.1 Much of the information needed to support current policy to reduce morbidity and mortality in care settings is unpublished. The SCWG has therefore convened an expert virology, epidemiology and microbiology symposium to align initial unpublished findings across all domains and to support information exchange. The initial meeting on 21/09/20 included input from colleagues in academia, PHE/Easter Six study & Hospital discharge study, COG UK/East of England study, UCL/Vivaldi study and HPS/Scottish Care Homes Study...

4.2 Retrospective genomic analysis and seropositive studies in care homes therefore find evidence for multiple routes of virus ingress to care homes, but are not systematic enough to quantify the relative frequency of different routes of ingress. Furthermore, these studies do not definitively rule out any mode of ingress so staff, visitors, visiting professionals, hospital discharges and new admissions and persistent infections may all contribute to the introduction of disease...

5.1 Future research [needed on]... How does the physical layout of a home influence transmission? Have homes that have cohorted residents onto different floors, been able to
arrest the spread of the virus? How elements of ventilation & heating impact on transmission potential...Surveys on behavioural aspects of controlling the virus are important, for example a qualitative study interviewing staff to get further insight into how ways of working have changed...

6.1 Visiting Recommendations to allow visitors to care homes within risk assessed parameters and based on local clinical judgement was made in June although many homes have continued to maintain closed doors. Isolation can however be harmful to residents, particularly where poor recognition or sensory deficit is present. Urgent work has commenced to try to develop a cost consequence model of the impact of disease ingress due to visitors (supplementary to other ingress), and the impact of stopping visitors for an extended period of isolation, using EQ-5D and ICECAP-O measures of quality of life...

6.4 Unpaid carers and PPE...Whether to supply PPE for unpaid carers is complex. It is highly likely that the use of masks, gloves, gowns and other PPE, together with behavioural infection control measures such as hand washing and physical distancing, will result in a decreased risk of coronavirus transmission between unpaid carers and cared for persons. The major caveat is that protective procedures must be properly instigated and consistently followed if they are to be effective. When using PPE unpaid carers should follow procedures recommended for domiciliary care workers. N95 masks offer much better protection than medical masks, and cloth masks/face covering may offer little or no protection, although giving a sense of security. Rather than it simply being a matter of the availability of PPE for carers that determines effectiveness, the behaviour of carers and cared for persons are major determinants of transmission.” (pp. 1-5)

This SCWG report from 23rd September also notes that new work has been requested on the risks for unpaid carers, specific service user groups and supported housing settings.

The most recent rapid review of the international evidence on the impact of visiting policies in care homes during the COVID-19 pandemic was published on 1st November and concluded:
• “We found no scientific evidence that visitors to care homes introduced COVID-19 infections, however during the peak of the pandemic most countries did not allow visiting and there are some anecdotal reports attributing infections to visitors before restrictions.

• There is increasing evidence that care home residents experienced greater depression and loneliness and demonstrated more behavioural disturbance during the period that included visitor bans.

• There is evidence of substantial care provision by unpaid carers and volunteers in care homes prior to the pandemic, hence visiting restrictions may have resulted in reductions in quality of care or additional tasks for care home staff.” (Comas-Herrera et al., 2020, p. 1)

The Department of Health’s COVID-19: Regional Principles for Visiting in Care Settings in Northern Ireland, published on 22nd September 2020, provides an overview of how the approach to care homes and visiting arrangements, has developed over time and the rationale for the current approach. As the international literature suggests, there is no one right, evidence based approach to these complex issues as they involve the balancing of different rights, perspectives and priorities and the best possible balance may vary over time, between areas and settings, even within families and between individuals. It is acknowledged that “that blanket visiting bans are contrary to the rights of both patients and their families and that failure to adopt an individualised approach to the safety of visits will breach the Article 8 rights of both the patients and their families” (Department of Health, 2020b, p. 4) but also that, given the potential consequences of infection, restrictions may be put in place, in specific settings, if based on a sufficiently rigorous risk assessment of all the issues involved at that time.

Fiona McMahon, Carer Involvement Lead in Northern Ireland for tide (together in dementia everyday) provided a powerful and balanced expression of these complex issues, “Carers are collectively and individually campaigning to be able to see their loved ones. No one wants to put anyone at risk and no one wants access at any cost. The ask is for their rights as carers and to protect the rights of the person with dementia that they love. Chat, social activities, interests and sharing those with people who love you, are all part of health and social care. Particularly
for someone with dementia; stimulation, familiarity and routine are essential to maintaining emotional and physical health.” (McMahon, 2020, p. 1).

As will be discussed later in this rapid review, COVID-19 has also increased the awareness and urgency of more fundamental questions about how social care is valued, funded and provided including the need to reconsider the role of the traditional care home approach.

**Day care**

**Definition**

Day care for adults typically involves planned activities for older or working age adults, to support them with important aspects of social, health, nutrition and daily living. Often run by social care professionals and volunteers they are usually delivered in non-residential, group settings and offer social and organised activities for adults who have care needs, who are at risk of social isolation, as well as providing a regular break to carers. Activities can include social, leisure, entertainment, educational and employment opportunities and often includes providing meals and other services such as hairdressing, chiropody and other health advice and support.

Day care services are for adults with many different support needs and may be specialised in the care they provide. Specific groups include:

- older people
- people living with dementia
- adults with learning disability and/or autism, brain injury, mental health problems and long-term health conditions.

**International developments and evidence**

The loss of, or reduction in, day care services during the COVID-19 crisis has been a huge challenge for people who use the services and their families and carers. The pandemic has increased social isolation, disrupted routines and educational/employment opportunities, affected support for personal care, and reduced interactions with healthcare services. It will also have affected the independence of many service users and those who care for them. The
general dilemma, as Chaturvedi (2020) has highlighted is trying to balance the potential infection control benefits of closing or restricting day care with the negative impact on the health, social and rehabilitative needs which were being met in these settings for the people using them and their carers. It is also not yet clear what the full unintended consequences have been from the reductions in day care for other aspects of social care.

Updated in October 2020, SCIE has produced a guide to *Delivering safe, face-to-face adult day care* offering practical advice and guidance to reopening facilities, controlling infection, PPE, managing transport and assessing risk (SCIE, 2020b). A free e-learning video-based course (https://www.scie.org.uk/e-learning/infection-control) is also available online targeted at care providers about the reducing the spread of infection.

Key considerations include:

- Undertaking a general health and safety of buildings
- Infection prevention and control for everyone (hand hygiene, avoid face/hands/eyes touching, hygiene around coughing and sneezing, offering hand and respiratory hygiene assistance with attendees
- Be familiar with test and trace protocols
- Remove unnecessary items and soft items/furnishings that are hard to clean
- Frequently touched surfaces
- 2 metre social distancing
- Planning for transport needs and arranging alternative family arrangements where possible and observing hygiene protocols to reduce risk
- The importance of ongoing risk assessment particularly regarding activities that may involve shared equipment and facilities and personal care

SCIE also presents practice examples including one from New Directions (Ireland) that demonstrates how to prioritise individual risk in service users using 4 different levels. This framework assesses individual risk and considers how much support an individual has, vulnerabilities in the family or carers, observation of noticeable decline in mental health presentation or an increase in behaviours of concern.
**Supported living**

**Definition**

Supported living are “schemes that provide personal care to people as part of the support that they need to live in their own homes. The personal care is provided under separate contractual arrangements to those for the person’s housing. The accommodation is often shared, but can be single household.” (Care Quality Commission, 2015)

**International developments and evidence**

Although much of the guidance and evidence for care home settings is also relevant to supported living settings, Dobbs et al. (2020) have provided some guidance specifically for supported living or assisted living (AL) as it’s referred to in the US:

- “Technology can be one solution to maintaining socialization and well-being within AL. AL administrators have reported using Google hangouts, Skype and Zoom video to facilitate family and resident daily communication. More staff time needs to be devoted to assisting with technology needs, especially for residents with dementia, as they do not have the cognitive capability to use this technology without assistance.

- States need to adopt protocols that limit the number of AL communities visited by home health care workers in a 14-day period during this pandemic to help reduce the spread of infection from one AL community to another. An adequate supply of personal protective equipment (PPE) needs to be available for home health care workers, including masks, gloves and gowns for each new resident they care for. Some AL communities across the country are housing direct care workers on-site and paying them bonuses so they can contain the spread of infection (Belanger, 2020). This may not be feasible for all ALs, but for those who can afford it, is worth considering.

- The implementation in AL of infection control programs for COVID-19 and educating staff about the importance of social distancing, handwashing and wearing PPE during each resident encounter is essential. Also important is increasing what workers are paid, given they are expected to care for highly vulnerable residents, in many cases without the PPE necessary because AL is not given priority.
• States agencies should develop a template for AL communities as well as nursing homes for a COVID-19 comprehensive emergency management plans (CEMPS) similar to those required for disaster planning" (pp. 336-339).

The Department of Health and Social Care (2020f) in England has also produced guidance for providers of supported living on 12th October. It provides a range of advice including:

• “Sharing staff between settings should be avoided to reduce the potential spread of COVID-19 from one setting to another. If a local risk assessment identifies service delivery issues caused by low staffing, then supported living and care/support providers can work with local authorities to establish plans for mutual aid, including limited sharing of the workforce.

• Local primary and community health services providers may support with the deployment of volunteers and agency staff where that is safe to do so and provided safeguarding measures are in place.

• Identify people who are clinically extremely vulnerable, and work with them, their families or advocates to explain issues related to guidance and make a joint decision on how they will be supported and on their accommodation and support needs. For example, when shielding advice is operational, a person who uses services may want to remain in their current home if they can be supported to ‘shield’ or they may wish/need to move to different accommodation that will enable them to ‘shield’ effectively...

• Infection prevention and control (IPC) measures include a hierarchy of controls designed to prevent harm and reduce transmission of infection to patients, residents, people who use supported living services, and health and social care staff and their co-workers.

• Staff providing care for autistic people and people with dementia or learning disabilities should make every effort to make sure that the people they support are aware of the key behaviours needed to follow good IPC and should provide encouragement and reminders when not followed. Staff should consider how the person they are supporting is most likely to understand the information and use the most appropriate communication techniques for that person." (p. 1)
**Domiciliary care (including self-directed support)**

*Definition*
Domiciliary care is delivered “to people living in single household accommodation that is owned or occupied by the person receiving care, and that occupation is entirely independent of the care arrangements (which remain at all times a visiting arrangement).” (Care Quality Commission, 2015)

*International developments and evidence*
The parallel rapid review for the Office of Social Services, specifically on domiciliary care, provides a wider review of the relevant literature but some key points are reinforced here.

The Health Foundation’s (2020a) analysis of domiciliary care in England, which was published in July, reported that although fewer users of domiciliary care had died, compared to residents in care homes, the proportional increase was higher (225% compared to 208%). It acknowledged that many of those deaths may not have been explicitly linked to COVID-19 but may be at least indirectly linked. Glynn et al. (2020) also reported that the rise in deaths among those receiving domiciliary care to be similar to those in care homes but this does seem to have attracted less coverage.

A prevalence survey of COVID-19 among domiciliary care workers in England, which was published in July 2020, reported that, in contrast to the higher rates among care home workers, prevalence of COVID-19 among domiciliary care workers was in link with the general population, although it was acknowledged that those who were off work or self-isolating would be under-represented in the findings (Public Health England, 2020).

Focusing on people who work as social Personal Assistants, Woolham et al., in a report published in July 2020 reported that “From our initial sample of 105 Personal Assistants (PAs) who participated in an earlier study, in April 2020 we found many of them had either decided to stop working or had been asked by their employer to stop. Most employers and a small number of PAs had decided to ‘shield’ – the latter because of their own long-term health problems or those of a close family member.” (p. 4)
In a qualitative study of 15 unpaid carers’ experiences, Giebel et al. (2020) reported that many unpaid carers had made the difficult decision to stop paid carers coming into their homes to reduce the risk of infection but this meant that they had to provide additional care. The findings reinforce the need for both paid and unpaid carers to have access to PPE and sufficient training to use it effectively.

**Carers**

*Definition*

The Department of Health defines a carer as “someone who regularly provides a substantial amount of care to a family member, friend or neighbour who is ill, disabled or is an older person. Carers (also referred to as informal carers or family carers) generally provide unpaid care as opposed to care workers who work in care and support jobs (e.g. domiciliary care).” (Department of Health, 2020c, p. 1)

*International developments and evidence*

Lorenz-Dant (2020) provided a range of international examples of measures to support unpaid carers during the COVID-19 pandemic. These included:

- “The voluntary sector provides tangible support
- Several countries have developed guidance documents to support family carers
- There has been lack of recognition that unpaid carers need to buy goods for people with care needs
- Existing financial support mechanisms in some countries continue, but so far only Germany has increased financial support for family carers during the COVID-19 pandemic
- Emergency support structures in case the family carer becomes unable to provide care have been addressed in some countries
- Technological interventions, such as helplines and online carer groups but also the provision of tele-health have been newly established and/or expanded.” (p. 2)
In October 2020, Carers UK published their report on the continued impact of COVID-19 on unpaid carers. It including findings from a survey of almost 6000 carers and former carers. It highlighted that, before COVID-19, there were up to 9.1 million unpaid carers in the UK and most of them (81%) are now providing more care. Since the start of the pandemic there are also now many more including an additional 4.5 million who new to caring. Almost two thirds of carers (64%) said their mental health has worsened as a result of the pandemic; just half (50%) said they were able to manage their caring role at present; and three quarters (74%) reported feeling exhausted and worn out from caring. About a third (33%) have started using new technology and digital services, although 10% reported limited access. For some, the pandemic has created opportunities to connect with family, friends and other groups in the community. There were also specific issues highlighted around shielding, bereavement, access to breaks and services, financial pressures and balancing demands.

The Carers’ UK report suggests a number of important responses are needed: ensure that carers are able to take breaks and that the return of essential services is prioritised; place a high priority on guidance, information and advice for carers that is adapted to their needs; ensure that carers and their families are not facing significant financial hardship; provide sufficient funding for local authorities and Health and Social Care Trusts to meet the increased levels of social care need; prioritise carers and their families’ safety; prioritise carers’ health and wellbeing; ensure that local authorities have sufficient resources to carry out and deliver contingency planning with carers; ensure that carers are able to continue to remain in work; digital strategies and services must be a core part of delivery and the future. The report also identified the need, in the medium term, for a new deal for carers and social care reform, and, in the long term, for fundamental reform of the social care system.

The Carers’ UK report estimates that there were 212,000 unpaid carers in Northern Ireland before the pandemic and that there are now many more including 98,000 who are new to caring. The findings from Northern Ireland are in line with the UK wide findings in terms of increased care, increased needs, a reduction in breaks, concerns about the ability to manage and almost two thirds (65%) reporting that their mental health as worsened.
In addition to the UK wide recommendations, the Carers; UK report specifies some further recommendations for the Northern Ireland context. These are that: Trusts should ensure carers are informed of their right to a Carer’s Assessment; that the role of unpaid carers should be clearly recognised in the development of health and social care; that an action plan should be co-produced with carers; that funding for short breaks should be protected; that there should be increased financial support for carers; and that carers should be a priority group for support and access to psychological therapies.

**Workforce**

**Definition**
The social care workforce is made of a wide range of roles including health roles that are closely associated with providing support within a social care environment.

Key social care roles include: Care worker, personal assistant, social worker, community support and outreach worker, activities co-ordinator, technicians, administration and support staff such as cleaning staff, chef and driver. Many allied health professionals also work within social care including occupational therapist, nurses, psychological therapists and public health professionals.

**International developments and evidence**
The Health Foundation (2020b) highlighted that, in England based on data from the Office of National Statistics, after adjusting for age and sex, social care workers are more than twice as likely to die from COVID-19 compared to the general population. This is also in contrast to health care workers who, it was reported, did not have a statistically significant increased risk of death compared to the general population. A systematic review and meta-analysis of 115 international studies (Salazar de Pablo et al., 2020) concluded that Severe Acute Respiratory Syndrome (SARS)/Middle East Respiratory Syndrome (MERS)/COVID-19 had a substantial impact on the physical and mental health of health care workers and recommended that this group become a priority for public health strategies.

Exposure to mental health outcomes in healthcare workers included:

<p>| General health concerns | 62.5% |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear</td>
<td>43.7%</td>
</tr>
<tr>
<td>Insomnia</td>
<td>37.9%</td>
</tr>
<tr>
<td>Psychological distress</td>
<td>37.8%</td>
</tr>
<tr>
<td>Burnout</td>
<td>34.4%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>29.0%</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>26.3%</td>
</tr>
<tr>
<td>PTSD</td>
<td>20.7%</td>
</tr>
<tr>
<td>Somatisation</td>
<td>16.1%</td>
</tr>
<tr>
<td>Stigmatisation feelings</td>
<td>14.0%</td>
</tr>
</tbody>
</table>

**Workforce support and wellbeing**

In Wales, a special payment scheme (one-off flat rate payment of £500) for social care workers was introduced for those who had worked during for 12 weeks in one setting during the period 15th March to 31st May (Welsh Government, 2020). In Scotland, in April 2020, social care staff received a 3.3% pay increase which was part of a package of measures to support them in recognition of their role during the pandemic (Scottish Government, 2020).

McFadden et al. (2020) conducted a survey of health and social care workers’ quality of working life and coping while working during the pandemic in the UK. They reported areas of positive developments, especially in relation to effective communication, flexibility of working and support for emotional wellbeing. They also highlighted some of the challenges around the redeployment of staff and the importance of employment rights, terms and conditions.

There are a range of examples of specific initiatives to support workforce wellbeing for example, Britton (2020) describes the establishment of a WhatsApp group to connect and share information to staff working across a number of different care homes. It has enabled peer-support and encouragement and created a space for creative staff to share ideas, plan activities and occupations for residents and help improve morale. It improved a valuable resource to share ideas and practical links but also provided a forum for staff to ask questions across the different site locations. While and Nightingale (2020) also highlight the importance of helping staff to remain well and able to work and reinforce that this must include good support for wellbeing.
Gray (2020) has reported that "In Northern Ireland seventy-five per cent (of 31,000) of care workers are employed by the private sector; 12,000 of these work in domiciliary care. There are significant differences between pay and conditions in the statutory and independent sectors, while investment in learning and improvement is more limited in the independent sector.” (p. 1)

On 3rd November Robin Swann, Minister of Health, announced that regular testing of staff working in care home settings in Northern Ireland, would be increasing from fortnightly testing to weekly testing.

**Data and monitoring**
In England, the Health Foundation (2020a) reported that since 9th March, registered residential and nursing care providers have been asked to submit a range of information, including available beds, the number of COVID-19 cases, staff absences and levels of PPE to the ‘Capacity Tracker’. It has been estimated the response rate was about 29%. There is also the equivalent for domiciliary care providers, the ‘Home Care Tracker’ which began on 13th April and has a daily response rate of about 52%.

The European Centre for Disease Prevention and Control also recommend that long-term care facilities should consider implementing a daily surveillance routine for residents to measure fever, respiratory rate, oxygen saturation and other typical and atypical signs of COVID-19 (Danis et al., 2020):

<table>
<thead>
<tr>
<th>Typical symptoms:</th>
<th>cough, fever, sore throat, shortness of breath, sudden onset of anosmia, ageusia or dysgeusia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atypical symptoms:</td>
<td>headache, chills, muscle pain, fatigue, vomiting, diarrhoea</td>
</tr>
<tr>
<td>Signs:</td>
<td>oxygen saturation via pulse oximetry &lt;95%, respiratory rate &gt;25/min</td>
</tr>
</tbody>
</table>
They have also produced technical guidance on data collection tools to monitor and report infections that can be submitted to local authorities/government for further monitoring and assessment (European Centre for Disease Prevention & Control, 2020).

Table A4. Initial data for LTCFs to report to local and national authorities with their first report (can be updated monthly/quarterly)

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Variable</th>
<th>Data format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Reporting period</td>
<td>Date from</td>
<td>YYYY.MM.DD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Date to</td>
<td>YYYY.MM.DD</td>
</tr>
<tr>
<td>Location data</td>
<td></td>
<td>Address</td>
<td>(free text, e.g. address)</td>
</tr>
<tr>
<td>LTCF</td>
<td>Characteristics</td>
<td>LTCF identifier</td>
<td>(Number or free text)</td>
</tr>
</tbody>
</table>
|                  |                           | LTCF type (report once)                       | □ Residential home  
|                  |                           |                                               | □ Nursing home  
|                  |                           |                                               | □ Mixed facility  
|                  |                           |                                               | □ Palliative care  
|                  |                           |                                               | □ Rehabilitation centre  
|                  |                           |                                               | □ LTCF for physically or mentally disabled  
|                  |                           |                                               | □ Psychiatric LTCF  
|                  |                           |                                               | □ Other LTCF type  
|                  |                           | LTCF organisation                             | □ Public  
|                  |                           |                                               | □ Private  
|                  |                           |                                               | □ Non-government social care facility  
|                  |                           |                                               | □ Other LTCF type  
|                  |                           | Regional code                                 | E.g. NUTS1/2 code (text) |
| Denominator      | Residents                 | Total number of resident beds*                | N           |
|                  |                           | Total number of residents                     | N           |
|                  | Staff                     | Total number of staff                         | N           |
|                  | PPE**                     | Do staff with direct contact with residents wear face masks? | □ YES for all residents  
|                  |                           |                                               | □ YES for COVID-19 cases only  
|                  |                           |                                               | □ YES for all symptomatic residents  
|                  |                           |                                               | □ NO face masks  
|                  |                           |                                               | □ Unknown  
|                  |                           | Specify type of face mask used by staff       | □ No mask available  
|                  |                           |                                               | □ Mask available (type unspecified)  
|                  |                           |                                               | □ Self-made masks  
|                  |                           |                                               | □ Surgical mask  
|                  |                           |                                               | □ FFP2/3 respirators  
|                  |                           |                                               | □ Combination of the above  
|                  |                           | Do visitors of residents wear face masks?     | □ YES all visitors  
|                  |                           |                                               | □ ONLY selected visitors  
|                  |                           |                                               | □ NO face masks  
|                  |                           |                                               | □ Unknown  
|                  |                           | Specify type of face mask used by visitors    | □ No mask available  
|                  |                           |                                               | □ Mask available (type unspecified)  
|                  |                           |                                               | □ Self-made masks  
|                  |                           |                                               | □ Surgical mask  
|                  |                           |                                               | □ FFP2/3 respirators  
|                  |                           |                                               | □ Combination of the above  

N — number

* The total number of resident beds in the LTCF, both occupied and unoccupied beds. Beds shared by partners should be counted as two beds.

** Face masks are considered most important, particularly as source control for staff, other PPE can be added.
**Table A5. Data, for collection by each LTCF on a daily or weekly basis**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Variable</th>
<th>Data format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Reporting period</td>
<td>Date from</td>
<td>YYYY.MM.DD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Date to</td>
<td>YYYY.MM.DD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Start date for cumulative data (default = 2020.03.01)</td>
<td>YYYY.MM.DD</td>
</tr>
<tr>
<td>LTCF</td>
<td>Characteristics</td>
<td>LTCF identifier</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Location code, e.g. NUTS1/2 code</td>
<td>(text)</td>
</tr>
<tr>
<td>Residents</td>
<td>Denominator (on the day when the outbreak is first notified)</td>
<td>Total residents</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Total N of COVID-19 cases**</td>
<td>Cumulative cases since 1 March 2020 –or selected date</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Possible and probable cases</td>
<td>Cumulative cases since 1 March 2020 –or selected date</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Confirmed cases***</td>
<td>Cumulative symptomatic cases since 1 March 2020 –or selected date</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cumulative asymptomatic cases since 1 March 2020 –or selected date</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Deaths (all causes)</td>
<td>Cumulative deaths in hospitals since 1 March 2020 –or selected date</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cumulative deaths in LTCF since 1 March 2020 –or selected date</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Deaths among possible and probable cases</td>
<td>Cumulative deaths since 1 March 2020 –or selected date</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Deaths among confirmed cases</td>
<td>Cumulative deaths since 1 March 2020 –or selected date</td>
<td>N</td>
</tr>
<tr>
<td>Staff</td>
<td>Cumulative number since 1 March 2020 – or selected date</td>
<td>N of symptomatic confirmed cases</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N of asymptomatic confirmed cases</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N of deaths of confirmed cases</td>
<td>N</td>
</tr>
<tr>
<td>Residents + Staff</td>
<td>Cumulative number of confirmed cases since 1 March 2020 – or selected date</td>
<td>N of all confirmed cases</td>
<td>N</td>
</tr>
<tr>
<td>Tests</td>
<td>For the time period included in this report</td>
<td>N of residents tested</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N of staff tested</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N of all tests¥</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Cumulative number since 1 March 2020 – or selected date</td>
<td>N of all tests¥</td>
<td>N</td>
</tr>
</tbody>
</table>

N — number; selected date: e.g. introduction of the virus into the country

Staff: the definition of persons as ‘staff’ should be determined at national level and should include those who work full time, part time, or periodically; including paid and unpaid staff. Examples of staff types include but are not limited to nursing staff, paramedical staff, recreation support team, staff concerned with cleaning, maintenance or quality control and LTCF managers and administrative staff, including staff who only have contact with other staff members.

* LTCF is in an affected area: reporting should be daily if there is ≥ 1 confirmed case, daily (weekly) if there is ≥ 1 possible case; LTCF is in an unaffected area: weekly or monthly if there are no cases or ≥ 1 possible case.

**Total number of all possible, probable, and confirmed COVID-19 cases according to ECDC case definition or defined nationally

*** If no data is available on whether a confirmed case is symptomatic or asymptomatic, assume that all confirmed cases are symptomatic.

¥ - number of tests rather than number of people tested

We have already discussed Cuypers and colleagues (Cuypers et al., 2020) review of the high rate of mortality in people with ID in 2017-18 flu epidemic in the Netherlands where they recommend that high quality data collection in this population group is essential detect patterns in infection and mortality as they didn’t follow the pattern in the general population.
Technology has been used to identify and monitor outbreaks in nursing homes and assisted living facilities in Israel (Caspi, Chen, Liverant-Taub, Shina, & Caspi, 2020). After setting up a national taskforce, an interactive, real-time, dashboard heat map tool based on COVID-19 outbreak analytic metrics including all facilities. The dashboard allows for:

- A snapshot of the national picture to allow the task force to assess regional need
- Identify outbreak linkage
- Tailoring of disease mitigation by heat map layering to identify whether areas are ‘hot’ or ‘cold’

Reform of Adult Social Care

International developments and evidence

McGilton et al. (2020), in an editorial considering care homes during COVID-19 across a range of countries concluded, “an essential redesign of nursing homes globally is urgently needed to combat the poor public image of nursing homes, address a funding system that is broken, improve the working conditions for staff, and address the lack of meaningful data to monitor and develop practice. Our main recommendations include a focus on leadership, increased attention to the complexity of health issues reflected in the nursing home population, and enhancing the capacity of nursing staff and inter-professional team members.” (p. 964)

A report from the Local Government Association, published in August 2020, highlighted the positive use and potential of digital technologies in adult social care but emphasised that these need to be developed in the context of much wider reform, “It is vital that we harness all of the power technology and digital innovations offer but digital transformation is not about investing in specific technologies, quick fixes or short-term imperatives. Where there is targeted national investment in adult social care digital transformation, it should be in people, communities, staff, approaches and outcomes and it must support the longer-term ambition for adult social care funding and reform.” (p. 22)

There have also been innovations in commissioning. Flexible funding arrangements have been put in place for many authorities to cope with the pressures of COVID-19. Devon County
Council implemented a flexible approach to day care provision during lockdown that enabled providers to use staff teams to support service users in their own homes or alternative forms of service delivery to offer some form of day opportunity and avoiding the furloughing of staff. They committed to continue to pay for the number of commissioned places at the standard rate.

In September 2020, the Women’s Budget Group launched the report of their Commission on a Gender-Equal Economy which was called Creating a caring economy: a call to action. It suggested that the pandemic had further highlighted: the crucial importance of carers, paid and unpaid; that the economy is made and sustained by people, it’s not a separate entity; and that the pandemic has raised the questions of what kind of world do we want to create? What kind of economy do we want to make? The report suggests that in working together to design a new, caring economy the key priorities should be: the wellbeing of individuals and the planet; valuing care, both paid and unpaid; and addressing discrimination, violence and poverty.

The Social Care Institute for Excellence (SCIE), also in September 2020, published Beyond COVID: New thinking on the future of adult social care. SCIE (2020a) which identifies three strategic shifts that are needed to positively respond to the challenges in social care. These are:

“Shift 1: To shift the sector from surviving hand-to-mouth, to the point where it has long-term and sustainable funding. How care is paid for and funded for those who are eligible for state-funded care is deeply unfair. Whereas the NHS is free to everyone who wants to use it, everyone with assets of more than £23,250 must pay for themselves, rely on family, or go without...

Shift 2: To shift investment and focus away from remedial and acute services, towards community-centred preventative models of care, support, housing and technology. As a sector, we are not yet investing a sufficient proportion of expenditure on prevention...

Shift 3: To shift the workforce away from low pay, low recognition and poor conditions, towards higher pay, better conditions and parity of esteem with the NHS. The social care workforce is in a dire need of investment and reform. Skills for Care estimates that there is a 30.8 per cent turnover rate, equivalent to approximately 440,000 leavers over the year, and
that around a quarter of the workforce (24 per cent) are on a zero-hours contract (370,000 jobs). Whilst some efforts have been made during the pandemic to increase the recognition of people working in social care, care work lags well behind the NHS in terms of pay, conditions, career opportunities and access to training and development.” (pp. 4-5)

On 16th October 2020, the Care Quality Commission launched their report on *The state of health care and adult social care in England 2019/20* which concluded with a number of key points including:

- “The problems that existed before COVID-19 have not gone away.
- The fact that the impact of COVID has been felt more severely by those who were already likely to have poorer health outcomes makes the need for services to be designed around people’s needs all the more critical.
- There needs to be a new deal for the adult social care workforce that reaches across health and care – one that develops clear career progression, secures the right skills for the sector, better recognises and values staff, invests in their training and supports appropriate professionalisation…
- We must use the learning from the pandemic to lock in positive changes, and drive a new way of working that is supported at a national, regional and local level by the whole health and care system.” (p. 81)

Gray (2020) has provided a summary of some of the key issues for Northern Ireland and highlighted that the COVID-19 pandemic has increased awareness of the existing problems with social care and the urgent need to address them: “Across the UK and in many countries social care has been in the spotlight as a result of the COVID-19 Pandemic and the high number of care home deaths as a proportion of overall COVID-19 deaths. Of course, the impact on social care extends beyond care homes with many users of domiciliary and day care services and unpaid carers left very vulnerable. The BBC has reported that 4,000 domiciliary care packages were suspended in Northern Ireland during the pandemic as users or families were concerned about the spread of the Coronavirus. A clear picture has emerged of social care systems under significant pressure and a workforce struggling to cope. But, many of the now highly visible problems relating to social care are not new; the pandemic has just brought to public attention serious problems resulting from years of under-funding and political
Across the UK social care has been a political failure. Government after government has talked about improving quality in care without linking this directly to substantial improvement in funding and the pay and conditions of workers. It does not now seem logical that planned transformation of services in NI can continue without a radical rethink about reforming the system of social care.” (pp. 1-2)

Conclusion
The Reform of Adult Social Care in Northern Ireland was already underway before COVID-19 and the report of the Expert Advisory Panel on Adult Care and Support, Power to People: Proposals to reboot adult care & support in N.I. (Kelly and Kennedy, 2018) provided an excellent framework for this work to progress. COVID-19 has highlighted and reinforced how important that process of investment and change should be for everyone. The evidence highlights the fine balance between preventing and limiting infection risk within social care and protecting people's human rights. This can only be achieved through ethical decision-making that helps protect an individual’s right to life, to see family and friends within safe settings, and protect them from the very real risks associated with loneliness, fear and isolation.
References


Local Government Association (2020) Digital innovation in adult social care: how we’ve been supporting communities during COVID-19. What we have done, what we have learned and what next for digital innovation in adult social care. London: Local Government Association.


Minnesota Department of Health (2020) *Minnesota’s Five-Point Battle Plan to Protect our Most Vulnerable*. Accessed online at [www.health.state.mn.us/diseases/coronavirus/hcp/ltc.html](http://www.health.state.mn.us/diseases/coronavirus/hcp/ltc.html)


