Scottish COVID-19 Inquiry Research Briefing

Portfolio 3: The Provision of Health and Social Care Services

In care and nursing homes:

- the transfer of residents to or from homes,
- treatment and care of residents,
- restrictions on visiting,
- infection prevention and control, and
- inspections

And:

 the delivery of end-of-life care and the use of Do Not Attempt CardioPulmonary Resuscitation (DNACPR) decisions [only as it applies to those living in care homes]

Dr Jenni Burton 28th February 2022

Disclaimer:

This report was commissioned by the Scottish Covid-19 Inquiry as introductory scoping research. It was written to assist the inquiry with its planning process about the shape and direction of its investigation, and is published in the interests of transparency. The inquiry is grateful to the author[s] for their work. The inquiry is an independent body, and will be carrying out its own investigations to fulfil its terms of reference. The introductory research represents the views of those who wrote it, and nothing in it is binding on the inquiry. The introductory research is one of many sources which will be considered by the inquiry during the course of its investigation.

© Crown copyright 2022. This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, Visit https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/

Contents

Abbreviations used in this briefing

Executive summary

Background - what is a care home and who lives there

Data, intelligence and evidence related to care homes in Scotland

Resident voice

Methods

The transfer of residents to or from homes

- National Policy in March 2020
- Admissions Guidance for Care Homes
 - Isolation
 - Testing: residents moving-in from hospital settings or returning to the home from hospital
 - Testing: residents moving-in from the community or other care homes
- Concerns with early national guidance
- Analysis of hospital discharges
- Mental Welfare Commission Review

Infection prevention and control

- Guidance
 - Scottish Government Clinical Guidance
 - HPS/PHS Guidance
 - ARHAI Guidance
- Personal Protective Equipment (PPE)

- Testing
 - Resident testing
 - Testing for staff
 - Testing for visitors
- COVID-19 Outbreak Investigations/Analysis
 - Academic reports
- Root cause analysis
 - Whole genome sequencing
- Care home context

Treatment and care of residents

- COVID-19 presentation
- COVID-19 care
 - Access to external care and support
 - Emerging treatments
- Vulnerability and mortality from COVID-19
- Vaccination

Restrictions on visiting

- Terminology
- Key events and guidance in 2020
- Alternative approaches
- Open with Care
- Action on Rights
- Care Home Relatives Scotland
- Restoring Relationships
- Academic research
- Open for Care
- Named visitor
- Anne's Law

The delivery of end-of-life care and the use of Do Not Attempt CardioPulmonary Resuscitation (DNACPR) decisions [only as it applies to those living in care homes]

- End-of-life care delivery
- Bereavement and psychological support
- Anticipatory Care Planning
- Cardiopulmonary Resuscitation and DNACPR

Inspections, oversight and investigation

- Care Inspectorate
- Multidisciplinary Care and Professional Oversight Teams
- Crown Office Investigation and Police Scotland

Conclusions

Findings from other agencies on care homes and COVID-19 in Scotland

Appendices

- Appendix 1: Timeline summary of Health Protection Scotland/Public Health Scotland guidance
- Appendix 2: Timeline summary of Scottish Government Clinical Guidance for Care Homes
- Appendix 3: Timeline summary of Scottish Government visiting guidance

Authorship and declaration

Abbreviations used in this briefing

ACP - Anticipatory Care Planning

CMO - Chief Medical Officer

CPAG – Clinical and Professional Advisory Group on Care

Homes

CPR - CardioPulmonary Resuscitation

DNACPR - Do Not Attempt CardioPulmonary Resuscitation

FRSM - Fluid Resistant Surgical Mask

HIS - Healthcare Improvement Scotland

HPS - Health Protection Scotland

HPT - Health Protection Team

HSCP - Health and Social Care Partnerships

IPC – Infection prevention and control

KIS – Key Information Summary

LFD - Lateral Flow Device

LTCF – Long Term Care Facility

NEJM - New England Journal of Medicine

NHS NSS - NHS National Services Scotland

NRS - National Records of Scotland

PCR – Polymerase Chain Reaction

PHS – Public Health Scotland

PPE – Personal Protective Equipment

RAD - Risk Assessment Document

SAT - Scrutiny Assessment Tool

Executive summary

This briefing is intended to provide an overview of key events, reports and evidence in the areas of interest to the COVID Inquiry team in relation to adult care homes in Scotland from March 2020 to February 2022. Key considerations are the vast and diverse care home sector who have worked throughout the pandemic to support adults of all ages with complex needs.

An overview such as this cannot capture the spectrum of individual experiences of care home residents, relatives, staff and other sector stakeholders throughout the pandemic, particularly given variations in the impacts geographically and over the waves of infection and illness. The voice and perspectives of those most impacted have not been well captured in work undertaken to-date.

Summary points from review undertaken:

- Global understanding of COVID-19 and its impacts on those living in care homes has improved significantly during the period of interest
- There is a need to improve Scottish national data on those living in care homes on a permanent and temporary basis to provide accurate and meaningful insights to support residents
- Care homes are homely settings where individuals live.
 Moving others in must be considered not just as creating capacity within the health and care system, but carefully with thought for the individual and impact on existing residents
- Communication with care homes in preparation for hospital discharge must share relevant information to allow effective and safe transfers of care

- Rapidly evolving policy and guidance changes need to be accessibly presented and shared with respect and consideration for the professionals who need to implement them
- There has been a lack of specialist Infection Prevention and Control support outside of acute hospitals and guidance specific for use in care homes has had to be developed
- Care homes had been required to adopt significant new tasks around testing, reporting to external stakeholders and managing visiting processes – all impact on staffing and time to deliver care
- The experiences and insights of care home staff in managing COVID-19 outbreaks have not yet been heard and this risks missing critical insights to improve care in future
- Atypical and non-specific presentation of illness is common among older adults, but public messaging around COVID-19 has focused on core symptoms
- COVID-19 is a serious illness with an increased risk of death among older adults, living with multiple long-term conditions (including dementia) and frailty
- Vaccination has been effective in reducing mortality among those living in care homes. Thought is required about how to distribute and monitor vaccination uptake and effectiveness going forwards
- The pandemic has radically changed the lives of residents in terms of their connectedness to loved ones, social activities and access to health and wellbeing practitioners
- Ensuring individuals in care homes are supported to spend time with those who are important to them remains a challenge, despite updated guidance
- Temporary legal changes around repurposing of medicines allow care home residents more timely access to symptomatic treatment and warrants exploration beyond pandemic situations

- Anticipatory care planning remains a valuable way to ensure values and preferences are respected, but must be approached sensitively and on an individual basis tailoring communication
- The pandemic has resulted in unanticipated change in the Clinical Oversight for care homes, the medium to long-term consequences of which need to be assessed
- Future pandemic plans must incorporate and value care home sectoral expertise from the outset

Background – what is a care home and who lives there

This briefing focuses on adult care home services in Scotland, which are all regulated by the Care Inspectorate. Their legal definition is:

"a service which provides accommodation, together with nursing, personal care or personal support, for persons by reason of their vulnerability or need; but the expression does not include—

(a)a hospital; (b)a public, independent or grant-aided school; or (c)a service excepted from this definition by regulations."

(Footnote 1)

The term 'care home' will be used throughout this document to refer to adult care home services. There is no legal difference between care homes providing residential and nursing care services in Scotland (footnote 2). There are no publicly available data on the number of care homes with and without on-site registered nursing staff. The Care Inspectorate monitor the number of care homes in which individuals are assessed as receiving care from a registered nurse through their aggregated annual return data, this may include visiting professional nurses. Homes with and without registered nursing staff will have differences in the clinical needs of the individuals they are supporting and the care which they can provide.

There is significant variation among care homes in Scotland in the individuals receiving care and support. Broadly care home services are classified into those for older people (~75% of services, with ~92% of all beds) and other adult services (~25% of services and ~8% of all beds) (footnote 3). The other adult services are those for people living with learning disabilities,

mental health problems, physical and sensory impairment, substance misuse, blood-borne viruses and a small group of dedicated respite and short break services (footnote 4).

Care homes are principally the homes of those who live there. Most residents are considered as long-stay residents (intended stay of 6 weeks or longer) (footnote 5). However, some care homes also provide temporary care in the form of planned or emergency respite; intermediate care (typically after a hospital stay to allow a period of assessment); step-up services (from the community); or other step-down services (after hospital care). Not all homes provide these services and some regions have established relationships with specific homes to deliver these models of care. A small number of care homes are designated as providing Hospital-Based Complex Clinical Care (formally known as NHS Continuing Care) (footnote 6). These range from designated units within larger care homes which have NHS medical staff input through to specific care homes run by NHS providers.

In February 2020, there were 1,084 adult care home services registered in Scotland with a total of 40,969 registered places (range 1 to 225 places; average 38 places) (footnote 7). National data are inclusive of care home services which are privately owned (~63%), those which are provided by voluntary or not for profit providers (~24%) and those run by local authorities and the NHS (~13%).

Data, intelligence and evidence related to care homes in Scotland

An underpinning issue around data is relevant to several of the topics of interest to the Inquiry. Although Scotland has highquality health data and established mechanisms for linking health datasets using the national personal identifier the Community Health Index Number, the social care data landscape is less favourable. This was recognised prepandemic and highlighted by the Office of Statistics Regulator in reviewing social care data across the UK nations (footnote 8 and 9). The consequence of this is that we do not reliably know who lives in a care home in Scotland (on a permanent or temporary basis) using large-scale national routinely collected data (footnote 10). This poses limitations on interpreting other data sources - for example national deaths data from National Records of Scotland (NRS) identifies deaths in care homes, but not deaths of care home residents in hospital and national hospital data do not reliably identify who is admitted from or discharged to a care home. There are differences in recording between national datasets on what constitutes a care home (for example NRS include some hospices in their published care home definition and statistics) (footnote 11). There are delays in recording when individuals move between care settings and temporary residences are particularly difficult to identify. When we can identify residents (using address matching techniques, or flags) (footnote 12) in our national data sources we are often limited to basic demographic information and lack meaningful variables about resident care needs, other medical diagnoses, long-term conditions, frailty, disability and quality of life (footnote 13). Thus, interpreting data can be difficult without such contextual information.

Care homes themselves are data-rich environments, but the pandemic has placed unprecedented demands on them from a range of external stakeholders including the Care Inspectorate, Health and Social Care Partnerships (HSCPs), Local Health Protection Teams (HPTs), Multidisciplinary Professional Oversight Teams and Scottish Government (footnote 14). The Turas Care Management (known as the Safety Huddle Tool) (footnote 15) was developed to support these data needs but requires considerable effort from care home teams to complete daily self-reporting. The existence of the Safety Huddle Tool has not replaced additional/overlapping data requests from stakeholders and the information submitted provides only aggregated or summary data (about homes) and not information about the needs of individual residents.

Resident voice

Those living in care homes are some of Scotland's most vulnerable people. Many but by no means all residents may lack capacity to consent to participate in research, often because of dementia or other diagnoses. However, their views, values and reflections on what is important will often be expressed to those who care for them – in a professional or personal context.

Public health concerns, about introducing infection and restrictions on care homes have discouraged non-essential visits. There is a lack of existing infrastructure for research in care homes across the UK, compared to that which was mobilised to support primary and secondary care (footnote 16). Consequently, most academic research related to the pandemic in care homes in Scotland has relied on the use of routine data, modelling studies, surveys or interviews with staff and families. It is important to acknowledge from the outset the lack of resident voice available in formal work undertaken to-date and consider how this may be included.

Methods

This briefing is structured as a narrative review of core topics. It has been undertaken to introduce the key issues of interest, identified by the Inquiry team in response to consultation, in relation to care homes in Scotland from March 2020 to February 2022. It draws on a range of academic and non-academic documents and reports and highlights the evidence publicly accessible and documented for each. The content has been structured to link related topics and reduce duplication between sections, noting the interconnectedness of many of the topics. Some sections are structured around key dates of changes in guidance, others are structured around stakeholder groups or key topics.

All hyperlinks were active at time of submission on 28th February 2022 and full text copies of all cited documents can be provided by the author if required by the Inquiry Team.

The transfer of residents to or from homes

Care homes are dynamic places where individual citizens live on a permanent or temporary basis. Residents move into care homes from hospital, from their own homes/living elsewhere in the community and from other care homes. Residents may leave care homes to access hospital care, move to another care home or return to living elsewhere in the community depending on their care needs and support available. This section primarily discusses the movement of individuals into care homes during the pandemic, summarising guidance and policy decisions around hospital discharge, testing and isolation. The national picture around residents moving out of care homes, including to hospital, is less clearly understood from available data and published reports.

National Policy in March 2020

In the initial phase of the pandemic there was a focus on creating capacity within the NHS. The first guidance issued to care homes was published on the **13th March** and stated:

"The long term care/residential care sector is vital to the wider health and care system and it is essential that it continues to function in a safe and effective way as it provides an appropriate alternative in some cases to more acute settings such as hospital care. It is therefore imperative that care homes continue to take admissions if it is clinically safe to do so." (Footnote 17)

The 'delay phase' of the pandemic was announced on the **15th March** and on the **17th March** the NHS was placed on an 'emergency footing'. Announced by the Cabinet Secretary for Health and Sport, this planning included:

"working closely with COSLA and the Health and Social Care Partnerships and Chief Officers to see a rapid reduction in delayed discharges – the goal I have set is a reduction of at least 400 by the end of this month."

(Footnote 18)

The definition of delayed discharges used in NHS Scotland is:

"A delayed discharge occurs when a patient aged 18 years and over, clinically ready for discharge, cannot leave hospital because the other necessary care, support or accommodation for them is not readily accessible and/or funding is not available, for example to purchase a care home place." (Footnote 19)

Delayed discharge data is not just about care homes and includes those waiting to go to other forms of placement or waiting to return home. Delayed discharge disproportionately impacts older adults and is associated with a range of adverse outcomes for individuals including mortality, infection, depression and reductions in mobility and ability to self-care (footnote 20). However, delays can be for complex reasons e.g., related to legal powers for those who lack capacity (footnote 21). Annual statistics acknowledge the direct impact of policy changes on the 2020 statistics:

"Delayed discharge figures in NHSScotland have been affected by measures put in place to respond to COVID-19. The marked fall in delayed discharges during 2020 is likely to be due to patients being moved out of hospital to increase capacity." (Footnote 22)

Health and Social Care Scotland undertook a review with the Scottish Government Integration Division called 'Lessons Learned from Reducing Delayed Discharges and Hospital Admissions', which engaged with the 31 HSCPs and collated learning across a range of topics (footnote 23). This found:

"During the initial mobilisation period, the additional funding promised from Scottish Government was used in many areas to make over 1,000 additional care home beds available to Integration Authorities, as part of contingency planning should they need them during the pandemic (either to support discharge from hospital, or in the event that care at home or other social care capacity became insufficient). Additional availability came in a variety of ways, such as opening new wings within existing facilities, or block purchase of beds with external providers"

This included creating places for those already waiting to move into care homes from hospital and accommodating those waiting for other social care provision in the community on a temporary basis. Data obtained from 28 of the 31 HSCPs identified that 14.5% of all hospital discharges to care homes during March to May 2020 were for temporary placements (footnote 24). Some of these will have reflected existing arrangements, such as intermediate care described in the Background text.

Admissions Guidance for Care Homes

Clinical guidance for care homes stated the following on 13th March 2020:

"Where a long term care facility has a resident who has tested positive for coronavirus, further admissions should be halted" (footnote 25)

This clinical guidance was updated and republished on **26th March** (**footnote 26**), incorporating Public Health guidance advice about admissions to residential settings which stated they:

"may remain open to admissions in the following situations:

- Where a single case of laboratory confirmed COVID-19 has been identified and all appropriate infection prevention and control procedures are in place as per COVID-19 IPC Guidance.
- Where more than 1 laboratory confirmed case has been identified and following risk assessment and discussion with the local HPT, it is possible to manage cases and ensure all appropriate infection prevention and control measures are in place as per COVID-19 IPC Guidance."

An outbreak of COVID-19 has been defined as:

"An outbreak is defined as two or more suspected or confirmed cases of COVID-19 within the same setting occurring within a 14 day period where cross transmission is suspected." (Footnote 27)

The definition should include individuals transferred to hospital from the care home and any symptomatic individual who has died within the same timeframe. Care homes may not know what happens to their residents after admission to hospital, including their COVID-19 status, unless informed by hospital teams.

Care homes are required to report outbreaks to their local Health Protection Team (HPT) and the Care Inspectorate. Decisions around the status of care homes (in terms of being open or closed) are made by local HPTs. Definitions have applied around the timing of reopening of a care home following an outbreak, related to not having any further active cases in a 28 day or 14 day period (depending on stage of pandemic, prevalent strains and updated knowledge of virus transmission). If further positive cases are detected, the time period of the outbreak resets, extending the period of outbreak (and associated restrictions). The community prevalence of COVID-19 infection, particularly in the period before vaccination, is associated with risk of COVID-19 outbreak (footnote 28).

Isolation

In addition to clinical guidance advising residents remain in rooms as much as possible and avoid communal activities, formal isolation guidance existed for specific cases. This included management of individuals with confirmed COVID-19 who "should be cared for in a single room with en-suite facilities. Room door(s) should be kept closed where possible and safe to do so." (footnote 29)

Clinical guidance from **26th March** included an Annex: 'New admission/transfer form' which was to be shared with care homes receiving residents from hospital (**footnote 30**). This included an evaluation of the clinical judgement of the most senior medical decision maker that the individual did not have new medical or infective problems and recommended:

"Residents on admission should be isolated for 7 days to ensure that they do not develop new symptoms. This isolation period can include days in hospital spent in isolation"

Additional guidance with new information about isolation of those moving into care homes with confirmed COVID-19 was published on **17th April 2020** stating:

"As part of the national effort, the health and care sector plays a vital role in accepting individuals who have COVID-19. Such individuals can be safely cared for in a health and care facility, if this guidance is followed. Individuals who have been confirmed as having had COVID-19 but no longer have symptoms and have completed their isolation period prior to arrival, whilst still in hospital, home or another facility, can have care provided as normal. The period of isolation for individuals with suspected or confirmed COVID-19 infection is:

- 14 days from their first positive COVID-19 test for those who are immune-compromised OR who required critical care (or ITU care) while in hospital, with at least 48 hours with no fever
- 7 days from onset of symptoms for those who did not require hospitalisation OR who in hospital did not require critical care (or ITU care), with at least 48 hours of no fever" (footnote 31)

It is likely that most individuals moving-in to care homes from hospital with COVID-19 would be in the latter category of not having required critical care. However, this information would need to be shared with care homes by discharging hospital teams.

Testing: residents moving-in from hospital settings or returning to the home from hospital

Testing, both for those known to have had COVID-19 and those not known to have had COVID-19 was not required before hospital discharge in March and early April 2020. Decisions around suitability to move 'clinically well individuals' from hospital to care home required:

- "appropriate clinical plan
- risk assessment of their facility environment and provision of advice about self isolation as appropriate (See NHS Inform for details)
- arrangements in place to get return them to the facility" (Footnote 32)

From 26th March onwards guidance explicitly stated that:

"Individuals being discharged from hospital do not routinely need confirmation of a negative COVID-19 test" (footnote 33)

Risk of exposure to COVID-19 in hospital was recognised and **26th March** guidance stated:

"If a patient being discharged from hospital is known to have had contact with other COVID-19 cases and is not displaying symptoms, secondary care staff must inform the receiving facility of the exposure. The receiving facility should ensure the exposed individual is isolated for 14 days following exposure to minimise the risk of a subsequent outbreak within the receiving facility." (Footnote 34)

For individuals with COVID-19, **17th April** guidance suggested the following information should be provided to care homes:

"In all instances, the discharging hospital or facility or carer should provide you with the following information on arrival if the individual:

- The date and results of any COVID-19 test.
- The date of the onset of symptoms.
- A care plan for completion of the isolation period" (Footnote 35)

It is not known how well this guidance was adhered-to and the extent of communication with care homes receiving residents from hospital in relation to COVID-19 status and follow-up arrangements.

Testing policy changed following the Cabinet Secretary for Health and Sport's announcement to Parliament on **21st April 2020** that:

"Covid-19 patients discharged from hospital to a care home should have given two negative tests before discharge. I now expect other new admissions to care homes to be tested and isolated for 14 days in addition to the clear social distancing measures the guidance sets out." (Footnote 36)

Public health guidance was revised and published on **26th April** to account for the changed advice:

"Covid-19 patients discharged from hospital to a care home should have completed the required isolation period and have given two negative tests at least 24 hours apart before discharge. The isolation period for COVID-19 patients is 14 days All other new admissions to care homes regardless of origin should be tested and isolated for 14 days. The timing of testing and between tests has not been specified" (footnote 37)

A summary of all Public Health guidance (issued by Health Protection Scotland (HPS) now Public Health Scotland (PHS)) and Scottish Government Clinical Guidance are provided in Appendices 1 and 2.

Testing and isolation guidance is not intended to apply for essential temporary visits out of the care home (e.g. attending a funeral, attendance at hospital A&E, planned out-patient's appointment or as a day case) (footnote 38).

Pre-discharge testing of individuals known to have COVID-19 continued until **January 2022**, when guidance was updated as it was felt repeat PCR testing was not useful due to the potential for "**non-viable viral RNA remnants**" to be detected on testing. The recommendation is that:

"recovered residents in hospital can be discharged to the care home 10 days after symptom onset (or first positive test, if asymptomatic) without further testing. In such instances, discharge at 10 days, providing the person is clinically stable and afebrile for 48 hours without antipyretics, is based on clinical judgment of fitness for discharge. This decision should be made in collaboration with the receiving care home manager.

If COVID-19 recovered patients have completed their 10 days of isolation in hospital, no further isolation is required on return to the care home. If a COVID-19 recovered resident is to be discharged before their 10-day isolation period has ended, it is advisable they have one negative PCR test before discharge from hospital, preferably within 48 hours prior to discharge" (footnote 39)

Pre-discharge testing of all others moving to care homes from hospital continued until **January 2022** when the development of guidance stratifies risk based on the response to respiratory screening questions. A single negative PCR test is required and only those considered at risk based on respiratory screening questions have to isolate for a 10-day period (**footnote 40**).

Testing: residents moving-in from the community or other care homes

In addition to residents returning home from hospital or new residents moving-in to the care home from hospital, individuals can move-in to care homes from their own homes and from other care homes. Typically, ~14% of care home admissions each year are from another care home and ~35% are from individuals own homes/supported/sheltered accommodation (footnote 41). The Scottish Care Home Census was paused for 2019/20 data collection and completion for 2020/21 was lower than usual (63% vs 78% for 2018/19) (footnote 42), thus national data will be significantly incomplete to evaluate this route of individuals moving-in to care homes.

In relation to COVID-19, guidance on **26th March 2020** stated:

"people being admitted from home / the community do not need to be tested for COVID-19 and should be managed based on symptoms" (footnote 43)

This was later updated on 26th April 2020:

"All other new admissions to care homes regardless of origin should be tested and isolated for 14 days. The timing of testing and between tests has not been specified" (footnote 44)

Guidance was updated to provide the timing of such tests and is available from Appendix 1. From **27th January 2022**, guidance reduces the period of isolation from 14 to 10 days, with the need for isolation required based on the outcome of risk assessment and a PCR test within 3 days of their admission date (**footnote 45**).

Concerns with early national guidance

It is evident that individuals working in care homes raised concerns about early guidance and policy in relation to individuals moving out of hospitals into care homes. Clinical guidance issued as early as the **13th March** openly acknowledges this:

"There are situations where long term care facilities have expressed concern about the risk of admissions from a hospital setting. In the early stages where the priority is maximising hospital capacity, steps should be taken to ensure that patients are screened clinically to ensure that people at risk are not transferred inappropriately but also that flows out from acute hospital are not hindered and where appropriate are expedited." (Footnote 46)

In addition, review work undertaken with HSCPs highlights concerns of family members and care homes, around the area of testing before hospital discharge:

"There was some reluctance from families and care homes to admit people into them before testing became available. There was a lot of time spent working through and addressing these concerns. Testing has been helpful as it has given some reassurance about allowing people to be admitted. In some areas, testing was introduced locally ahead of national roll out. With the benefit of hindsight, it would have been helpful to have been able to introduce testing earlier." (Footnote 47)

No formal evaluation work or research has been undertaken hearing the perspectives of care home staff around the policy decisions and their impact in the early phase of the pandemic, despite the need being articulated by representative bodies (footnote 48).

Analysis of hospital discharges

PHS published on Discharges from NHS Scotland Hospitals to Care Homes between 1st March and 31st May 2020, in October 2020 and updated in April 2021 (footnote 49). Analysts used national hospital data, linked to COVID-19 test data, patient transport data, death records and the Community Health Index population spine to try to identify individuals who were discharged to care homes during this period (footnote 50). NHS Boards were involved in quality assurance and HSCPs provided data on temporary placements. This was necessary as national hospital data alone cannot reliably identify who is admitted from or discharged to a care home. The report provides a summary of the clinical characteristics and test status of all those who were discharged; analysis of the outcomes for individuals within 30-days of hospital discharge (COVID-19 infection, all-cause mortality and COVID-19 mortality) and an analysis of those 106 individuals whose last test before hospital discharge was positive. It also provides an analysis of care home outbreaks across Scotland. The report acknowledges limitations in the methodology available as it does not include data submitted by care homes on individuals they received, it does not include those admitted from their own home or other care homes and it does not include care home staff tests.

Mental Welfare Commission Review

The Mental Welfare Commission for Scotland undertook a review of cases of individuals who moved from hospital to care homes during the period 1st March to 31st May 2020 and sought information directly from HSCPs. Their 'Authority to Discharge' report was published in May 2021 and found evidence of unlawful moves, mistaken interpretation of changes to legal powers and lack of evidence of reviewing legal documents. The report makes 11 recommendations for HSCPs, the Care Inspectorate and Scottish Government to address with respect to hospital discharge processes for those who lack capacity (footnote 51).

Infection prevention and control

Infection prevention and control (IPC) is defined by the World Health Organization as:

"a practical, evidence-based approach which prevents patients and health workers from being harmed by avoidable infection and as a result of antimicrobial resistance." (Footnote 52)

IPC is relevant across all care settings. There are ten Standard Infection Control Precautions which apply to:

"all staff, in all care settings, at all times, for all patients whether infection is known to be present or not to ensure the safety of those being cared for, staff and visitors in the care environment." (Footnote 53)

Scotland has had a National IPC Manual (NIPCM) in place since 2012, which was mandated for use in the NHS but not for social care, including care homes (footnote 54). It is recognised that the focus of IPC in Scotland has been on hospital settings, with a lack of community-based IPC practitioners (footnote 55). Scotland had national Healthcare Associated Infection standards in place, "considered as best practice guidelines for social care settings", but documents acknowledge the need to align with other standards (footnote 56). The pandemic has prompted a review of these standards and the development of IPC standards which can be used for health and social care settings (footnote 57).

Guidance

During the pandemic, guidance for adult care homes has been produced by three main organisations:

- 1. Scottish Government Clinical Guidance
- 2. Health Protection Scotland (HPS), later known as Public Health Scotland (PHS)
- 3. Antimicrobial Resistance and Healthcare Associated Infection (ARHAI), NHS National Services Scotland (NHS NSS)

Scottish Government Clinical Guidance

Links to access the three clinical guidance documents are provided in Appendix 2. All versions cross reference HPS guidance as the source of advice on preventing spread of COVID-19. The March versions refer to handwashing, appropriate PPE and cleaning of communal areas and hard surfaces. The May version includes a specific IPC section (section 7).

HPS/PHS Guidance

A summary of HPS/PHS guidance is provided in the Appendix 1. The first version was issued on the 12th March 2020 and was intended to cover social or community care and residential settings. In late April of 2020, guidance was split, creating care home specific guidance. This guidance has continued to be updated throughout the waves of the pandemic with versions and dates provided in Appendix 1. It is now a joint publication between PHS and ARHAI which applies for all adult care home services in Scotland (footnote 58).

ARHAI Guidance

In December 2020 a Scottish COVID-19 Care Home Infection Prevention and Control Addendum was published to provide COVID-19 specific advice for care homes, in addition to the contents of NIPCM (footnote 59). It was recognised that the NIPCM needed some adaptation for implementation in the care home setting and thus work was undertaken with stakeholders to take account of the specific care home context. The Care Home NIPCM was launched on 24th of May 2021 (footnote 60 and 61), and a National Cleaning Specification for Care Homes was shared with a three-month implementation period (footnote 62). Webinars were offered to support implementation of the Care Home NIPCM and Cleaning Specification (footnote 63). The COVID-19 Care Homes Addendum was later replaced by the Winter (21/22) Respiratory Infections in Health and Care Settings Infection Prevention and Control (IPC) addendum in November 2021 (footnote 64). This Winter (21/22) addendum presents care home guidance alongside that for secondary care, primary and community care and dental settings.

Feedback from care home managers identified concerns about the timing of guidance changes and difficulties this posed for implementing change and meeting expectations of relatives. This included the timing of circulation (often later in the day, often on Fridays) and the clarity of guidance/ability to identify changes in content (footnote 65). Concerns about timing of communication were reiterated in the Scottish Government review of lessons learned from the initial response. This included concerns around:

"when Scottish Government guidance was issued which either contradicted or did not align with Health Protection Scotland guidance" "exacerbated when several aspects of guidance were felt to be 'piecemeal' in collections of letters, often sent out late in the evening or over the weekend with immediate implementation required". (Footnote 66)

A later section of this briefing will discuss Inspections, oversight and investigation in detail (page 69). It is important to note that inconsistency in the IPC advice provided by assurance and inspection visits has been reported by care home managers (footnote 67).

Personal Protective Equipment (PPE)

Guidance and advice with respect to PPE use in care homes (and other settings) has changed during the pandemic. Core items of PPE currently include gloves, plastic aprons, fluid-resistant surgical masks (FRSMs) and eye protection in the form of goggles/visors (when indicated).

Initially FRSMs and eye protection were only recommended when providing care within 2 metres of someone who is suspected or known to have COVID-19 (footnote 68 and 69). On the 23rd June 2020 guidance changed to recommend that staff working:

"in an care home for the elderly should wear a medical face mask at all times throughout their shift. In relation to care homes, it is expected that this advice will be relevant in the first place to care homes for adults and older people" (footnote 70)

In addition:

"Members of the public visiting a care home for the elderly are asked to wear a face covering of the same kind that the Scottish Government has recommended be worn on public transport, where it's not always possible to maintain a 2-metre distance from other people."

The second issue around PPE is procurement and provision to the care home sector. Audit Scotland have reported on shortages of PPE in the early stage of the pandemic, acknowledging there was significant worldwide demand, impacts on costs and a lack of centrally held stocks (footnote 71). They also note that providers, such as care homes, "would normally source PPE from private supply chains, found that their usual suppliers were unable to provide the increased levels of PPE needed" acknowledging the difficulties experienced and shared by the sector (footnote 72). A helpline was established on the 24th March 2020 to triage social care queries about PPE supplies, accessible only when: "there is an urgent supply shortage and a suspected or confirmed case of Covid-19" (footnote 73).

Testing

The diagnosis of COVID-19 is made using Polymerase Chain Reaction (PCR) nasopharyngeal (nose/throat) swab tests which have been analysed in specific laboratories across Scotland. As the pandemic has developed, new technologies have become available to care homes including Lateral Flow Device (LFD) tests, provided by NHS NSS funded by Scottish Government (footnote 74).

Regulatory rules from the Medicines and Healthcare products Regulatory Agency (known as the MHRA) have impacted on testing approaches and pathways in care homes in Scotland. This has included availability of testing at home by staff and visitors.

While national guidance around testing was developed and published, it is important to acknowledge at the outset that there was variation between NHS Boards in policies towards testing care home residents and staff in the early phase of the pandemic (footnote 75). This variation effects the completeness of COVID-19 data and accuracy of case ascertainment (identifying all those who are positive). The availability of tests and routes tests can be accessed introduces bias around those who receive a positive test. For example, if testing is limited to those admitted to hospital, this will miss identifying cases which are less severe or cases occurring in individuals who do not wish hospital care or cannot access hospital care.

Changes in testing demand across wider society have impacted on the timeliness of care home testing during the pandemic, particularly in the autumn of 2020 (footnote 76). The impact of these delays on outbreak confirmation was identified as important in a root-cause analysis of care home outbreaks (footnote 77).

Published epidemiological data from Scotland consider care home outbreaks (footnote 78 and 79), rather than the prevalence of the disease within complete care homes or regions. Asymptomatic COVID-19 (being PCR-positive for the virus without any symptoms) was reported in the New England Journal of Medicine (NEJM) in a long-term care facility (LTCF) in Washington, published on 27th March 2020 (footnote 80). The risk of presymptomatic disease among LTCF residents, with risk of onward transmission to others, was highlighted in

the USA and again published in NEJM on 28th May 2020 (footnote 81). Outbreak investigation studies conducted by Public Health England in four London care homes which tested all residents found that 40% of residents were positive of which 43% had no symptoms and 18% had only atypical COVID symptoms (footnote 82). Further work in seven London care homes without outbreaks found evidence of COVID-19 exposure in 10-50% of residents and staff in Spring 2020, suggestive of prior exposure or 'silent outbreak' (footnote 83). These are quoted to highlight the under-detection of COVID-19 cases early in the pandemic among residents and staff which will have occurred as a consequence of testing policies.

Resident testing

Resident testing is first mentioned in the HPS COVID-19 social care guidance issued on the **17th April 2020**. This states that the procedure to that point was that:

"Outbreak guidance states that the first five symptomatic residents in a care home setting should be tested to provide confirmation of an outbreak of COVID-19." (Footnote 84)

Access to testing at this time required tests being brought to care homes and conducted by visiting professionals. Anyone undertaking testing was recommended to wear PPE including a fluid-resistant surgical mask and eye protection (footnote 85).

17th April 2020: guidance was updated so that all care home residents with COVID-19 symptoms would be included in testing, removing the limit described above (**footnote 86**).

1st May 2020: announcement that all residents in care homes with an outbreak (defined as two or more linked cases) would be offered a test (**footnote 87**). In addition, sample testing in

care homes without cases was commenced for "some asymptomatic residents and social care workers".

Testing procedures for individuals moving into a care home or on returning from hospital are described earlier in this briefing document (page 22).

Testing for staff

In March 2020 there were no COVID-19 tests routinely available for care home staff.

National guidance from the **15th March 2020** was that testing was reserved for those requiring admission to hospital (**footnote 88**), thus staff attending COVID assessment centres or hospitals may have received a clinical diagnosis of suspected COVID-19 but they would not routinely have had this diagnosis confirmed with a laboratory test. By the **28th April "key workers in our health and care services"** are reported to be included in existing NHS testing arrangements, with tests available to those with symptoms at testing sites (**footnote 89**).

1st May 2020: all staff in homes with outbreaks to be offered testing and "Where staff work between homes run by the same operator, testing will also take place in those homes following a risk assessment" and initiation of sample testing as described above (footnote 90).

14th May 2020: interim guidance published on COVID-19 testing in care homes and management of positive residents and staff (**footnote 91**), updated two days later and republished (**footnote 92**). These documents provide details around introducing the testing expansion announced on the **1st May**, particularly how to manage staffing when undertaking asymptomatic testing and ensuring safe staffing is maintained.

18th June 2020: weekly testing of care home staff by PCR announced and introduced, results managed through the UK Government Social Care Testing Portal (**footnote 93**). On the **24th June** a Social Care Staff Support Fund was introduced to support care staff receive their usual pay when required to self-isolate and try to avoid financial hardship (**footnote 94**).

24th December 2020: enhanced care home staff testing to start from 4th January 2021 – twice weekly LFD tests to be started in addition to existing weekly PCR test, with one LFD to be done at same time as PCR (footnote 95). Care home staff asked to log these results online on the testing portal. Care home staff are required to undertake their tests at the care home and are not supplied with home testing kits (unlike NHS staff). Requirement to test on-site remains until 12th July 2021, where location of testing based on care home discretion (footnote 96).

9th December 2021: care home staff to take daily LFD on working days alongside weekly PCR tests (**footnote 97**).

Testing for visitors

Access to testing for care home visitors started in December 2020, with a pilot involving 12 care homes in four areas starting to provide testing on the **7th December** (**footnote 98**). The findings from the pilot work and learning captured have not been published. Rollout to all homes was planned in January and February 2021 (**footnote 99**), but communication was issued on the **14th December** starting provision of LFD testing kits to all homes for visitor testing (**footnote 100**). LFD tests had to be done at the care home, with visitors waiting for results, requiring care homes to manage the logistics of visiting and testing on-site. The requirement for tests to be done at the care home itself remained in place until **July 2021** (**footnote 101**).

COVID-19 Outbreak Investigations/Analysis

Academic reports

Academic work has been undertaken and published evaluating COVID-19 outbreaks within Lothian, in all adult care homes and in older adult care homes in Scotland (footnote 102, 103 and 104). These have identified care home size as the most significant predictor of care home outbreaks using available data, with community prevalence of infection also important. Modelling studies have been undertaken by a team at the University of Strathclyde on the role of staff testing and the impact of staff working across several care homes (footnote 105 and 106).

Root cause analysis

Independent root cause analysis work was commissioned by the Cabinet Secretary for Health and Sport and undertaken in October 2020 by Jacqui Reilly, David Crawford and Donna O'Boyle (footnote 107). It was a mixed methods study involving review of a range of clinical data sources, published literature and interviews with stakeholders. There was a focus on four care homes with outbreaks with large numbers of positive cases, none which had experienced an outbreak during the first wave. A total of 14 recommendations were made to improve the management of COVID-19 in care homes across Scotland, on the topics: Care Home risk factors, First wave, Data landscape and digital infrastructure, Early Warning Systems, Testing, IPC knowledge and expertise, IPC indicators, Leadership, Training and education, Guidance and local, Inspection arrangements, Carer perspectives, Built environment and Raising Concerns (footnote 108).

Whole genome sequencing

Whole genome sequencing has been suggested as a tool to help investigate outbreaks, including those taking place in care homes (footnote 109). A care home outbreak sequence analysis is included in the Scottish paper looking at the introduction of the virus to Scotland, showing evidence of community transmission in the cluster of cases (footnote 110). Analysis was undertaken to supplement work in the PHS Hospital Discharges report. However, findings are limited by the lack of available sequencing data from the first wave of the pandemic (footnote 111). There are no other published or publicly available reports on the genomic epidemiology or investigation of care home outbreaks in Scotland.

Care home context

A recurring issue relates to recognition of care homes as homely settings, rather than medicalised environments like hospitals (footnote 112). The creation of care home specific NIPCM and the need for adaptation of IPC indicators show progress recognising the specific care home context. This needs to be reflected in personnel as well as in guidance and the Root Cause Analysis report specifically recommends that:

"Local IPC capacity requires to be developed at H&SCP level and with HPTs to support care homes with expert IPC advice which is risk based, proportionate and supports compassionate care in a homely setting" (footnote 113)

An additional practical consideration relevant to care homes is the need for them to be adequately insured. This is a necessary condition of their operation. Concerns were first voiced in September 2020 about the insurance sector and access to liability insurance (footnote 114). By November 2021 these concerns had become manifest with premium costs escalating for care home providers (footnote 115). The pandemic has placed significant additional costs on care homes including testing and associated administration logging results to evidence engagement with the programme; visitor testing and coordinating visiting to be accountable and maintain adequate records in the event of an outbreak, in addition to significant staffing and equipment costs (footnote 116).

There has been no formal research undertaken in Scotland exploring the experiences of care home staff in managing COVID-19. Mixed methods research in England exploring the lived experience of implementing IPC measures during the pandemic and highlighted the difficulties, particularly in caring for those living with dementia and the need for care-home guidance to be informed directly by staff working on the frontline (footnote 117).

A final key issue to consider is the cascading and dissemination of changing national guidance to frontline care home staff in a diverse range of roles (including housekeepers, carers and nurses), principally by care home managers. Guidance has varied from PDF format documents (HPS/PHS/SG guidance) and online resources (e.g. the CH NIPCM). Access to devices has already been discussed but this is also applicable to care home staff. Digital skills are recognised as key facilitators to use of new technologies in the care home setting, which also require support (footnote 118).

Treatment and care of residents

Guidance around family and friends, professional visitors, communal activities, and trips outside of the home has been developed and communicated as part of visiting guidance. Therefore, these aspects of care home life will be discussed in the next section of this briefing (page 49). Given the focus of the Inquiry, this section will therefore primarily discuss treatment and care related to COVID-19.

COVID-19 presentation

It is widely recognised that older adults often present with illnesses in an atypical or non-specific manner, for example with falls or delirium (an acute confusional state) when they have an infection (footnote 119). Delirium is very common as a presenting symptom in those living with dementia when they become unwell for any reason (footnote 120).

Public messaging around recognition of COVID-19 illness was based on recognition of core symptoms of new continuous cough, fever and later loss of sense of taste or smell (added 18th May 2020) (footnote 121).

Clinical guidance for care homes issued on **26th March 2020** stated:

"The most important thing is simply to be vigilant that someone who is frail may experience health challenges in a different way and being aware of that may provide an opportunity to flag up when someone needs medical or nursing assessment" (footnote 122)

This guidance was strengthened when republished on **15th May 2020**, which stated:

"Many older people may not present with the commonly reported symptoms of COVID-19 (such as a new persistent cough and temperature). Reported symptoms include loss of appetite or smell, vomiting and diarrhoea, shortness of breath, falls, dehydration and increased confusion, delirium or excessive sleepiness." (Footnote 123)

A Scottish Intercollegiate Guideline Network Position statement was issued at the end of May 2020 about the presentation of COVID-19 in older adults in acute care which highlighted atypical symptoms but also the need to consider other non-COVID-19 causes of illness (footnote 124). These were based on experiences from clinical practice and emerging international evidence (footnote 125, 126 and 127). There is no published data on the prevalence of atypical or non-specific presentations of COVID-19 in care homes in Scotland. However, engagement work with the sector identified that these symptoms were common among residents with COVID-19 and important to highlight, thus they were incorporated into an educational resource first published in December 2020 (footnote 128 and 129). Awareness raising targeted towards staff working in care homes on the ways in which COVID-19 can present in older people was recommended in the Root Cause Analysis review (footnote 130).

COVID-19 care

Access to diagnostic testing has already been discussed (page 33). Symptomatic residents received care in isolation in their rooms in line with clinical and public health guidance. Care homes were advised to:

"take residents temperature and where necessary are supported to take other vital signs including blood pressure, heart rate, pulse oximetry and respiratory rate. This will enable external healthcare staff to triage and prioritise support of residents according to need."

Some, but not all patients with COVID-19 developed low oxygen saturations (levels). Oxygen is not routinely available in most care homes but can be provided for individuals to use through established community oxygen pathways, authorised by prescribers. Some additional arrangements were made during the pandemic to improve care homes access to oxygen in the event it was needed, but these vary across partnership/health board areas and the extent of need and uptake by care home residents is not known.

In the early months of the pandemic, there were no evidence-based treatments for COVID-19. Good fundamental supportive care was key, for example managing fever, relief of distress, support with hydration, care of those with delirium, skincare, and repositioning. Such activities are part of existing care home practice, although clearly more complicated when managing a highly infectious and new disease.

Moving into autumn 2020, British Geriatrics Society guidance for care homes highlight a potential role for medications to reduce the risk of blood clots (so-called thromboprophylaxis) and use of subcutaneous fluid therapy in selected cases – both requiring involvement of prescribers (footnote 131). Neither of these are treatments for COVID-19 but considerations to address recognised complications of the illness.

Access to external care and support

Across Scotland residents in care homes receive medical support through a range of clinical models. This includes locally enhanced GP contracts (where homes are aligned to specific practices and resource is provided to support proactive care), while other care homes can be supported by multiple GP practices, and some receive additional support from geriatricians. Some regions also have specific Care home liaison nursing teams, supporting multiple homes. Hospital at Home services have been established across some regions of Scotland, particularly NHS Fife, NHS Lothian, NHS Lanarkshire, NHS Tayside and NHS Grampian (footnote 132). These teams exist to provide acute hospital care in an individual's home and can also support residents in care homes when appropriate. There is no nationally published data on the distribution and uptake of these models, although such intelligence is known to HSCPs, but the landscape is highly varied.

Guidance for care homes was that although they were to significantly reduce external visitors that: "This might need to consider visits from appropriate health and care staff as essential." In common with wider Scottish society, the use of technology and clinical systems such as NHS NearMe have been promoted as alternative ways for external healthcare professionals to support residents in care homes (footnote 133 and 134). However, access to broadband and wifi throughout the care home and the availability of appropriate devices which can facilitate remote consultations is not universal across Scotland's care homes. As the pandemic progressed, some of these challenges have been recognised (footnote 135) and schemes providing technologies have been established (footnote 136) and plans made for building digital skills (footnote 137), but there remain accessibility and practical challenges around this model of care for those living in care homes.

For individuals with COVID-19, guidance stated:

"It is not advised that residents in long term care are admitted to hospital for ongoing management but are managed within their current setting. Where a long-term care facility is affected we should aim to deploy in-reach to bring care to residents. That may mean members of the community such as district nursing AHPs, GPs or where appropriate hospital at home."

(Footnote 138)

The extent to which local areas were able to respond and provide support will have varied, reflecting the variation in relationships and support care homes experience in accessing care for residents. There was a need to ensure care home staff were supported in managing a novel and thus unfamiliar infectious disease among those whom they care for. This included in their interactions with external care professionals, including GPs, community nursing teams, NHS24, out-of-hours services and hospital teams. There has not been any work undertaken in Scotland to explore and learn from the experiences of care home staff in supporting residents with COVID-19. As the pandemic has continued, additional guidance for visiting professionals has been issued and reiterated (page 56).

Emerging treatments

The first evidence-based treatment for COVID-19 was Dexamethasone, a steroid medication which is taken orally, published on 16th June 2020 (footnote 139). Evidence was derived from individuals in hospital and beneficial effects of treatment were reserved only for those who needed oxygen therapy, with treatment increasing mortality among those with normal oxygen levels (footnote 140). Steroid treatment in older

adults has some complications, including the potential to worsen delirium and the need to monitor blood glucose levels (footnote 141). These can both be managed in a care home setting but required the development of locally agreed protocols before any change in care practices.

As evidence has emerged from clinical trials, undertaken in hospital and in adults living independently in the community, thus some treatments have been recommended for those at high risk. Some care home residents are considered in those eligible and guidance was issued on 31st December 2021 to highlight availability of treatment to selected patients (footnote 142). Decisions require consultation including with any legal representative for residents and not all can be delivered in the care home setting without the support of specialist teams able to administer intravenous treatment.

A UK-wide platform clinical trial to evaluate preventative treatments for COVID-19 in care home residents, known as PROTECT-CH, was planned and funded by the National Institute for Health Research (footnote 143). However, this was unable to proceed as the time taken to establish all of the infrastructure to undertake such work in UK care homes, the uptake of the COVID-19 vaccination programme rollout changed the epidemiology of the virus in care homes and made the work unfeasible (footnote 144).

Vulnerability and mortality from COVID-19

Tragically, COVID-19 is a disease which carries a significant risk of death to those who are infected and have specific risk factors, with published data internationally and across settings of care, prior to the development of vaccines. These include increasing age, frailty, living with multiple health conditions, specific conditions such as cancer, chronic kidney disease, obesity, dementia, cerebral palsy and Downs syndrome (footnote 145, 146, 147, 148, 149, 150, 151, 152 and 153). Significant mortality has been identified among those living in care homes globally (footnote 154). Additionally even after vaccination, there are a range of recognised conditions which increase the risk of mortality from COVID-19 (footnote 155 and 156). Excess mortality in Scotland has been identified among those living with learning/intellectual disabilities (footnote 157) and those living with dementia (footnote 158).

Collectively, individuals living in care homes are systematically different from those living in their own homes, in terms of the complexity of their needs and their usual life expectancy (footnote 159). Analysis of Scottish data from older adult care home services from March to June 2020 has been undertaken and published. Using registered places (as we do not have data on number of occupied places) mortality from COVID-19 ranges from 1 to 40%, with an average of 8.2% per care home (footnote 160). A quarter of all COVID-19 associated deaths occurred in just 26 homes (3% of all older people's care-homes and 8% of such homes with COVID-19 deaths) (footnote 161). The topic of end-of-life care is explored separately in this briefing (page 61), but the impact of COVID-19 mortality on staff, residents and their loved ones must be acknowledged.

Vaccination

The Joint Committee on Vaccination and Immunisation decision in winter 2020 to prioritise residents in care homes for older adults, their carers and all frontline social care staff (footnote 162) has been unquestionably effective in reducing mortality associated with COVID-19 among those living in care homes (footnote 163). Despite significant increases in community prevalence of the virus (footnote 164), this has not resulted in significant mortality from the virus among residents.

Rollout of the vaccination has been undertaken through visiting Vaccination Management Teams providing vaccinations to residents and staff (footnote 165). Logistical issues around the distribution of vaccine and storage, necessitated this approach particularly at the time of initial rollout (footnote 166). However, this centralised approach will have implications for the uptake and accessibility of both influenza and COVID-19 vaccination in the care home sector and under-utilises the skills of care home nurses to support and ensure all who are eligible can be included (e.g. including staff not on shift on a particular day, including residents out of the home/in hospital, new residents).

Despite use of new technologies with vaccine data collected at time of injection, care home staff have been repeatedly required to report on vaccination uptake by their residents and their staff, via the Safety Huddle Tool, to inform Oversight arrangements and inform national estimates of coverage (footnote 167). The limitations and inability to join this information centrally for residents, results in additional reporting by frontline care staff and need to be considered as we move towards living with COVID approaches in public health policy.

Restrictions on visiting

Like all members of society, people living in care homes have a diverse range of relationships and circumstances. Some are supported by family members and other close loved ones, others have companionship from neighbours, friends, or faith communities, some are sustained by relationships with supportive professionals such as hairdressers, social workers or faith practitioners, others by volunteers. Some individuals living in care homes have no visitors and are represented legally by solicitors without ongoing contact. Many care homes are considered part of their wider communities, with visits from nurseries, schools, students, and volunteers. Similarly, some adults who live in care homes spend time visiting local shops, going on trips, and visiting family members, including overnight stays. There are also a wide range of visiting professionals providing additional clinical, social, and personal supports. Such introduction is necessary context for explaining the range of social contact and visiting those living in care homes may have experienced before the pandemic and the scope which guidance and restrictions covers.

Terminology

I recognise that many close family members, who have continued involvement in the care of their loved one after they have moved into a care home setting do not feel that the term 'visitor' captures their role, relationship, and significance. This view has been reflected across the UK and internationally with guidance 'More than a visitor – a guide to essential family carers' (footnote 168) and legislation developed in Ontario during the pandemic, known as the 'More Than a Visitor Act' (footnote 169). This briefing will discuss guidance and restrictions around visiting of all forms to care homes in

Scotland. This is not intended to diminish the value of the relationships some care home residents are fortunate to share, but for consistency to align with Scottish guidance publications.

Key events and guidance in 2020

A summary of all available Scottish Government issued visiting guidance is provided in the Appendix 3 with dates and hyperlinks for ease of reference to read in full. Some of the guidance issued in 2020 is no longer available on the Scottish Government website, some communications are accessible **via** other partners – hyperlinks have been provided wherever possible.

Following formation of the Clinical and Professional Advisory Group (CPAG) for Care Homes in May 2020, visiting guidance was developed through this multidisciplinary group. Guidance required approval from civil servants and clinical teams in Scottish Government, PHS and Scottish ministers before publication.

13th March 2020: Scottish Government Clinical guidance to care homes issued which advised:

"Reducing visitors to the home apart from essential visits. This should seek to reduce external visitors by 75% as with other guidance. This might need to consider visits from appropriate health and care staff as essential. Thought should be given to having a named relative as contact. There may need to be consideration given to a named relative as an essential visitor, but the frequency and duration of visiting will need to be reduced. Obviously there needs to be flexibility where appropriate such as in end of life settings." (Footnote 170)

In addition, the guidance stated that:

"Residents should be isolated within their rooms as much as is practical and ideally reducing time in communal areas by 75% also. Meals should be served in residents rooms where possible and communal sitting areas avoided." (Footnote 171)

26th March 2020: Scottish Government Clinical guidance to care homes updated to align to HPS guidance, this states that:

"Routing visiting should be suspended – Only essential visitors permitted in line with HPS guidance. Local risk assessment and practical management should be considered, ensuring a pragmatic and proportionate response. Visits from appropriate health and care staff would be classed as essential. For family and friends, visits should be restricted to end of life care situations or people with dementia who are distressed..........Visiting may be suspended if considered appropriate." (Footnote 172)

25th June 2020: Guidance is issued for implementation on the **3rd July** with a proposal for a staged approach to visiting and communal activity in care homes. It required care homes to develop visiting plans to resume outdoor visiting, by appointment. Local risk assessment was to be undertaken by a range of external stakeholders and visiting was only permitted if there had been no COVID-19 cases for 28 days. Guidance prepared for visitors specifically highlighted avoiding physical contact/touch/cuddle with the resident, with social distancing of two metres required (**footnote 173**).

8th August 2020: Expansion of outdoor visiting and development of indoor visiting plans for approval by Directors of Public Health before **24th August** to allow indoor visits to resume (**footnote 174**).

1st September 2020: the Scottish Human Rights Commission wrote to CPAG arguing that the human rights of residents, their families and staff should be a principle around which decisions on visiting are based and that this be explicitly reflected in guidance and decision-making (**footnote 175**). They also advocated for involvement of those with direct experience in development of guidance.

3rd September 2020: Guidance issued for professional health and social care services to resume routine visits to care homes, in the absence of any COVID-19 cases for 28 days (**footnote 176**)

12th October 2020: Updated family and professional guidance issued to involve broader range of professionals beyond health and social care (e.g. spiritual care, hairdressers), guidance on gifts (need for wiping down or quarantine) and pets/therapet visits (footnote 177). Key change to family visiting extending length of visits and involvement in care and touch/physical contact to be resumed. This guidance explains relationship between care home guidance and local and national restrictions and provided more detailed definition of "essential visiting".

Christmas and New Year 2020: An additional eight-page guidance document was issued on the 4th December 2020 with advice for families and care home staff, differentiating restrictions for those in older adult homes from other adult homes and outlining how care home guidance applies in areas in Level 4.

Alternative approaches

In the absence of routine visiting, alternative approaches were suggested including virtual visiting using technology and devices (footnote 179). However, these were contingent on access to appropriate devices, connectivity throughout the home and staff to support residents as needed. Funding was provided in November 2020 to help support digital device provision (footnote 180).

Window visits were incorporated into outdoor visiting guidance, but often limited by practicalities such as building design, resident mobility and sensory impairments.

Visiting rooms with screens were developed and installed in some care homes, although not recommended in Scottish guidance. These physically separated the resident from their visitors, posing significant challenges for those living with dementia or sensory impairments among others and often reported to have caused distress to all (footnote 181).

Open with Care

24th February 2021: Launch of Open with Care Guidance: Supporting Meaningful Contact in Care Homes (footnote 182). This set out an incremental approach to resuming meaningful contact for all adults living in care homes in Scotland, starting with two visits per week and increasing frequency and number of visitors. A ten-point checklist was provided on the conditions for resuming indoor visiting which included approval from the clinical oversight team and directors of public health (footnote 183). Supplementary information was provided to respond to queries from care homes and visitors, addressing practical questions and concerns. This has continued to be updated as queries arose, and version 1.8 has been in place since July 2021 (footnote 184).

An oversight group was formed to support implementation of Open with Care, as a distinct sub-group from CPAG, with involvement from a wider range of local and national bodies, care providers and relative and carer representative groups. A review of implementation progress was published on the 25th June 2021, collating data and feedback from a range of sources including Safety Huddle Tool data (footnote 185). This recommended:

"continued national and local action will support meaningful contact to become the norm. This action should focus on:

- a. Care homes improving, maximising and embedding meaningful contact.
- b. Local system support and monitoring to maximise contact.
- c. Strengthening awareness and adoption of Open with Care."

17th May 2021: Additional advice and guidance: activities and outings away from the care home (footnote 186). Guidance issued linked to the national levels framework with provided advice on arranging outings and considerations (including risk minimisation, planning the outing and procedures on return to the care home). Support from Clinical Oversight Teams forms part of the considerations documented.

6th August 2021: Beyond level 0 – Associated updates to Open with Care and Open for Care was issued (**footnote 187**). This guidance recommended working towards normalising visiting arrangement for people in and away from the care home, including enhanced communal and group activities.

A survey of 434 care home managers was conducted in August 2021 to obtain their feedback on implementing Open with Care. The analysis was undertaken by the Social Care Analytical Unit in Scottish Government. Main findings were as follows:

- "The majority of respondents were supporting a range of visiting options and were planning to continue to increase contact for residents and their families and friends.
- Respondents viewed visiting as vitally important for residents and their loved ones, and they were striving to deliver meaningful contact safely.
- However, it was clear that respondents were dealing with substantial logistical challenges and sensitive issues around visiting, within the context of balancing safety and risk, and were very concerned about future outbreaks and potential repercussions.
- The majority of respondents were experiencing significant challenges in relation to staffing and workload.
- For some respondents, ensuring visitor compliance with guidance was a further challenge.
- There were mixed views about the advice, guidance and support provided for Open with Care with calls for more notice to be given around significant guidance changes and suggestions for improving the clarity of guidance." (Footnote 188)

Oversight for the implementation of Open with Care continues into 2022 involving key stakeholders.

Action on Rights

Alzheimer Scotland were commissioned by Scottish Government to establish the Action on Rights team in February 2021, to support the implementation of Open with Care (footnote 189). The charity had an existing 24-hour dementia helpline and this had been a vehicle of support for those with family members living in care homes during the earlier stages of the pandemic. It was promoted through a range of stakeholders

and accessible for anyone in Scotland looking for support around visiting a friend or loved one in a care home whether or not they had a dementia diagnosis (footnote 190). Critically, there was provision of emotional support for callers, acknowledging their experiences to-date and working with individuals and care homes to resolve issues and find solutions collaboratively (footnote 191). The helpline team also have access to routes for onward referral for counselling for people living with dementia and their families.

The helpline plays a valuable mediation role and families accessing their support can access support, without their initial contact outwith the care home having to be the care regulator.

The team report on their activity to Scottish Government and to the Oversight group established for Open with Care implementation. In addition to their case work involving individuals, they have undertaken consultation work with families, friends, and care home staff. Critically, they have also undertaken consultation events inclusive of residents (virtual meetings facilitated in the care home) and received video feedback and written submissions from residents on their views, which would be valuable to explore.

Care Home Relatives Scotland

Care Home Relatives Scotland formed in July 2020 as a campaigning group of relatives with family members in care homes, as of May 2021 their Facebook group had 1900 members (footnote 192). Their aim at inception was: "To enhance the quality of life of our loved ones in care homes, by resuming essential family contact". They have undertaken member surveys and provided feedback to inform policymakers. They have been involved in the development of

guidance and the oversight of implementation, have collaborated with similar groups across the other UK nations and brought the petition for legislation known as Anne's Law (page 60). Members of the group have been involved in analysis of a subset of publicly available data (footnote 193) and in producing open access resources on compassionate IPC in collaboration with IPC experts (footnote 194 and 195). This concept was first expressed in an open letter from 16th October 2020 in the Nursing Times (footnote 196).

Restoring Relationships

Together in dementia everyday (TIDE) are a carers organisation based in Scotland and England (footnote 197). They received funding from Scottish Government to undertake a programme of work, called 'Restoring Relationships: The Recovery of Love, Connection and Family' to support those living in care homes because of the restrictions faced during the pandemic (footnote 198). This recognises both the impacts for families and relatives of those living in care homes and for care home staff and managers and resulted in the creation of toolkits for support and webinars for both groups.

Academic research

Two academic research projects have been conducted in Scotland on the topic of care home visiting restrictions.

The first was a multi-institutional collaboration led by The University of Edinburgh and funded by the Chief Scientist Office (footnote 199). The research was undertaken between May and October 2020 and involved: an online survey of family carers; 36 interviews with family carers of care home residents;

19 interviews with stakeholders and five café style interviews with 21 members of care home staff from four care homes (footnote 200). The survey identified significant mental distress among carers and the interviews explored carers' views on restrictions highlighting the emotional toll (footnote 201). Interviews with staff identified the effort by care staff to maintain family connections, the attention to emotional well-being of residents living and dying in the care home and the professionalism and commitment of the leadership and staff involved (footnote 202).

The second was undertaken by Stirling University and involved qualitative interviews with 32 relatives of people living in care homes in Scotland in April and May 2021 (footnote 203). The aim of this work was exploring the impacts of COVID-19 restrictions on relatives and residents of care homes for older people in Scotland. Findings were grouped into the impact on relatives and residents as individuals, impact on familial and caring relationships and the impact of restrictions on care.

Open for Care

On the **14th April 2021** there was further guidance issued named: Open for Care, for visiting health, social care and other services in care homes and communal activity (**footnote 204**). A staged approach was proposed accounting for what should happen if a care home has an outbreak through to expectations as the rest of Scotland moved through the Levels Framework. Guidance considered health and social care professionals, other professionals and volunteers (termed people and organisations), site-related services and communal activities and provided principles for return of visiting services. This included guidance for professionals on aspects such as testing, planning of visits and use of PPE. Five conditions were

identified for supporting return of visiting professionals: no active outbreak, no concerns from clinical oversight team, screening and testing of professionals, care home staff testing and adequate PPE. An update was issued on the **2nd December 2021** which described updated principles for supporting the full return of visiting professionals and stated: "We encourage care to be needs led with a renewed focus on anticipatory, preventative and rehabilitative care for all residents" (footnote 205). It reiterated the need to liaise with care homes to coordinate professional visits to minimise the risk of infection and the need to maintain essential visits from professionals during outbreaks.

Named visitor

On the **15th September 2021** a further change was made to allow those in a period of isolation (e.g. after a hospital stay) to have a named visitor during their isolation and to allow individuals to designate a named visitor who can visit during a controlled outbreak in the care home (**footnote 206**). This change was intended to reduce any barriers to receiving care in hospital and avoid prolonged periods of separation which can arise when either another resident or staff member tests positive, extending an 'outbreak' for a further 14 days.

Guidance was strengthened on 19th January 2022, to recommend that: "named visiting should be supported in outbreak situations, unless there are exceptional circumstances" (footnote 207). This revision also reduced the isolation period to 10 days and reduced the number of residents who need to isolate after a hospital stay based on their in-hospital care pathway (page 20). Decisions on visiting during an outbreak should be made with HPTs, Oversight Teams and Care Home Managers.

Anne's Law

Anne's Law was included in the Programme for Government 2021-22, as an intention to introduce legislation "to ensure that people who live in adult care homes have rights to see and spend time with the people who are important to them" (footnote 208). The proposed legislation, to allow a designated visitor into care homes, arose from a petition proposed by Natasha Hamilton on behalf of Care Home Relatives Scotland, lodged in November 2021 (footnote 209). The petition was named to recognise Natasha's mother, Anne Duke, a former carer, living with dementia in a care home during the pandemic, who has sadly died since the petition was lodged. A public consultation was undertaken in October and November 2021, including workshops for stakeholders and residents alongside written submissions (footnote 210).

A separate public consultation in similar formats was also undertaken from September to November 2021 to review ways to strengthen the Health and Social Care Standards as an interim measure while developing legislation to enact Anne's Law (footnote 211). The current Health and Social Care Standards have been in place since 2018 and set out what everyone using health, social care or social work services in Scotland should expect – they include five overarching outcome measures, underpinned by five principles (footnote 212).

Both Anne's Law and the proposed strengthening of the Health and Social Care Standards reflect the ongoing, lived challenges of implementing the ambition to restore meaningful contact between citizens living in care homes and those who are important to them while living with COVID. The delivery of end-of-life care and the use of Do Not Attempt CardioPulmonary Resuscitation (DNACPR) decisions [only as it applies to those living in care homes]

End-of-life care delivery

Palliative and end-of-life care is a core function provided by many of Scotland's care homes, with up to a fifth of deaths in Scotland annually occurring in care home settings (footnote 213). Supporting individuals to receive end-of-life care in a homely setting, such as a care home, is a recognised part of national health policy (footnote 214).

Before the pandemic, there was a recognised need to improve support for the care home sector in Scotland to enable them to deliver increasing levels of high-quality palliative and end-of-life care (footnote 215). Recommendations included: improved access to specialist support and advice, promotion of anticipatory care planning and access to education and training opportunities inclusive of and tailored to the needs of care home staff. These themes have been reflected in academic research undertaken across the UK (footnote 216).

There are some structural barriers which exist which can make the delivery of high-quality palliative and end-of-life care in care homes more difficult. For example, care homes cannot legally hold controlled drugs on a non-named patient basis without a special license from the Home Office. This means that if a resident requires medications used to relieve symptoms at the end of life, such as opiate-based painkillers like morphine, a specific supply for that resident must be obtained. This is unlike what happens in hospices or hospitals, where a stock of these

medicines can be held and given to anyone who requires them once they have been prescribed as indicated and beneficial for that person. This can lead to delays in relieving distressing symptoms. Many individuals receiving palliative care in the community have a supply of medications for symptomatic relief in place, for administration by an appropriate practitioner if required. These are known as 'Just in Case' medications and are an established part of palliative care practice (footnote 217). National guidance for care homes stated: "It may be judicious to ensure that just-in-case medication is prescribed for high risk residents." (Footnote 218)

Two other temporary changes were made to try to help support access to medicines and timely palliative care for residents who needed it. These were a COVID-19 palliative care toolkit providing guidance to support Primary Care, Emergency Departments, HSCPs, Health Boards, Pharmacy Teams, Community Care and Palliative Care teams (footnote 219). This specifically addressed support for care homes to access medications, highlighting a broader range of accessible medicines to provide symptomatic relief, increasing access to prescription only medicines and protocolising access to medicines at a national level. In addition, work was undertaken to facilitate the repurposing of prescription-only medicines in emergency situations to improve care home resident access (footnote 220).

We do not have comprehensive data on medicines administered/taken in the community, prescribing data capture when medications are dispensed from a pharmacy, not whether they are ever used or not. Care homes have their own medication administration record systems, most commonly paper based records, of medicines which have been given to residents. These must first be prescribed by a prescriber, commonly a general practitioner. For care homes without onsite registered nursing staff, administration of medicine would be by district or community nursing staff.

There are no national data on access to specialist palliative care services in Scotland and so the level of support given to care home residents is not known nationally. The Equality and Human Rights Commission raised concerns about access to palliative care for those living in care homes, from roundtable discussions with professionals and those with lived experience that they convened in summer of 2020 (footnote 221). Both Highland Hospice and St Columba's Hospice (Edinburgh) used existing projects using Extension for Community Health Outcomes (ECHO) technology to support care home staff in their regions in delivery of end-of-life care during the pandemic (footnote 222 and 223).

Bereavement and psychological support

Highly related to delivering end-of-life care is providing care for the bereaved – families, friends and professional caregivers. The Bereavement Charter for Children and Adults in Scotland explicitly acknowledges the need to support care workers in the grief and distress associated with the meaningful relationships they may have for those in their care (footnote 224). Excess mortality in care home residents has already been described, but it is important to reflect on the psychological toll this is likely to have had on care home residents and staff (footnote 225). Support, in the form of online national wellbeing resources (footnote 226) and a national helpline, have been available to health and social care staff since May 2020 (footnote 227). A feasibility study using Online Supportive Conversations and Reflection for care home staff was undertaken in Lothian. funded by the Chief Scientists Office and found to be helpful (footnote 228).

Anticipatory Care Planning

Anticipatory Care Planning (also known as ACP) is a process which has been advocated in Scottish health policy since 2010 for those with long-term conditions and promoted as valuable for those living in a care home (footnote 229). An ACP is defined in national documents as:

"a record of the preferred actions, interventions and responses that care providers should make following a clinical deterioration or a crisis in the person's care or support. It should be reviewed and updated as the condition or the personal circumstances change and different things take priority"

There is no national data on the uptake of ACP among care home residents in Scotland (before or during the pandemic). It is likely that many care home residents will have had an ACP in place before the pandemic, given the focus on ACP for this population.

There is national supporting electronic infrastructure to help share key decisions and ACP conversations, known as the Key Information Summary (KIS). The KIS is updated by Primary Care Teams and accessible electronically in Secondary Care, Out-of-hours and by the Scottish Ambulance Service. Before the pandemic, having a KIS completed increased the likelihood of individuals dying in their preferred place of care and the information within then was felt to be useful (footnote 230). It is important to highlight that neither residents nor staff in care homes have access to resident's KIS, unless a paper copy is printed for them to hold.

National clinical guidance for care homes, issued on 13th March and reissued 26th March 2020, advised that:

"Anticipatory Care Plans should be in place for as many residents as possible (and ideally all residents) in these settings. Clear documentation of 'What matters to me' is helpful in the event of changing circumstances. In many cases the staff in the Residential or Nursing Home settings are able to start these conversations."

On the 26th March 2020, the Chief Medical Officer (CMO) wrote to all general practitioners in Scotland for their support in identifying those at high risk of severe morbidity and mortality from COVID-19 (footnote 231). This letter recommended that these individuals have a KIS created and removed the need to obtain patient consent to share their information. This has resulted in a significant rise in the numbers of people in Scotland with any clinical data recorded on their KIS, rising from 250,000 in February 2020 to 1.7 million in December 2020 (footnote 232). Subsequent correspondence from CMO to GPs and NHS Boards highlighted the role for discussion of ACPs and provided a template developed by Healthcare Improvement Scotland (HIS) to facilitate this (footnote 233).

There is an existing evidence-based Care Home specific ACP tool, which was also updated during the pandemic with resources for care home staff and GPs to support discussions, decision-making and documentation (footnote 234). There is research ongoing across the UK into the training materials and resources developed and provided to care home staff and family members of care home residents during the pandemic (footnote 235).

Cardiopulmonary Resuscitation and DNACPR

Decision-making around Cardiopulmonary Resuscitation (CPR) in the event of cardiac arrest is often one part of an ACP process. CPR is a specific medical treatment for cardiac arrest (when the heart stops) which involves chest compressions, support with breathing, administration of medications such as adrenaline and administration of electric shocks to try to correct heart rhythm disturbances where appropriate. Following CPR if an individual survives their resuscitation (known as a return of spontaneous circulation), they are admitted to an intensive care or coronary care unit setting for ongoing care and support, if appropriate. Individuals living in the community, including in care homes, would typically receive Basic Life Support from trained staff or first responders, in the form of chest compressions, but other aspects of resuscitation would be provided by the Scottish Ambulance Service in response to a 999 call, unless there is a defibrillator available on-site.

CPR is not a treatment for natural dying, where the vital organs fail and the heart and breathing stop last, it is for cardiorespiratory arrest when the heart and breathing stop first and is only effective for cases where a reversible cause is identified and treated successfully (footnote 236 and 237). Survival to discharge rates for cardiac arrest in-hospital and out-of-hospital are poor, estimated at 24% and 10% respectively (footnote 238 and 239). CPR can be a harmful intervention if not used appropriately (e.g. where it will not be successful or is not wished by the individual) with potential harms to the individual, those delivering resuscitation, witnesses and family members.

National policies and procedures are in place in Scotland to support decision-making around CPR, developed in 2010. These were updated in 2016 following changes in national guidance and the implications of key legal cases (footnote 240). Standard national documentation, in the form of Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) forms used across all care settings, a decision-making framework and leaflet are all available (footnote 241 and 242). Despite this there are common misperceptions around DNACPR forms, including that individuals or families must sign the paperwork themselves.

In relation to care homes and DNACPR in the pandemic, the national clinical guidance for care homes in Scotland stated that:

"Do Not Resuscitate paperwork should be in place where appropriate and communicated appropriately with patients or carers."

For many individuals living in care home prior decisions around CPR would already have been in place as part of their existing ACP made before the pandemic. However, in response to guidance and recognition of COVID-19 as a condition with significant risk of death for which there were no evidence-based treatments available, it is likely that clinical teams supporting care home residents will have been prompted to consider whether CPR would be appropriate for individual residents in the event of them developing COVID-19.

There has been no formal evaluation of DNACPR decisionmaking in Scotland during the pandemic in relation to individuals in their own homes, in care homes or in hospitals. The Equality and Human Rights Commission Scotland highlighted concerns about DNACPR forms being applied against wishes and without consultation among those living in care homes (footnote 243). Age Scotland have communicated concerns from feedback they have collated from calls received by their helpline from older people and their families about how DNACPR decision-making was undertaken, particularly in the early phase of the pandemic, including for adults living in care homes (footnote 244). Their concerns included DNACPR decisions applied without consultation for all residents in some care homes. These concerns were echoed in the findings of a survey undertaken by the Queens Nursing Institute which included care home nurses in Scotland and raised issues around 'blanket use' of DNACPRs in care home residents (footnote 245). The Mental Welfare Commission also identified this as an area of concern, as early as 2nd April 2020, from feedback from their advice line (footnote 246).

The Care Quality Commission in England reviewed practice in response to public concerns and found a need for improved information, training and support, a consistent national approach and improved oversight and assurance (footnote 247). The UK charity, Compassion in Dying, produced a report which emphasises the need to acknowledge the experiences of poor practice around DNACPR which occurred during the pandemic and the impact this had on individuals and their families (footnote 248). They also stress the importance of improving training, supporting conversations, public understanding and discussions around CPR in the context of what is important to an individual's priorities and wishes.

Inspections, oversight and investigation

Care Inspectorate

The Care Inspectorate are "a scrutiny body which supports improvement" registering and inspecting around 14,000 care services in Scotland (footnote 249), of which adult care homes are a key part.

Before the pandemic, care home services were required to report serious events including accidents, incidents, injuries, outbreaks of infectious disease (2 or more linked cases) and deaths of residents (in the home or in hospital), through the Inspectorate's eForms notification system (footnote 250).

From 12th March 2020, notification was requested for any suspected or known case or outbreak of COVID-19 - inclusive of those awaiting test results or testing to be performed, inclusive of residents and staff (footnote 251). This was revised on the 19th March to be suspected or confirmed cases or deaths due to COVID-19 among residents only (footnote 252). A key challenge of these data was the inability of services to amend submissions, if the cause was not due to COVID-19 or for them to have complete data, for example if a resident was hospitalised. Latterly, differentiation has been made around confirmed or suspected cases and notifications for the end of a suspected or confirmed outbreak to improve the quality of the Care Inspectorate data (footnote 253). On the 3rd April 2020, additional notifications were requested from homes around staffing shortages which was intended to identify services without adequate staffing to be shared with HSCPs, Scottish Government and the NHS/SSSC hub (footnote 254). This notification system was later discontinued on the 22nd June 2020 (footnote 255), with data collected through the professional judgement staffing template (footnote 256).

On the 13th March 2020 the Care Inspectorate announced plans to "scale down" inspections and restrict visits to services to those where it was necessary (footnote 257). Care home inspections resumed from May 2020. Introduction of remote working, voluntary redeployment of staff to the care workforce and notifications formed key parts of the organisational adaptation to the pandemic (footnote 258). The organisation has published a report reflecting on their role, purpose and learning during the early stages of the pandemic which includes a timeline of events and key references (footnote 259).

In June 2020 the Care Inspectorate added an additional key question for inspections in response to the pandemic, with three quality indicators associated with it:

- "How good is our care and support during the COVID-19 pandemic?
- 7.1 People's health and wellbeing are supported and safeguarded during the COVID-19 pandemic.
- 7.2 Infection control practices support a safe environment for both people experiencing care and staff.
- 7.3 Staffing arrangements are responsive to the changing needs of people experiencing care" (footnote 260)

This was intended to allow inspectors to work with HIS and HPS providing targeted inspections to fulfil the duties placed on the Care Inspectorate by the Coronavirus (Scotland)(No. 2) Act and subsequent guidance that they must evaluate (grade) IPC and staffing (footnote 261 and 262). However, independent review of these joint inspections in October 2020 highlighted inconsistencies in methodologies and grading which resulted in confusion for care home staff around implementation of recommendations (footnote 263).

In July 2020 a new COVID-19 Scrutiny Assessment Tool (SAT) (footnote 264) was introduced to identify indicators of potential concern in care homes (footnote 265). This was designed to identify homes requiring weekly contact, fortnightly contact and monthly contact based on their SAT score (footnote 266). These have replaced the Risk Assessment Document (RAD) scoring system which had been in place to determine when inspections need to be carried out, the intensity of inspection and areas to be covered (footnote 267).

Multidisciplinary Care and Professional Oversight Teams

On the 21st April 2020 it was announced that NHS Directors of Public Health were 'required to take enhanced leadership for care homes', described as:

"reporting on their initial assessment of how each home is faring in terms of infection control, staffing, training, social distancing and testing and the actions they are taking to rectify – and rectify quickly – any deficits they identify." (footnote 268)

On the 17th May 2020 the Cabinet Secretary for Health and Sport in Scotland wrote to the following organisations: NHS Board Chief Executives, Local Authority Chief Executives, IJB Chief Officers, NHS Board Directors of Public Health, NHS Board Medical Directors, NHS Board Nurse Directors and Local Authority Chief Social Work Officers to inform them of new oversight arrangements for care homes, including new legislation (footnote 269). This letter and associated eight-page guidance document (footnote 270) was published and shared with care home provider representatives, no care home specific communication was issued by Scottish Government.

Multidisciplinary Care and Professional Oversight Teams involving the following professionals, were convened in each Health Board and HSCP: The NHS Director of Public Health, Executive Nurse lead, Medical Director, Chief Social Work Officer and the HSCP Chief Officer providing operational leadership. Responsibilities included testing arrangements, staffing including training and deployment, IPC including PPE and cleaning plus the care needs of residents. This also saw the introduction of joint visits by the oversight teams, HIS and the Care Inspectorate and led to:

"Nurse and Medical Directors taking direct responsibility for the clinical support required for each care home in their NHS Board area in collaboration with Directors of Public Health and Nurse and Medical Directors, in conjunction with HAI leads, providing practical expert advice and guidance on infection prevention and control"

There was also a request for standardised information to be collected, on a daily basis from care homes, to provide intelligence to the Oversight Teams (outlined in Annex 1 of the guidance document) and this 'Safety Huddle' information formed the basis of the electronic tool, Turas Care Management (Safety Huddle Tool) which was introduced in August 2020, developed by NHS Education for Scotland (footnote 271).

Concerns have been expressed around levels of accountability including when "there were attempts to use parts of the system in an assurance role without having previously had this experience over care homes" (footnote 272). Others have identified confusion with respect to roles and responsibilities in how oversight teams have taken-on aspects usually undertaken by the Care Inspectorate (footnote 273). Survey work undertaken by care sector representative body Scottish Care identified:

"the need for clarity in the role and function of all parts of the system, and greater partnership working and consistency which includes recognition of sector expertise. Worryingly, this experience detracts from prioritising the needs and wellbeing of those in receipt of care and support." (footnote 274)

These oversight arrangements were extended on 23rd March 2021 and, at the time of writing, there is an expectation the arrangements will be renewed, and the model was proposed to continue in the consultation document for the National Care Service (footnote 275).

Crown Office Investigation and Police Scotland

On the 13th May 2020 the COVID-19 deaths investigation team was established by the Lord Advocate to investigate deaths where an individual may have contracted the virus through their employment or occupation (including NHS and care home staff) and COVID-19 deaths where the individual was resident in a care home when the virus was contracted (footnote 276). The decision was announced in the Scottish Parliament and made as it was felt by the Lord Advocate that these deaths were a source of "public anxiety" (footnote 277). Of the four UK nations only Scotland has taken this approach to the investigation of care home deaths. The investigation is ongoing at the time of writing with an ongoing requirement for reporting of deaths in which the deceased individual was resident in a care home when the virus was contracted (footnote 278).

To support the Crown Office investigation, Police Scotland launched Operation Koper. Information released under Freedom of Information request, available on the Police Scotland website, includes the template of the 37 questions

care homes are asked to complete to provide (footnote 279). Representatives of the care sector have expressed concerns about the negative impact of the investigation on staff, the significant workload generated in providing evidence while the pandemic has been ongoing and the unequal treatment of the care home sector (footnote 280). Work undertaken by Health and Care Scotland with HSCPs identified the impact of the investigation on individuals and families when considering care home placement:

"exacerbated with the announcement of police investigations in to deaths, leading to fear of negligence claims, litigation or prosecution. There are long term concerns over the sustainability of, and reputational damage to, the care home sector" (footnote 281)

Survey work undertaken by Scottish Government names Operation Koper as a barrier to implementation of visiting policy identified by care home managers (footnote 282). A Scottish Government review of lessons learned from the initial pandemic response identifies the impact of the ongoing investigation from stakeholder interviews:

"While acknowledging the need to assess what went wrong, participants expressed that this approach was substantially increasing the very high levels of anxiety being experienced by professional, skilled staff who support and care for the most frail and vulnerable people in our society and there is a perceived and felt search for blame." (Footnote 283)

Conclusions

Care home residents, relatives and staff have been disproportionately affected by the COVID-19 pandemic in Scotland. This reflects the devastating impact of the virus in terms of mortality in vulnerable populations, particularly concentrated in homes with outbreaks during the first wave. However, responding to the threat and risks of the virus has fundamentally changed care home life in Scotland in terms of restrictions on residents in their activities, social lives and connectedness to those who care for them. Their access to visits from health and wellbeing professionals have been curtailed. The psychological and emotional impacts of the pandemic restrictions and direct effects on residents, relatives and staff are significant.

Care homes have adapted and embedded new routines and tasks with significant administrative impacts. The pandemic has brought new oversight processes and a range of external stakeholders have been given responsibility for care homes, including fundamental decisions such as whether homes are open or closed. In addition, all homes in which an individual has died due to COVID-19 remain under investigation by the Crown Office. The format, timing and multiplicity of guidance developed for care homes has created challenges and contributes to inconsistency in practice, with greater thought needed on how to engage most effectively with the care workforce. Appreciating the care home context and differentiation from NHS settings is critical moving forwards in guideline development, dissemination, oversight and assurance.

Academic and sectoral analysis across the UK and internationally identifies that there are long-term challenges for the care home sector which have been exposed by the pandemic and must be addressed to provide all of those living in care homes with the care and support they need and deserve. There is an urgent need to learn lessons from the experience of care homes in Scotland during the pandemic and address ongoing areas of challenge and inconsistency. Care home residents needs and rights must be accounted-for as we move forward, ensuring decision-making is proportionate to the risks and harms. The professionalism and expertise of care home staff needs to be recognised and enabled.

Future pandemic planning must never again overlook the pivotal role care homes play in supporting vulnerable people and requires involvement of those with care sectoral expertise from the outset.

Findings from other agencies on care homes and COVID-19 in Scotland

Before concluding this research briefing, it is important to highlight key documents which summarise investigations already undertaken pertinent to care homes and COVID-19 in Scotland as sources for review. Findings from some of these documents have been quoted in the materials presented earlier.

- Care Inspectorate. The Care Inspectorate's Role, Purpose and Learning During the COVID-19 pandemic: https://hub.careinspectorate.com/media/4167/ci-rolepurpose-learning-during-covid-19.pdf
- Equality and Human Rights Commission Scotland. Equality in residential care in Scotland during coronavirus: https://www.equalityhumanrights.com/en/publicationdownload/equality-residential-care-scotland-duringcoronavirus-covid-19
- Reilly J, Crawford D, O'Boyle D. Care Home Review. A rapid review of factors relevant to the management of COVID-19 in the care home environment in Scotland: https://www.gov.scot/binaries/content/documents/govscot/publications/independent-report/2020/11/root-cause-analysis-care-home-outbreaks/documents/care-home-review-rapid-review-factors-relevant-management-covid-19-care-home-environment-scotland/care-home-review-rapid-review-factors-relevant-management-covid-19-care-home-environment-scotland/govscot% 3Adocument/care-home-review-rapid-review-factors-relevant-management-covid-19-care-home-environment-scotland.pdf

 Scottish Government. Lessons Identified from the initial health and social care response to COVID-19 in Scotland report:

https://www.gov.scot/binaries/content/documents/govscot/publications/research-and-analysis/2021/08/lessons-identified-initial-health-social-care-response-covid-19-scotland/documents/lessons-identified-initial-health-social-care-response-covid-19-scotland/lessons-identified-initial-health-social-care-response-covid-19-scotland/govscot%3Adocument/lessons-identified-initial-health-social-care-response-covid-19-scotland.pdf

- Scottish Human Rights Commission. COVID-19: Care homes and human rights: https://www.scottishhumanrights.com/media/2054/ coronavirus-care-homes-briefing-140720_vfinaldocx.pdf
- Scottish Parliament. Social Care Inquiry: https://archive2021.parliament.scot/parliamentary business/currentcommittees/113970.aspx
- Scottish Parliament. Social Care Inquiry Survey
 Responses from Care Home Managers:
 https://archive2021.parliament.scot/S5_HealthandSport
 Committee/Inquiries/COVID19_Care_Home_Inquiry_
 Responses_from_Care_Home_Managers.pdf
- Scottish Parliament. Social Care Inquiry Survey
 Responses from Public, Staff and Relatives:
 https://archive2021.parliament.scot/S5_HealthandSport
 Committee/Inquiries/COVID19_Care_Home_Inquiry_
 Responses_from_Public_Staff_and_Relatives.pdf

Appendices

Appendix 1: Timeline summary of Health Protection Scotland/Public Health Scotland guidance

Information and Guidance for Social or Community Care and Residential Settings

Available from: https://www.hps.scot.nhs.uk/covid-19-guidance-archive/information-and-guidance-for-social-or-community-care-and-residential-settings/

Version 1.0 12/3/20; Version 1.2 20/3/20; Version 1.3 23/3/20; Version 1.5 26/3/20; Version 1.6 2/4/20; Version 1.7 17/4/20

COVID-19: Information and Guidance for Care Home Settings

Available from: https://www.hps.scot.nhs.uk/covid-19-guidance-archive/information-and-guidance-for-care-home-settings/

Version 1.0 21/4/20; Version 1.1 26/4/20; Version 1.2 1/5/20; Version 1.3 20/5/20; Version 1.52 15/6/20; Version 1.6 4/8/20;

Version 1.7 17/9/20; Version 1.8 7/10/20; Version 1.9 13/10/20;

Version 2.0 19/12/20; Version 2.1 31/12/20; Version 2.2

24/6/21; Version 2.3 12/8/21

Not in online archive Versions 2.6 24/12/21 and Versions 2.4 and 2.5

Current Version 2.7: 27/1/22 Available from:

https://publichealthscotland.scot/publications/covid-19-information-and-guidance-for-care-home-settings-adults-and-older-people/covid-19-information-and-guidance-for-care-home-settings-adults-and-older-people-version-27/

COVID-19: Information and Guidance for Social, Community and Residential Care Settings (initially includes care homes for adults, not older people but laterally removed)

Available from: https://www.hps.scot.nhs.uk/covid-19-guidance-archive/information-and-guidance-for-social-community-and-residential-care/

Version 1.0 4/5/20; Version 1.1 20/5/20; Version 1.2 11/6/20; Version 1.4 13.8/20; Version 1.41 21/8/20; Version 1.5 13/10/20; Version 1.6 24/12/20; Version 1.7 31/12/20 **Current Version 1.8: 16/4/21 Available from:**

https://publichealthscotland.scot/publications/covid-19-information-and-guidance-for-social-community-and-residential-care-settings/covid-19-information-and-guidance-for-social-community-and-residential-care-settings-version-18/

Appendix 2: Timeline summary of Scottish Government Clinical Guidance for Care Homes

13/03/20 - Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19: https://www.careinspectorate.com/images/COVID-19_-_Letter_from_Cabinet_Secretary_for_Health_and_Sport_-_Social_care_guidance_-_13_March_2020.pdf

26/03/20 – Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19 updated: https://scottishcare.org/wp-content/uploads/2020/03/COVID-19-ClinicalGuidanceforNursingHomeand ResidentialCareResidents-Final26March.pdf

15/05/20 – National Clinical and Practice Guidance for Adult Care Homes in Scotland during the COVID-19 Pandemic:

https://www.webarchive.org.uk/wayback/archive/20200516095432/https://www.gov.scot/publications/coronavirus-covid-19-clinical-and-practice-guidance-for-adult-care-homes/

Appendix 3: Timeline summary of Scottish Government visiting guidance

13/03/20 - Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19, point 1 discusses visiting:

https://www.careinspectorate.com/images/COVID-19_-_Clinical_Guidance_for_Nursing_Home_and_Residential_ Care_Residents.pdf

26/03/20 – Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19 updated, section 2.2 discusses visiting:

https://scottishcare.org/wp-content/uploads/2020/03/COVID-19-ClinicalGuidanceforNursingHomeand ResidentialCareResidents-Final26March.pdf

25/06/20 – Visiting Guidance for Adult Care Homes in Scotland:

https://scottishcare.org/wp-content/uploads/2020/06/ Care-home-visiting-guidance-final-20.06.25.pdf

08/08/20 – Extensions to outdoor visiting and plans for approval for indoor visiting announced:

https://www.gov.scot/news/care-home-visiting-expanded/

03/09/20 – Health and wellbeing visits from visiting professionals to resume:

https://www.gov.scot/news/health-and-well-being-visits-to-care-homes-to-resume/

12/10/20 – Optimising visiting – updates to family and friends visiting guidance for adult care homes in Scotland, summary available from:

https://www.careinspectorate.com/index.php/publications-statistics/10-organisation/6450-archived-updates-2020

4/12/20 - Christmas and New Year Guidance 2020:

https://www.careinspectorate.com/images/documents/coronavirus/Adult_Care_Homes_Christmas_and_New_Year_guidance_-_FINAL_4.12.20.pdf

24/12/20 – Testing of Care Home Staff, Visiting Professionals and Outbreak Management:

https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/12/coronavirus-covid-19-adult-care-home-visitor-testing-guidance/documents/letters/letter-to-care-home-managers---enhanced-testing-of-care-home-staff-visiting-professionals-and-outbreak-management---december-2020/letter-to-care-home-managers---enhanced-testing-of-care-home-staff-visiting-professionals-and-outbreak-management---december-2020/govscot%3Adocument/Letter%2Bto%2Bcare%2Bhome%2Bmanagers%2B-%2Benhanced%2Btesting%2Bof%2Bcare%2Bhome%2B staff%252C%2Bvising%2Bprofessionals%2Band%2B outbreak%2Bmanagement%252C%2BDecember%2B2020.pdf

24/02/21 - Launch of Open with Care:

https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2021/02/open-care-supporting-meaningful-contact-care-homes/documents/open-care-supporting-meaningful-contact-care-homes/open-care-supporting-meaningful-contact-care-homes/govscot%3Adocument/open-care-supporting-meaningful-contact-care-homes.pdf

14/04/21 - Launch of Open for Care:

https://www.careinspectorate.com/images/Updated_advice _on_care_home_visiting_-_visiting_professionals_and_ other_services_14_April_2021.pdf

17/05/21 – Additional advice on activities and outings away from the care home:

https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/06/coronavirus-covid-19-adult-care-homes-visiting-guidance/documents/open-with-care-documents/open-with-care--outings-away-from-the-care-home---additional-guidance---17-may-2021/open-with-care--outings-away-from-the-care-home---additional-guidance---17-may-2021/govscot%3Adocument/Open%2Bwith%2BCare%2B%25E2%2580%2593%2Boutings%2Baway%2Bfrom%2Bthe%2Bcare%2Bhome%2B%25E2%2580%2593%2Badditional%2Bguidance%2B%25E2%2580%2593%2B17%2BMay%2B2021.pdf

15/07/21 – Supplementary information on Open with Care (version 1.8):

https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2021/07/coronavirus-covid-19---open-with-care-advice-on-practicalities/documents/open-with-care-supporting-meaningful-contact-and-activities-in-and-away-from-care-homes---supplementary-information/open-with-care-supporting-meaningful-contact-and-activities-in-and-away-from-care-homes---supplementary-information/govscot%3
Adocument/Open%2Bwith%2Bcare%2B-%2Bsupplementary%2Binformation%2B-%2B15%2BJuly%2B2021.pdf

06/08/21 – Beyond Level 0 – updates on Open with Care and Open for Care:

https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/06/coronavirus-covid-19-adult-care-homes-visiting-guidance/documents/open-with-care-documents/open-with-care---care-home-visiting---beyond-level-0-advice-letter-for-9-august/open-with-care---care-home-visiting---beyond-level-0-advice-letter-for-9-august/govscot%3Adocument/Care%2B home%2Bvisiting%2B-%2BOpen%2Bwith%2Bcare%2B-%2BBeyond%2BLevel%2B0%2BAdvice%2Bfor%2B9th%2B Aug%2B-%2BLetter%2B06-08-2021.pdf

15/09/21 - Named visitor during outbreaks and isolation:

https://www.gov.scot/publications/coronavirus-covid-19-open-with-care-named-visitor-during-outbreaks-letter-to-sector/

02/12/21 - Reminder of Open for Care:

https://www.gov.scot/publications/coronavirus-covid-19open-for-care-visiting-professionals-into-adult-care-homesletter-2-december-2021/

15/12/21 and 22/12/21 – Changes in view of Omicron Variant:

https://www.careinspectorate.com/images/documents/DCM O_and_DCNO_letter_to_adult_care_homes_regarding_visit ing_and_omicron_15_December_2021.pdf

https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/06/coronavirus-covid-19-adult-care-homes-visiting-guidance/documents/open-with-care-documents/letter-to-adult-care-homes-regarding-visiting-and-omicron---15-december-2021/letter-to-adult-care-homes-regarding-visiting-and-omicron---15-december-2021/govscot%3Adocument/DCMO%2Band%2BDCNO%2Bletter%2Bcare%2Bhome%2Bvisiting%2Bomicron-%2B%2B221221%2B-%2Bupdated%2Bwith%2BQ%2526A%2BFINAL%2B21-12-21.pdf

19/01/22 – Update on isolation periods and visiting: https://www.gov.scot/publications/updated-guidance-on-self-isolation-for-residents-in-adult-care-homes-and-indoor-visiting-letter-from-deputy-chief-medical-officer-and-deputy-chief-nursing-officer/

Authorship and declaration

This research briefing was written by Dr Jenni Burton, NHS Education for Scotland/Chief Scientist Office Postdoctoral Clinical Lecturer and Honorary Specialist Registrar in Geriatric and General Internal Medicine, Institute of Cardiovascular and Medical Sciences, University of Glasgow

Academic profile: https://www.gla.ac.uk/researchinstitutes/icams/staff/jenniferburton/

Email address: Jenni.Burton@glasgow.ac.uk

Some of the work quoted includes published academic work I have been involved with, analysing COVID-19 outbreaks in care homes across Scotland. This includes involvement in the Public Health Scotland analysis of hospital discharges to care homes during the first wave of the pandemic, for which I was formally seconded from my clinical post to facilitate.

I have also been a voluntary member of the Scottish Government Clinical and Professional Advisory Group (CPAG) for Care Homes and Adult Social Care since May 2020.

Footnotes

- 1. The National Archives. Public Services Reform (Scotland) Act 2010. Available from:
 - https://www.legislation.gov.uk/asp/2010/8/schedule/12
- 2. Care Inspectorate. Care homes for adults. Available from: https://www.careinspectorate.com/index.php/care-homes-for-adults
- Care Inspectorate. The Care Inspectorate's Role, Purpose and Learning During the COVID-19 Pandemic. Available from: https://hub.careinspectorate.com/media/4167/ ci-role-purpose-learning-during-covid-19.pdf
- 4. Care Inspectorate. Datastore. Available from: https://www.careinspectorate.com/index.php/publications-statistics/93-public/datastore
- Public Health Scotland. Care Home Census for Adults in Scotland. Statistics for 2011-2021. Available from: https://publichealthscotland.scot/media/10791/ 2021-12-14-care-home-census-report.pdf
- The Scottish Government. Hospital Based Complex Clinical Care. Available from: https://www.sehd.scot.nhs.uk/dl/DL(2015)11.pdf
- 7. Care Inspectorate. Datastore. Available from: https://www.careinspectorate.com/index.php/publications-statistics/93-public/datastore
- Office for Statistics Regulation. Adult social care statistics in Scotland. Available from:
 https://osr.statisticsauthority.gov.uk/wp-content/uploads/2020/07/ASC_Scotland-1.pdf
- Office for Statistics Regulation. Adult social care statistics: a way forward for Great Britain. Available from: https://osr.statisticsauthority.gov.uk/wp-content/ uploads/2020/07/ASCR_GB_summary-1.pdf

- 10. Burton JK, Guthrie B. Identifying who lives in a care home a challenge to be conquered. Age and Ageing. 2018; 47(3):322-3.
- 11. National Records of Scotland. Deaths involving coronavirus (COVID-19) in Scotland: Methodology Guide. Available from: https://www.nrscotland.gov.uk/files/statistics/covid19/covid-deaths-21-methodology.pdf
- 12. Burton JK, Marwick CA, Galloway J, Hall C, Nind T, Reynish EL, et al. Identifying care-home residents in routine healthcare datasets: a diagnostic test accuracy study of five methods. Age and Ageing. 2019;48(1): 114-21.
- 13. Burton J, Goodman C, Guthrie B, Gordon A, Hanratty B, Quinn T. Closing the UK care home data gap methodological challenges and solutions. International Journal of Population Data Science. 2020;5(4): doi: 10.23889/ijpds.v5i4.1391.
- 14. Hanratty B, Burton JK, Goodman C, Gordon AL, Spilsbury K. Covid-19 and lack of linked datasets for care homes. BMJ. 2020;369:m2463.
- 15. NHS Education for Scotland. Turas Care Management User Guides. Available from: https://learn.nes.nhs.scot/34427/turas-care-management-user-guides
- 16. Gordon AL, Rick C, Juszczak E, Montgomery A, Howard R, Guthrie B, et al. The COVID-19 pandemic has highlighted the need to invest in care home research infrastructure. Age and Ageing. 2022:afac052.
- 17. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://scottishcare.org/wp-content/uploads/2020/03/COVID-19-ClinicalGuidanceforNursing HomeandResidentialCareResidents-Final26March.pdf
- 18. Coronavirus (COVID-19): speech by Cabinet Secretary for Health and Sport 17 March 2020. Available from: https://www.gov.scot/publications/coronavirus-covid-19-update-scottish-parliament/

- Public Health Scotland. Delayed discharges. Available from: https://beta.isdscotland.org/topics/delayed-discharges/
- Rojas-García A, Turner S, Pizzo E, Hudson E, Thomas J, Raine R. Impact and experiences of delayed discharge: A mixed-studies systematic review. Health Expectations. 2018;21(1):41-56.
- 21. Public Health Scotland. Delayed Discharges in NHSScotland. Available from: https://www.publichealthscotland.scot/media/10872/ 2021-11-16-delayeddischarges-annual-report.pdf
- 22. Public Health Scotland. Delayed Discharges in NHSScotland. Available from: https://www.publichealthscotland.scot/media/10872/ 2021-11-16-delayeddischarges-annual-report.pdf
- 23. Health and Social Care Scotland. Scottish Government Integration Division. Lessons Learned from Reducing Discharges and Hospital Admissions. Available from: https://hscscotland.scot/couch/uploads/file/resources/covid19-reports/lessons-learned-report-final.pdf
- 24. Public Health Scotland. Discharges from NHSScotland Hospitals to Care Homes between 1 March and 31 May 2020. Available from: https://publichealthscotland.scot/ media/7313/2021-04-21-discharges-from-nhsscotlandhospitals-to-care-homes-between-1-march-and-31may-2020.pdf
- 25. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://www.careinspectorate.com/images/COVID-19_-_Letter_from_Cabinet_Secretary_for_Health_and_Sport_-_Social_care_guidance_-_13_March_2020.pdf

- 26. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://scottishcare.org/wp-content/uploads/2020/03/COVID-19-ClinicalGuidanceforNursingHome andResidentialCareResidents-Final26March.pdf
- 27. Health Protection Scotland. COVID-19: Information and Guidance for Care Home Settings. Version 1.0. Available from: https://www.hps.scot.nhs.uk/media/1925/covid-19-information-and-guidance-for-care-homes-v10.pdf
- 28. Burton JK, McMinn M, Vaughan JE, Fleuriot J, Guthrie B. Care-home outbreaks of COVID-19 in Scotland March to May 2020: National linked data cohort analysis. Age and Ageing. 2021;50(5):1482-92.
- 29. Health Protection Scotland. COVID-19: Information and Guidance for Social or Community Care and Residential Settings. Version 1.0. Available from: https://www.hps.scot.nhs.uk/media/1922/covid-19guidance-for-social-or-community-care-andresidential-settings-v1.pdf
- 30. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://scottishcare.org/wp-content/uploads/2020/03/COVID-19-ClinicalGuidanceforNursingHome andResidentialCareResidents-Final26March.pdf
- 31. Health Protection Scotland. COVID-19: Information and Guidance for Social or Community Care and Residential Settings. Version 1.7. Available from: https://www.hps.scot.nhs.uk/media/1921/covid-19-guidance-for-social-or-community-care-and-residential-settings-v17.pdf
- 32. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://scottishcare.org/wp-content/uploads/2020/03/COVID-19-ClinicalGuidanceforNursingHome andResidentialCareResidents-Final26March.pdf

- 33. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://scottishcare.org/wp-content/uploads/2020/03/COVID-19-ClinicalGuidanceforNursingHome andResidentialCareResidents-Final26March.pdf
- 34. Health Protection Scotland. COVID-19: Information and Guidance for Social or Community Care and Residential Settings. Version 1.5. Available from: https://www.hps.scot.nhs.uk/media/1919/covid-19-guidance-for-social-or-community-care-and-residential-settings-v15.pdf
- 35. Health Protection Scotland. COVID-19: Information and Guidance for Social or Community Care and Residential Settings. Version 1.7. Available from: https://www.hps.scot.nhs.uk/media/1921/covid-19-guidance-for-social-or-community-care-and-residential-settings-v17.pdf
- 36. Coronavirus (COVID-19) update: Health Secretary's statement 21 April 2020. Available from: https://www.gov.scot/publications/coronavirus-covid-19-update-health-secretarys-update-tuesday-21-april-2020/
- 37. Health Protection Scotland. COVID-19: Information and Guidance for Care Home Settings. Version 1.0. Available from: https://www.hps.scot.nhs.uk/media/1925/covid-19-information-and-guidance-for-care-homes-v10.pdf
- 38. Public Health Scotland. COVID-19: Information and Guidance for Care Home Settings (Adults and Older People). Version 2.7. Available from: https://publichealthscotland.scot/media/11346/2022-01-27-covid-19-information-and-guidance-for-care-homes-v27.pdf

- Public Health Scotland. COVID-19: Information and Guidance for Care Home Settings (Adults and Older People). Version 2.7. Available from: https://publichealthscotland.scot/media/11346/ 2022-01-27-covid-19-information-and-guidance-forcare-homes-v27.pdf
- Public Health Scotland. COVID-19: Information and Guidance for Care Home Settings (Adults and Older People). Version 2.7. Available from: https://publichealthscotland.scot/media/11346/ 2022-01-27-covid-19-information-and-guidance-forcare-homes-v27.pdf
- 41. Burton JK, Lynch E, Love S, Rintoul J, Starr JM, Shenkin SD. Who lives in Scotland's care homes? Descriptive analysis using routinely collected social care data 2012-16. The Journal of the Royal College of Physicians of Edinburgh 2019;49(1):12-22.
- 42. Public Health Scotland. Care Home Census for Adults in Scotland. Data Quality and Completeness Report Statistics for 2011 2021. Available from: https://publichealthscotland.scot/media/10792/2021-12-14-care-home-census-data-quality-and-completeness-report.pdf
- 43. Health Protection Scotland. COVID-19: Information and Guidance for Social or Community Care and Residential Settings. Version 1.5. Available from: https://www.hps.scot.nhs.uk/media/1919/covid-19-guidance-for-social-or-community-care-and-residential-settings-v15.pdf
- 44. Health Protection Scotland. COVID-19: Information and Guidance for Care Home Settings. Version 1.0. Available from: https://www.hps.scot.nhs.uk/media/1925/covid-19-information-and-guidance-for-care-homes-v10.pdf

- 45. Public Health Scotland. COVID-19: Information and Guidance for Care Home Settings (Adults and Older People). Version 2.7. Available from: https://publichealthscotland.scot/media/11346/ 2022-01-27-covid-19-information-and-guidance-forcare-homes-v27.pdf
- 46. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://www.careinspectorate.com/images/COVID-19_-_Letter_from_Cabinet_Secretary_for_Health_and_Sport_-_Social_care_guidance_-_13_March_2020.pdf
- 47. Health and Social Care Scotland. Scottish Government Integration Division. Lessons Learned from Reducing Discharges and Hospital Admissions. Available from: https://hscscotland.scot/couch/uploads/file/resources/covid19-reports/lessons-learned-report-final.pdf
- 48. Scottish Care. Scottish Care statement on discharges into care homes. Available from: https://scottishcare.org/scottish-care-statement-on-discharges-into-care-homes/
- 49. Public Health Scotland. Discharges from NHSScotland Hospitals to Care Homes between 1 March and 31 May 2020. Available from: https://publichealthscotland.scot/media/7313/2021-04-21-discharges-from-nhsscotland-hospitals-to-care-homes-between-1-march-and-31-may-2020.pdf
- 50. Public Health Scotland. Discharges from NHS Hospitals to Care Homes between 1 March and 31 May 2020. Validated register of hospital discharges to care homes methodology. Available from: https://publichealthscotland.scot/media/7250/2021-04-21-discharges-from-nhs-hospitals-to-care-homesvalidated-register-methodology.pdf

- 51. Mental Welfare Commission for Scotland. Authority to discharge: report into decision making for people in hospital who lack capacity. Available from: https://www.mwcscot.org.uk/sites/default/files/ 2021-05/AuthorityToDischarge-Report_May2021.pdf
- 52. World Health Organization. Infection prevention and control. Available from: https://www.who.int/teams/integrated-health-services/infection-prevention-control
- 53. NHS National Services Scotland. National Infection Prevention and Control Manual. Chapter 1 Standard Infection Control Precautions. Available from: https://www.nipcm.scot.nhs.uk/chapter-1-standard-infection-control-precautions-sicps/
- 54. NHS National Services Scotland. What is the National Infection Prevention and Control Manual (NIPCM)? Available from:
 - https://www.nipcm.scot.nhs.uk/about-the-manual/
- 55. Reilly J, Crawford D, O'Boyle D. Care Home Review: A rapid review of factors relevant to the management of COVID-19 in the care home environment in Scotland. Available from: https://www.gov.scot/publications/root-cause-analysis-care-home-outbreaks/
- 56. Healthcare Improvement Scotland. Healthcare Associated Infection (HAI) Standards. Available from:

 https://www.healthcareimprovementscotland.org/
 his/idoc.ashx?docid=90f299a8-d500-4285-9eebf6f9b05457db&version=-1
- 57. Healthcare Improvement Scotland. Draft infection prevention and control standards. Available from: https://www.healthcareimprovementscotland.org/our_work/standards_and_guidelines/stnds/ipc_standards.aspx

- 58. Public Health Scotland. COVID-19: Information and Guidance for Care Home Settings (Adults and Older People). Version 2.7. Available from: https://publichealthscotland.scot/media/11346/2022-01-27-covid-19-information-and-guidance-for-carehomes-v27.pdf
- 59. NHS National Services Scotland. Scottish COVID-19 Care Home Infection Prevention and Control Addendum. Available from: https://www.nipcm.hps.scot.nhs.uk/scottish-covid-19-care-home-infection-prevention-and-control-addendum/?utm_medium=email&utm_source=govdelivery
- 60. Scottish Government. Launch of the new National Infection Prevention and Control Manual for Older People and Adult Care homes and the National Cleaning Specification for Older People and Adult Care Homes. Available from: https://services.nhslothian.scot/CareHomes/Documents/National%20Infection%20Prevention%20and%20Control%20Manual%20for%20Older%20People%20and%20Adult%20Care%20Homes%20-%20ND_.pdf
- 61. NHS National Services Scotland. Infection Prevention and Control Manual for older people and adult care homes. Available from: https://www.nipcm.hps.scot.nhs.uk/infection-prevention-and-control-manual-for-older-people-and-adult-care-homes/
- 62. ARHAI Scotland. NHS National Services Scotland.
 Scottish Health Facilities Note 01-05. Sage Management of the Care Environment. Cleaning Specification for Older People and Adult Care Homes. Available from:
 https://www.nss.nhs.scot/media/1527/safe-management-of-the-care-environment-shfn-01-05-v1.pdf

- 63. NHS Education for Scotland. Infection Prevention and Control Manual for Older people and Adult Care Homes Webinar. Available from: https://learn.nes.nhs.scot/49779/infection-prevention-and-control-ipc-zone/preventing-infection-in-care/infection-prevention-control-manual-for-older-people-and-adult-care-homes-webinar?utm_medium=email&utm_source=govdelivery
- 64. NHS National Services Scotland. Winter (21/22),
 Respiratory Infections in Health and Care Settings
 Infection Prevention and Control (IPC) Addendum.
 Available from: https://www.nipcm.scot.nhs.uk/winter2122-respiratory-infections-in-health-and-caresettings-infection-prevention-and-control-ipcaddendum/
- 65. Scottish Government. Social Care Analytical Unit. Open with Care: Care home managers feedback on implementation survey findings. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2021/02/open-care-supporting-meaningful-contact-care-homes/documents/open-care-care-home-managers-feedback-implementation-survey-findings/open-care-care-home-managers-feedback-implementation-survey-findings/govscot%3Adocument/open-care-care-home-managers-feedback-implementation-survey-findings.pdf
- 66. Scottish Government. Coronavirus (COVID-19) initial health and social care response: lessons identified. Available from: https://www.gov.scot/publications/ lessons-identified-initial-health-social-care-responsecovid-19-scotland/documents/

- 67. Reilly J, Crawford D, O'Boyle D. Care Home Review: A rapid review of factors relevant to the management of COVID-19 in the care home environment in Scotland. Available from: https://www.gov.scot/publications/root-cause-analysis-care-home-outbreaks/
- 68. Public Health England. Academy of Medical Royal Colleges, Public Health Wales. Health Protection Scotland. Public Health Agency. NHS. Recommended PPE for primary, outpatient, community and social care by setting, NHS and independent sector. Available from: https://www.careinspectorate.com/images/documents/coronavirus/Recommended_PPE_for_primary_outpatient_community_and_social_care_by_setting.pdf
- 69. Care Inspectorate. COVID-19 Safe Practice in Care Homes. Available from: https://www.careinspectorate.com/images/Professionals/PPE/COVID19_Safe_practice_in_care_homes_-_A3_size.pdf
- 70. Scottish Government. COVID-19: Interim Guidance on the wider use of face masks and face coverings in health and social care. Available from: https://www.careinspectorate.com/images/documents/coronavirus/23_June_2020_Face_masks_and_face_covering_SG_letter_and_guidance.pdf
- 71. Audit Scotland. Personal Protective Equipment. Available from: https://www.audit-scotland.gov.uk/uploads/docs/report/2021/briefing_210617_ppe.pdf
- 72. Scottish Care. Scottish Care works with local organisations to address PPE shortage. Available from: https://scottishcare.org/scottish-care-works-with-local-organisations-to-address-ppe-shortage/
- 73. Care Inspectorate. NHS NSS triage centre for social care. Available from:
 - https://www.careinspectorate.com/index.php/news/5620-nhs-nss-triage-centre-for-social-care

- 74. Scottish Government. Coronavirus (COVID-19): adult care home lateral flow device testing. Available from: https://www.gov.scot/publications/coronavirus-covid-19-adult-care-home-visitor-testing-guidance/
- 75. Health and Social Care Scotland. Scottish Government Integration Division. Lessons Learned from Reducing Discharges and Hospital Admissions. Available from: https://hscscotland.scot/couch/uploads/file/resources/covid19-reports/lessons-learned-report-final.pdf
- 76. Scottish Care. Scottish care's statement on COVID-19 testing in care homes. Available from:

 https://scottishcare.org/scottish-cares-statement-on-covid-19-testing-in-care-homes/
- 77. Reilly J, Crawford D, O'Boyle D. Care Home Review: A rapid review of factors relevant to the management of COVID-19 in the care home environment in Scotland. Available from: https://www.gov.scot/publications/root-cause-analysis-care-home-outbreaks/
- 78. Burton JK, Bayne G, Evans C, Garbe F, Gorman D, Honhold N, et al. Evolution and effects of COVID-19 outbreaks in care homes: a population analysis in 189 care homes in one geographical region of the UK. The Lancet Healthy Longevity. 2020;1(1):e21-e31.
- 79. Burton JK, McMinn M, Vaughan JE, Fleuriot J, Guthrie B. Care-home outbreaks of COVID-19 in Scotland March to May 2020: National linked data cohort analysis. Age and Ageing. 2021;50(5):1482-92.
- 80. McMichael TM, Currie DW, Clark S, Pogosjans S, Kay M, Schwartz NG, et al. Epidemiology of Covid-19 in a Long-Term Care Facility in King County, Washington. New England Journal of Medicine. 2020;382(21):2005-11.
- 81. Arons MM, Hatfield KM, Reddy SC, Kimball A, James A, Jacobs JR, et al. Presymptomatic SARS-CoV-2 Infections and Transmission in a Skilled Nursing Facility. New England Journal of Medicine. 2020;382(22):2081-90.

- 82. Graham NSN, Junghans C, Downes R, Sendall C, Lai H, McKirdy A, et al. SARS-CoV-2 infection, clinical features and outcome of COVID-19 in United Kingdom nursing homes. J Infect. 2020;81(3):411-9.
- 83. Jeffery-Smith A, Dun-Campbell K, Janarthanan R, Fok J, Crawley-Boevey E, Vusirikala A, et al. Infection and transmission of SARS-CoV-2 in London care homes reporting no cases or outbreaks of COVID-19: Prospective observational cohort study, England 2020. The Lancet Regional Health Europe. 2021;3:100038.
- 84. Health Protection Scotland. COVID-19: Information and Guidance for Social or Community Care and Residential Settings. Version 1.7. Available from: https://www.hps.scot.nhs.uk/media/1921/covid-19-guidance-for-social-or-community-care-and-residential-settings-v17.pdf
- 85. Public Health England. Academy of Medical Royal Colleges, Public Health Wales. Health Protection Scotland. Public Health Agency. NHS. Recommended PPE for primary, outpatient, community and social care by setting, NHS and independent sector. Available from: https://www.careinspectorate.com/images/documents/coronavirus/Recommended_PPE_for_primary_outpatient_community_and_social_care_by_setting.pdf
- 86. Health Protection Scotland. COVID-19: Information and Guidance for Social or Community Care and Residential Settings. Version 1.7. Available from: https://www.hps.scot.nhs.uk/media/1921/covid-19-guidance-for-social-or-community-care-and-residential-settings-v17.pdf
- 87. Scottish Government. Testing expansion. Available from: https://www.gov.scot/news/testing-expansion/

- 88. Scottish Government. Coronavirus (COVID-19) implications of move to delay phase: CMO letter 15 March 2020. Available from: https://www.gov.scot/publications/coronavirus-covid-19---implications-of-move-to-delay-phase-cmo-letter-15-march-2020/
- 89. Scottish Government. Coronavirus (COVID-19) update: First Minister's speech 28 April 2020. Available from: https://www.gov.scot/publications/coronavirus-covid-19-update-first-ministers-speech-27-april-2020-1/
- 90. Scottish Government. Testing expansion. Available from: https://www.gov.scot/news/testing-expansion/
- 91. Health Protection Scotland. Interim guidance on COVID-19 PCR testing in care homes and the management of COVID-19 PCR test positive residents and staff. Version 2.4. Available from: https://www.hps.scot.nhs.uk/media/1985/covid-19-interim-guidance-pcr-testing-in-care-homes-and-management-pcr-test-positive-residents-and-staff-v24.pdf
- 92. Health Protection Scotland. Interim guidance on COVID-19 PCR testing in care homes and the management of COVID-19 PCR test positive residents and staff. Version 2.6. Available from: https://www.hps.scot.nhs.uk/media/1986/covid-19-interim-guidance-pcr-testing-in-care-homes-and-management-pcr-test-positive-residents-and-staff-v26.pdf
- 93. Scottish Government. Use of the UK Government Social Care Testing Portal by Scottish Care Homes: Summary guidance and frequently asked questions. Available from: https://www.careinspectorate.com/images/documents/coronavirus/Covid-19_-_care_home_staff_testing_-_SG_to_care_homes_-_attaching_guidance_-_3_July_20.pdf
- 94. Scottish Government. COSLA. Available from: https://www.careinspectorate.com/images/documents/coronavirus/JF_and_CIIr_Currie_COSLA_letter_-_
 Testing_letter_care_home_staff_20.6.24.pdf

- 95. Scottish Government. Additional preventative measures due to the new COVID variant testing of care home staff, visiting professionals and outbreak management.

 Available from:
 - https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/12/coronavirus-covid-19-adult-care-home-visitor-testing-guidance/documents/letters/letter-to-care-home-managers---enhanced-testing-of-care-home-staff-visiting-professionals-and-outbreak-management---december-2020/letter-to-care-home-managers---enhanced-testing-of-care-home-staff-visiting-professionals-and-outbreak-management---december-2020/govscot%3Adocument/Letter%2Bto%2Bcare%2Bhome%2Bmanagers%2B-%2Benhanced%2Btesting%2Bof%2Bcare%2Bhome%2Bstaff%252C%2Bvising%2Bprofessionals%2Band%2Boutbreak%2Bmanagement%252C%2BDecember%2B2020.pdf
- 96. Scottish Government. COVID-19: Care home guidance for use of lateral flow device testing. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/12/coronavirus-covid-19-adult-care-home-visitor-testing-guidance/documents/guidance/care-home-guidance-for-staff-and-visitor-lfd-testing-12-july-2021/care-home-guidance-for-staff-and-visitor-lfd-testing-12-july-2021/govscot%3Adocument/Guidance%2B-%2BLFD%2Btesting%2Bin%2Bcare%2Bhomes%2Bstaff%2Band%2Bvisitors%2B-%2Bupdated%2B21%2BJuly%2B2021.pdf
- 97. Scottish Government. Coronavirus (COVID-19): adult care home lateral flow device testing. Available from: https://www.gov.scot/publications/coronavirus-covid-19-adult-care-home-visitor-testing-guidance/

- 98. Scottish Government. Testing for care home visitors gets underway. Available from: https://www.gov.scot/news/testing-for-care-home-visitors-gets-underway/
- 99. Scottish Government. Testing Expansion Plan for Care at Home. Available from: https://www.careinspectorate.com/images/documents/coronavirus/Testing_
 Expansion_Plan_for_Care_at_Home.pdf?utm_medium =email&utm_source=govdelivery
- 100. Scottish Government. Care home visitor Lateral Flow Device Testing. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/12/coronavirus-covid-19-adult-care-home-visitor-testing-guidance/documents/letters/letter-to-care-home-managers/letter-to-care-home-managers/govscot%3Adocument/Letter%2B-%2Bcare%2Bhome%2Bvisitor%2Blateral%2Bfow%2B device%2Btesting.pdf
- 101. Scottish Government. COVID-19: Care home guidance for use of lateral flow device testing. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/12/coronavirus-covid-19-adult-care-home-visitor-testing-guidance/documents/guidance/care-home-guidance-for-staff-and-visitor-lfd-testing-12-july-2021/care-home-guidance-for-staff-and-visitor-lfd-testing-12-july-2021/govscot%3Adocument/Guidance%2B-%2BLFD%2Btesting%2Bin%2Bcare%2Bhomes%2Bstaff%2Band%2Bvisitors%2B-%2Bupdated%2B21%2BJuly%2B2021.pdf
- 102. Burton JK, Bayne G, Evans C, Garbe F, Gorman D, Honhold N, et al. Evolution and effects of COVID-19 outbreaks in care homes: a population analysis in 189 care homes in one geographical region of the UK. The Lancet Healthy Longevity. 2020;1(1):e21-e31.

- 103. Public Health Scotland. Discharges from NHSScotland Hospitals to Care Homes between 1 March and 31 May 2020. Available from: https://publichealthscotland.scot/ media/7313/2021-04-21-discharges-from-nhsscotlandhospitals-to-care-homes-between-1-march-and-31may-2020.pdf
- 104. Burton JK, McMinn M, Vaughan JE, Fleuriot J, Guthrie B. Care-home outbreaks of COVID-19 in Scotland March to May 2020: National linked data cohort analysis. Age and Ageing. 2021;50(5):1482-92.
- 105. Nguyen LKN, Howick S, McLafferty D, Anderson GH, Pravinkumar SJ, Van Der Meer R, et al. Impact of visitation and cohorting policies to shield residents from covid-19 spread in care homes: an agent-based model. American Journal of Infection Control. 2021;49(9): 1105-12.
- 106. Nguyen LKN, Megiddo I, Howick S. Hybrid simulation modelling of networks of heterogeneous care homes and the inter-facility spread of Covid-19 by sharing staff. PLOS Computational Biology. 2022;18(1):e1009780.
- 107. Reilly J, Crawford D, O'Boyle D. Care Home Review: A rapid review of factors relevant to the management of COVID-19 in the care home environment in Scotland. Available from: https://www.gov.scot/publications/root-cause-analysis-care-home-outbreaks/
- 108. Reilly J, Crawford D, O'Boyle D. Care Home Review: A rapid review of factors relevant to the management of COVID-19 in the care home environment in Scotland. Available from: https://www.gov.scot/publications/root-cause-analysis-care-home-outbreaks/

- 109. Thomson E, Robertson D, Rambaut A, Templeton K, Gunson R, Holden M. Utility of whole genome sequencing for SARS-CoV-2. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/fact sheet/2020/09/covid-19-advisory-group-evidence-papers-may-2020/documents/utility-of-whole-genome-sequencing-for-sars-cov-2-11-may-2020/utility-of-whole-genome-sequencing-for-sars-cov-2-11-may-2020/govscot%3Adocument/Utility%2Bof%2Bwhole%2Bgenome%2Bsequencing%2Bfor%2BSARS-CoV-2%2B%252811%2BMay%2B2020%2529.pdf
- 110. da Silva Filipe A, Shepherd JG, Williams T, Hughes J, Aranday-Cortes E, Asamaphan P, et al. Genomic epidemiology reveals multiple introductions of SARS-CoV-2 from mainland Europe into Scotland. Nature Microbiology. 2021;6(1):112-22.
- 111. Public Health Scotland. Discharges from NHSScotland Hospitals to Care Homes between 1 March and 31 May 2020. Available from: https://publichealthscotland.scot/ media/7313/2021-04-21-discharges-from-nhsscotlandhospitals-to-care-homes-between-1-march-and-31may-2020.pdf
- 112. Health and Social Care Scotland. Scottish Government Integration Division. Lessons Learned from Reducing Discharges and Hospital Admissions. Available from: https://hscscotland.scot/couch/uploads/file/resources/covid19-reports/lessons-learned-report-final.pdf
- 113. Reilly J, Crawford D, O'Boyle D. Care Home Review: A rapid review of factors relevant to the management of COVID-19 in the care home environment in Scotland. Available from: https://www.gov.scot/publications/root-cause-analysis-care-home-outbreaks/

- 114. Scottish Care. Scottish Care's statement on insurance concerns. Available from: https://scottishcare.org/scottish-cares-statement-on-insurance-concerns/
- 115. The Scottish Parliament. COVID-19 Recovery Committee 11. Available from: https://www.parliament.scot/chamber-and-committees/official-report/what-was-said-in-parliament/meeting-of-parliament-11-11-2021?meeting=13402&iob=121649
- 116. Scottish Government. Coronavirus (COVID-19): financial support arrangements for social care providers. Available from: https://www.gov.scot/publications/coronavirus-covid-19-financial-support-arrangements-for-social-care-providers/pages/additional-costs/
- 117. Bunn D, Brainard J, Lane K, Salter C, Lake I. The Lived Experience of Implementing Infection Control Measures in Care Homes during Two Waves of the COVID-19 Pandemic. A Mixed-Methods Study. Journal of Long-Term Care. 2021:386-400.
- 118. TEC Scotland. Digital Approaches in Care Homes. Available from: https://tec.scot/programme-areas/social-care-care-homes/digital-approaches-care-homes
- 119. British Geriatrics Society. Silver Book II: Geriatric syndromes. Available from: https://www.bgs.org.uk/resources/silver-book-ii-geriatric-syndromes
- 120. Scottish Intercollegiate Guidelines Network, Healthcare Improvement Scotland. SIGN 157: Risk reduction and management of delirium. Available from: https://www.sign.ac.uk/media/1423/sign157.pdf
- 121. Gov.uk Statement from the UK Chief Medical Officers on an update to coronavirus symptoms: 18 May 2020. Available from: https://www.gov.uk/government/news/statement-from-the-uk-chief-medical-officers-on-an-update-to-coronavirus-symptoms-18-may-2020

- 122. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://scottishcare.org/wp-content/uploads/2020/03/COVID-19-ClinicalGuidanceforNursingHome andResidentialCareResidents-Final26March.pdf
- 123. Scottish Government. National Clinical and Practice Guidance for Adult Care Homes in Scotland during the COVID-19 Pandemic. Available from:

 https://www.webarchive.org.uk/wayback/archive/20200516095432/https://www.gov.scot/publications/coronavirus-covid-19-clinical-and-practice-guidance-for-adult-care-homes/
- 124. Scottish Intercollegiate Guidelines Network, Healthcare Improvement Scotland. COVID-19 position statement: Presentations and management of COVID-19 in older people in acute care. Version 1. Available from: https://www.sign.ac.uk/media/1826/presentations-and-management-of-covid-19-in-older-people-v2-final.pdf [Note only Version 2 available online]
- 125. D'Adamo H, Yoshikawa T, Ouslander JG. Coronavirus Disease 2019 in Geriatrics and Long-Term Care: The ABCDs of COVID-19. J Am Geriatr Soc. 2020;68(5):912-7.
- 126. British Geriatrics Society. Coronavirus: Managing delirium in confirmed and suspected cases. Available from: https://www.bgs.org.uk/resources/coronavirus-managing-delirium-in-confirmed-and-suspected-cases
- 127. British Geriatrics Society. Managing the COVID-19 pandemic in care homes. Version 1. Available from: https://www.nhsaaa.net/media/8926/bgs-managing-the-covid-19-pandemic-in-care-homes.pdf

- 128. Frontline Best Practice for Supporting Residents in Care Homes with COVID-19 (poster). Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/06/coronavirus-covid-19-adult-care-homes-visiting-guidance/documents/infographics/frontline-best-practice-poster/frontline-best-practice-poster/govscot%3Adocument/Frontline_CH_covid_best_practice_July 2021.pdf
- 129. Frontline Best Practice for Supporting Residents in Care Homes with COVID-19 (video). Available from: https://www.vimeo.com/carehome/covid
- 130. Reilly J, Crawford D, O'Boyle D. Care Home Review: A rapid review of factors relevant to the management of COVID-19 in the care home environment in Scotland. Available from: https://www.gov.scot/publications/root-cause-analysis-care-home-outbreaks/
- 131. British Geriatrics Society. Managing the COVID-19 pandemic in care homes for older people. Version 4. Available from: https://www.bgs.org.uk/sites/default/files/content/attachment/2020-11-16/Managing%20the%20COVID-19%20pandemic%20in%20care%20homes%20November%202020_0.pdf
- 132. Healthcare Improvement Scotland. Hospital at Home. Available from: https://ihub.scot/project-toolkits/hospital-at-home/hospital-at-home/
- 133. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://scottishcare.org/wp-content/uploads/2020/03/COVID-19-ClinicalGuidanceforNursingHome andResidentialCareResidents-Final26March.pdf
- 134. TEC Scotland. Speciality Guidance for Using Near Me to Enable Virtual Care Home Reviews in Care Homes. Available from: https://tec.scot/sites/default/files/2021-06/Using-Near-Me-to-enable-virtual-care-reviews-in-care-homes.pdf

- 135. Digital Health and Care Scotland. TEC Scotland. COSLA. Connecting People Connecting Services Digital Approaches in Care Homes Action Plan. Available from: https://tec.scot/sites/default/files/2021-06/Digital-Approches-in-Care-Homes-Action-Plan-Final.pdf
- 136. Digital Health and Care Innovation Centre. Digital Inclusion: Connecting residents in Scotland's care homes. Available from: https://www.dhi-scotland.com/news/digital-inclusion-connecting-residents-in-scotland-scare-homes/
- 137. TEC Scotland. Resources for Care Homes. Available from: https://tec.scot/programme-areas/social-care-care-homes/digital-approaches-care-homes/resources-care-homes
- 138. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://www.careinspectorate.com/images/COVID-19_-_Letter_from_Cabinet_Secretary_for_Health_and_Sport_-_Social_care_guidance_-_13_March_2020.pdf
- 139. Randomised Evaluation of COVID-19 Therapy (RECOVERY). Low-cost dexamethasone reduces death by up to one third in hospitalised patients with severe respiratory complications of COVID-19. Available from: https://www.recoverytrial.net/news/low-cost-dexamethasone-reduces-death-by-up-to-one-third-in-hospitalised-patients-with-severe-respiratory-complications-of-covid-19
- 140. The RECOVERY Collaborative Group. Dexamethasone in Hospitalized Patients with Covid-19. New England Journal of Medicine. 2020;384(8):693-704.

- 141. British Geriatrics Society. Managing the COVID-19 pandemic in care homes for older people. Version 4. Available from: https://www.bgs.org.uk/sites/default/files/content/attachment/2020-11-16/Managing%20the %20COVID-19%20pandemic%20in%20care%20homes %20November%202020_0.pdf
- 142. Scottish Government. Coronavirus (COVID-19): treatment options guidance for care homes. Available from: https://www.gov.scot/publications/coronavirus-covid-19-treatment-options-guidance-for-care-homes/
- 143. Prophylactic Therapy in Care Homes Trial (PROTECT-CH). Available from: https://www.protect-trial.net/
- 144. Gordon AL, Rick C, Juszczak E, Montgomery A, Howard R, Guthrie B, et al. The COVID-19 pandemic has highlighted the need to invest in care home research infrastructure. Age and Ageing. 2022:afac052.
- 145. Williamson EJ, Walker AJ, Bhaskaran K, Bacon S, Bates C, Morton CE, et al. Factors associated with COVID-19-related death using OpenSAFELY. Nature. 2020;584(7821):430-6.
- 146. Booth A, Reed AB, Ponzo S, Yassaee A, Aral M, Plans D, et al. Population risk factors for severe disease and mortality in COVID-19: A global systematic review and meta-analysis. PLOS ONE. 2021;16(3):e0247461.
- 147. Shi C, Wang L, Ye J, Gu Z, Wang S, Xia J, et al. Predictors of mortality in patients with coronavirus disease 2019: a systematic review and meta-analysis. BMC Infectious Diseases. 2021;21(1):663.
- 148. Zhang X-M, Jiao J, Cao J, Huo X-P, Zhu C, Wu X-J, et al. Frailty as a predictor of mortality among patients with COVID-19: a systematic review and meta-analysis. BMC Geriatrics. 2021;21(1):186.

- 149. Geriatric Medicine Research Collaborative, Covid Collaborative, Welch C. Age and frailty are independently associated with increased COVID-19 mortality and increased care needs in survivors: results of an international multi-centre study. Age and Ageing. 2021;50(3):617-30.
- 150. McKeigue PM, Weir A, Bishop J, McGurnaghan SJ, Kennedy S, McAllister D, et al. Rapid Epidemiological Analysis of Comorbidities and Treatments as risk factors for COVID-19 in Scotland (REACT-SCOT): A populationbased case-control study. PLOS Medicine. 2020;17(10):e1003374.
- 151. Gao M, Piernas C, Astbury NM, Hippisley-Cox J, O'Rahilly S, Aveyard P, et al. Associations between body-mass index and COVID-19 severity in 6.9 million people in England: a prospective, community-based, cohort study. The Lancet Diabetes and Endocrinology. 2021;9(6):350-9.
- 152. Tahira AC, Verjovski-Almeida S, Ferreira ST. Dementia is an age-independent risk factor for severity and death in COVID-19 inpatients. Alzheimer's and Dementia. 2021;17(11):1818-31.
- 153. Williamson EJ, McDonald HI, Bhaskaran K, Walker AJ, Bacon S, Davy S, et al. Risks of covid-19 hospital admission and death for people with learning disability: population based cohort study using the OpenSAFELY platform. BMJ. 2021;374:n1592.
- 154. Comas-Herrera A, Zalakaín J, Lemmon E, Henderson D, Litwin C, Hsu AT, Schmidt AE, Arling G, Kruse F and Fernández J-L. Mortality associated with COVID-19 in care homes: international evidence. International Long-Term Care Policy Network. Available from: https://ltccovid.org/wp-content/uploads/2021/02/LTC_COVID_19_international_report_January-1-February-.pdf

- 155. McKeigue PM, McAllister DA, Caldwell D, Gribben C, Bishop J, McGurnaghan S, et al. Relation of severe COVID-19 in Scotland to transmission-related factors and risk conditions eligible for shielding support: REACT-SCOT case-control study. BMC Medicine. 2021;19(1):149.
- 156. Hippisley-Cox J, Coupland CA, Mehta N, Keogh RH, Diaz-Ordaz K, Khunti K, et al. Risk prediction of covid-19 related death and hospital admission in adults after covid-19 vaccination: national prospective cohort study. BMJ. 2021;374:n2244.
- 157. Scottish Learning Disabilities Observatory. The impact of COVID-19 on people with learning/intellectual disabilities in Scotland. Available from: http://www.sldo.ac.uk/our-research/life-expectancy-and-mortality/covid-19/
- 158. Scottish Government. Excess deaths from all causes and dementia by setting Scotland 2020-2021. Available from: https://www.gov.scot/publications/excess-deaths-causes-dementia-setting-scotland-2020-2021/
- 159. Burton JK, Reid M, Gribben C, Caldwell D, Clark DN, Hanlon P, et al. Impact of COVID-19 on Care-Home Mortality and Life Expectancy in Scotland. Age and Ageing. 2021;50(4):1029-37.
- 160. Burton JK, McMinn M, Vaughan JE, Fleuriot J, Guthrie B. Care-home outbreaks of COVID-19 in Scotland March to May 2020: National linked data cohort analysis. Age and Ageing. 2021;50(5):1482-92.
- 161. Burton JK, McMinn M, Vaughan JE, Fleuriot J, Guthrie B. Care-home outbreaks of COVID-19 in Scotland March to May 2020: National linked data cohort analysis. Age and Ageing. 2021;50(5):1482-92.

- 162. Department of Health and Social Care. Vaccine priority groups: advice on 30 December 2020. Available from: https://www.gov.uk/government/publications/priority-groups-for-coronavirus-covid-19-vaccination-advice-from-the-jcvi-30-december-2020/joint-committee-on-vaccination-and-immunisation-advice-on-priority-groups-for-covid-19-vaccination-30-december-2020#vaccine-priority-groups-advice-on-30-december-2020
- 163. Care Inspectorate. Weekly report on deaths of care home residents in Scotland. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/2020/05/data-on-coronavirus-covid-19-in-adult-care-homes-in-scotland2/documents/coronavirus-covid-19-deaths-reported-to-care-inspectorate/coronavirus-covid-19-deaths-reported-to-care-inspectorate/govscot%3A document/Deaths%2Breported%2Bto%2BCare%2BInspectorate%2B-%2Bweek%2B7.xlsx
- 164. Scottish Government. COVID-19 in Scotland. Detailed analysis. Available from: https://data.gov.scot/coronavirus-covid-19/detail.html
- 165. Scottish Government. Coronavirus (COVID-19) vaccine inclusion: vaccination programme phase one. Available from:
 - https://www.gov.scot/publications/vaccine-inclusion-phase-one-covid-19-vaccination-programme/

- 166. NHS Scotland. Scottish Government. Scotland's COVID-19 Vaccine Deployment Plan 2021. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2021/03/coronavirus-covid-19-vaccine-deployment-plan-update-march-2021/documents/coronavirus-covid-19-vaccine-deployment-plan-update---march-2021/coronavirus-covid-19-vaccine-deployment-plan-update---march-2021/govscot%3Adocument/COVID-19%2Bvaccine%2Bdeployment%2Bplan%2B-%2Bupdate%2B-%2B24%2BMarch%2B2021.pdf
- 167. Scottish Government. Coronavirus (COVID-19):
 vaccinations data technical note. Available from:
 https://www.gov.scot/publications/coronavirus-covid19-vaccinations-data---technical-note/
- 168. Methodist Homes Association. More than just a visitor. A guide to Essential Family Carers. Available from: https://www.mha.org.uk/files/2615/9707/4083/MHA_More_than_just_a_visitor._A_guide_for_Essential_Family_Carers.pdf
- 169. Legislative Assembly of Ontario. Bill 203, More Than a Visitor Act. Available from: https://www.ola.org/en/legislative-business/bills/parliament-42/session-1/bill-203#:~:text=The%20Bill%20enacts%20the%20More,settings%20and%20their%20designated%20caregivers.
- 170. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://www.careinspectorate.com/images/COVID-19_-_Letter_from_Cabinet_Secretary_for_Health_and_Sport_-_Social_care_guidance_-_13_March_2020.pdf

- 171. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://www.careinspectorate.com/images/COVID-19_-_Letter_from_Cabinet_Secretary_for_Health_and_Sport_-_Social_care_guidance_-_13_March_2020.pdf
- 172. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://scottishcare.org/wp-content/uploads/2020/03/COVID-19-ClinicalGuidanceforNursingHome andResidentialCareResidents-Final26March.pdf
- 173. Scottish Government. Visiting Your Relative Living in a Care Home. Available from: https://scottishcare.org/wp-content/uploads/2020/06/Pre-visit-Visitor-Guidelines-booklet-Final-20.06.25.pdf
- 174. Scottish Government. Care home visiting expanded.
 Available from: https://www.gov.scot/news/care-home-visiting-expanded/
- 175. Scottish Human Rights Commission. Visiting Guidance for Adult Care Homes in Scotland. Available from: https://www.scottishhumanrights.com/media/2085/20_09_01_carehomesvisitingletter.pdf
- 176. Scottish Government. Health and well-being visits to care homes to resume. Available from: https://www.gov.scot/news/health-and-well-being-visits-to-care-homes-to-resume/
- 177. Care Inspectorate. Archived updates (2020). Care home visiting guidance and testing updates (Added 13 October). Available from: https://www.careinspectorate.com/index.php/publications-statistics/10-organisation/6450-archived-updates-2020

- 178. Scottish Government. COVID-19: Christmas and New Year guidance for Adult Care Homes and Visitors. Available from: https://www.careinspectorate.com/images/documents/coronavirus/Adult_Care_Homes_Christmas_and_New_Year_guidance_-_FINAL_4.12.20.pdf
- 179. Care Inspectorate. Supporting people to keep in touch when care homes are not accepting visitors. Available from: https://www.careinspectorate.com/images/Supporting_people_to_keep_in_touch_when_care_homes_are_not_accepting_visitors.pdf
- 180. TEC Scotland. Digital Approaches in Care Homes.
 Available from: https://tec.scot/programme-areas/
 social-care-care-homes/digital-approaches-care-homes
- 181. Care Home Relatives Scotland. Adequate is not good enough. May 2021.
- 182. Scottish Government. Open with Care. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2021/02/open-care-supporting-meaningful-contact-care-homes/documents/open-care-supporting-meaningful-contact-care-homes/open-care-supporting-meaningful-contact-care-homes/govscot%3Adocument/open-care-supporting-meaningful-contact-care-homes.pdf?forceDownload=true

- 183. Scottish Government. Open with Care. Checklist:
 Conditions for resuming indoor visiting. Available from:
 https://www.gov.scot/binaries/content/documents/gov
 scot/publications/advice-and-guidance/2020/06/
 coronavirus-covid-19-adult-care-homes-visitingguidance/documents/open-with-care-documents/
 open-with-care---checklist-local-conditions-toresuming-meaningful-contact---24-february-2021/
 open-with-care---checklist-local-conditions-toresuming-meaningful-contact---24-february-2021/
 govscot%3Adocument/Open%2Bwith%2BCare%2BCh
 ecklist%2BJPG%2B%25281%2529.jpg
- 184. Scottish Government. Open with Care: Supporting Meaningful Contact and activities in and away from Care Homes. Supplementary Information: Answers to practical questions and concerns. Available from: https://www.gov.scot/binaries/content/documents/gov scot/publications/advice-and-guidance/2021/07/coronavirus-covid-19---open-with-care-advice-on-practicalities/documents/open-with-care-supporting-meaningful-contact-and-activities-in-and-away-from-care-homes---supplementary-information/open-with-care-supporting-meaningful-contact-and-activities-in-and-away-from-care-homes---supplementary-information/govscot%3Adocument/Open%2Bwith%2B care%2B-%2Bsupplementary%2Binformation%2B-%2BJuly%2B2021.pdf

- 185. Scottish Government. Open with Care supporting people in adult care homes to have meaningful contact with others. Progress with implementation. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/progress-report/2021/06/open-care-supporting-people-adult-care-homes-meaningful-contact-others-progress-implementation2/documents/open-care-supporting-people-adult-care-homes-meaningful-contact-others-progress-implementation/open-care-supporting-people-adult-care-homes-meaningful-contact-others-progress-implementation/govscot%3Adocument/open-care-supporting-people-adult-care-homes-meaningful-contact-others-progress-implementation.pdf
- 186. Scottish Government. Open with Care. Additional advice and guidance: activities and outings away from the care home. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/06/coronavirus-covid-19-adult-care-homes-visiting-guidance/documents/open-with-care-documents/open-with-care--outings-away-from-the-care-home---additional-guidance---17-may-2021/open-with-care--outings-away-from-the-care-home---additional-guidance---17-may-2021/govscot%3A document/Open%2Bwith%2BCare%2B%25E2%2580%2593%2Badditional%2B guidance%2B%25E2%2580%2593%2Badditional%2B guidance%2B%25E2%2580%2593%2B17%2BMay%2B 2021.pdf

- 187. Scottish Government. Relaxations to COVID-19 regulations/restrictions 9th August (Beyond Level 0) Associated updates to Open with Care and Open for Care. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/06/coronavirus-covid-19-adult-care-homes-visiting-guidance/documents/open-with-care-documents/open-with-care--care-home-visiting---beyond-level-0-advice-letter-for-9-august/open-with-care--care-home-visiting---beyond-level-0-advice-letter-for-9-august/govscot%3Adocument/Care%2Bhome%2Bvisiting%2B-%2BOpen%2Bwith%2Bcare%2B-%2BBeyond%2BLevel%2B0%2BAdvice%2Bfor%2B9th%2BAug%2B-%2BLetter%2B06-08-2021.pdf
- 188. Scottish Government. Social Care Analytical Unit. Open with Care: Care home managers feedback on implementation survey findings. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2021/02/open-care-supporting-meaningful-contact-care-homes/documents/open-care-care-home-managers-feedback-implementation-survey-findings/open-care-care-home-managers-feedback-implementation-survey-findings/govscot%3Adocument/open-care-care-home-managers-feedback-implementation-survey-findings.pdf
- 189. Alzheimer Scotland. The launch of a new Action on Rights team. Available from: https://www.alzscot.org/news/the-launch-of-a-new-action-on-rights-team
- 190. Alzheimer Scotland. Action on Rights. Available from: https://www.alzscot.org/action-on-rights
- 191. Alzheimer Scotland. An update on Action on Rights. Available from: https://www.alzscot.org/news/an-update-on-action-on-rights
- 192. Care Home Relatives Scotland. Adequate is not good enough. May 2021.

- 193. Care Home Relatives Scotland. Adequate is not good enough. May 2021.
- 194. Enable Safe Care. Available from: https://enablesafecare.org/
- 195. Storr J, Kilpatrick C, Hall S, Chraiti M-N. Applying workflow analysis techniques in care homes in the context of IPC and COVID-19. Antimicrobial Resistance and Infection Control. 2021;10(1):P103.
- 196. Storr et al. Open letter: Infection prevention and control should never be at the expense of compassionate care. Nursing Times. 16/10/20.
- 197. Together in Dementia Everyday (TIDE). About us. Available from: https://www.tide.uk.net/about-us/
- 198. Together in Dementia Everyday (TIDE). Restoring Relationships: The Recovery of Love, Connection and Family. Available from: https://www.tide.uk.net/restoring-relationships/
- 199. Chief Scientist Office. Understanding and reducing the psychosocial impact of Coronavirus social distancing and behavioural changes on families of care home residents in Scotland. Available from: https://www.cso.scot.nhs.uk/wp-content/uploads/COVEDI2017-1.pdf
- 200. Palattiyil G, Jamieson L, McKie L, Jain S, Hockley J, Sidhva D, et al. The Cost of Separation. The Impact of Visiting Restrictions on Families of Care Home Residents During COVID-19. Available from: https://www.creativecovidcare.com/files/2021/02/cost-of-separation-full.pdf
- 201. Palattiyil G, Jamieson L, McKie L, Jain S, Hockley J, Sidhva D, et al. The Cost of Separation. The Impact of Visiting Restrictions on Families of Care Home Residents During COVID-19. Available from: https://www.creativecovidcare.com/files/2021/02/cost-of-separation-full.pdf

- 202. Hockley J, Hafford-Letchfield T, Noone S, Mason B, Jamieson L, Ivershold R, et al. COVID, Communication and Care Homes: A Staffs' Perspective of Supporting the Emotional Needs of Families. Journal of Long-Term Care. 2021(2021):167-76.
- 203. Ferguson J. The impact of COVID-19 visiting restrictions on older people living in care homes and their relatives. 2021.
- 204. Scottish Government. Open for Care Visiting health, social care and other services in care homes and communal activity. Available from: https://www.careinspectorate.com/images/Updated_advice_on_care_home_visiting_-_visiting_professionals_and_other_services_14_April_2021.pdf
- 205. Scottish Government. Coronavirus (COVID-19) Open for Care – visiting professionals into adult care homes; letter 2 December 2021. Available from: https://www.gov.scot/ publications/coronavirus-covid-19-open-for-carevisiting-professionals-into-adult-care-homes-letter-2december-2021/
- 206. Scottish Government. Updated advice. Open with Care named visitor to enable people in care homes to maintain contact with loved ones during COVID outbreaks. Available from: https://www.gov.scot/binaries/content/ documents/govscot/publications/correspondence/202 1/09/coronavirus-covid-19-named-visitor-duringoutbreaks-letter-to-care-home-sector/documents/ open-with-care---named-visitor-to-enable-people-incare-homes-to-maintain-contact-with-loved-onesduring-covid-outbreaks/open-with-care---namedvisitor-to-enable-people-in-care-homes-to-maintaincontact-with-loved-ones-during-covid-outbreaks/ govscot%3Adocument/Open%2Bwith%2BCare%2B-%2BNamed%2BVisitor%2B-%2BSector%2BLetter %2Band%2BGuidance%2BNote%2BMr%2BStewart%2 BCMO%2BCNO%2BNCD.pdf

- 207. Scottish Government. Updated guidance on self-isolation for residents in adult care homes and indoor visiting: letter from Deputy Chief Medical Officer and Deputy Chief Nursing Officer. Available from: https://www.gov.scot/publications/updated-guidance-on-self-isolation-for-residents-in-adult-care-homes-and-indoor-visiting-letter-from-deputy-chief-medical-officer-and-deputy-chief-nursing-officer/
- 208. Scottish Government. Anne's Law: proposals for adults living in care homes to maintain family and friendship connections. Available from: https://consult.gov.scot/pandemic-response/annes-law-legislation/
- 209. The Scottish Parliament. PE01841: Allow a designated visitor into care homes. Available from: https://archive2021.parliament.scot/gettinginvolved/Petitions/designatedcarehomevisitors
- 210. Scottish Government. Anne's Law: proposals for adults living in care homes to maintain family and friendship connections. Available from: https://consult.gov.scot/pandemic-response/annes-law-legislation/
- 211. Scottish Government. Adult care homes: strengthening Health and Social Care Standards. Available from: https://consult.gov.scot/pandemic-response/ annes-law/
- 212. Scottish Government. Health and Social Care Standards: my support, my life. Available from: https://www.gov.scot/publications/health-social-care-standards-support-life/documents/
- 213. Finucane AM, Bone AE, Evans CJ, Gomes B, Meade R, Higginson IJ, et al. The impact of population ageing on end-of-life care in Scotland: projections of place of death and recommendations for future service provision. BMC Palliative Care. 2019;18(1):112.

- 214. Scottish Government. Palliative and End-of-Life Care by Integration Authorities: advice note. Available from: https://www.gov.scot/publications/strategic-commissioning-palliative-end-life-care-integration-authorities/pages/5/
- 215. Scottish Care. "Trees That Bend in the Wind": exploring the experiences of frontline support workers delivering palliative and end of life care. Available from: https://scottishcare.org/wp-content/uploads/2019/11/Trees-that-Bend-in-the-Wind-Exploring-the-Experiences-of-Front-Line-Support-Workers-Delivering-Palliative-and-End-of-Life-Care.pdf
- 216. Spacey A, Scammell J, Board M, Porter S. End-of-life care in UK care homes: a systematic review of the literature. Journal of Research in Nursing. 2018;23(2-3):180-200.
- 217. Healthcare Improvement Scotland. NHS Scotland. Scottish Palliative Care Guidelines. Anticipatory Prescribing. Available from:

 https://www.palliativecareguidelines.scot.nhs.uk/guidelines/pain/Anticipatory-Prescribing.aspx
- 218. Scottish Government. Clinical Guidance for Nursing Home and Residential Care Residents and COVID-19. Available from: https://www.careinspectorate.com/images/COVID-19_-_Letter_from_Cabinet_Secretary_for_Health_and_Sport_-_Social_care_guidance_-_13_March_2020.pdf
- 219. Scottish Palliative Care Pharmacy Association. Scottish Government. COVID-19 Palliative Care Toolkit. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/04/coronavirus-covid-19-palliative-care-toolkit/documents/coronavirus-covid-19-palliative-care-toolkit/coronavirus-covid-19-palliative-care-toolkit/govscot%3Adocument/Palliative%2B Care%2BToolkit%2Bv2.2%2BFINAL.pdf

- 220. Healthcare Improvement Scotland. Scottish guidance for repurposing medicines in care homes and hospices. Available from: https://www.healthcareimprovementscotland.org/our_work/coronavirus_covid-19/repurposing_medicines_guidance.aspx
- 221. Equality and Human Rights Commission Scotland.
 Equality in residential care in Scotland during coronavirus
 (COVID-19). Available from:
 https://www.equalityhumanrights.com/sites/default/files/briefing-care-homes-equality-in-residential-care-scotland-coronavirus-covid-19-december-2020.docx
- 222. Highland Hospice. Project ECHO. Available from: https://highlandhospice.org/what-we-do/education-learning-development/project-echo
- 223. St Columba's Hospice Care. Project ECHO. Available from: https://stcolumbashospice.org.uk/project-echo
- 224. A Bereavement Charter for Children and Adults in Scotland: Guidance Notes. Available from: https://scottishcare.org/wp-content/uploads/2022/01/NESD1377-Bereavement-Charter-updated-2021-FINAL.pdf
- 225. Scottish Care. Grief is the cost of loving: care and COVID trauma. Available from: https://scottishcare.org/grief-is-the-cost-of-loving-care-homes-and-covid-trauma/
- 226. National Wellbeing Hub. Available from: https://wellbeinghub.scot/
- 227. Scottish Government. Unique support for health and social care. Available from: https://www.gov.scot/news/unique-support-for-health-and-social-care/
- 228. Chief Scientist Office. Online Supportive Conversations and Reflection Sessions (OSCaRS): A feasibility study with care home staff during the pandemic. Available from: https://services.nhslothian.scot/CareHomes/Research/Documents/Covid-19%20OSCaR%20CSO%20report_.pdf

- 229. Scottish Government. Anticipatory Care Planning: Frequently Asked Questions. Available from: https://www.gov.scot/publications/anticipatory-care-planning-frequently-asked-questions/
- 230. Finucane AM, Davydaitis D, Horseman Z, Carduff E, Baughan P, Tapsfield J, et al. Electronic care coordination systems for people with advanced progressive illness: a mixed-methods evaluation in Scottish primary care. British Journal of General Practice. 2020;70(690):e20-e8.
- 231. Scottish Government. Shielding guidance for high risk vulnerable patients. Available from:

 https://www.sehd.scot.nhs.uk/publications/
 DC20200326letter.pdf
- 232. Healthcare Improvement Scotland. Key Information Summaries. Available from: https://ihub.scot/media/8823/20211903-key-information-summaries-guidance-and-top-tips-for-updating-and-reviewing-key-information-summaries-for-gp-practices-v10.pdf
- 233. Scottish Government. Anticipatory Care Plans for Vulnerable and High Risk Patients. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/foi-eir-release/2020/08/foi-202000037381/documents/foi-202000037381---information-released-a/foi-202000037381---information-released-a/govscot%3Adocument/FOI-202000037381%2B-%2BInformation%2Breleased%2B%2528a%2529.pdf
- 234. EC4H. Edinburgh Health and Social Care Partnership. 7 steps to ACP: Creating COVID-19 relevant ACPs in Care Homes. Implementation Guidance and Resources. Available from: https://ihub.scot/media/7143/acp-implementation-guidance-resources-for-care-homes-and-gp-practices.pdf

- 235. Harding A, Preston N, Doherty J, Cousins E, Varey S, McCann A, et al. Developing and evaluating online COVID-centric advance care planning training and information resources for nursing staff and family members in nursing homes: the necessary discussions study protocol. BMC Geriatrics. 2021;21(1):456.
- 236. Royal College of Physicians. Mythbusters.
 Cardiopulmonary resuscitation (CPR). Available from:
 https://www.rcplondon.ac.uk/file/30621/download
- 237. National Institute for Health and Care Excellence. Cardiac arrest out of hospital care: What causes it? Available from: https://cks.nice.org.uk/topics/cardiac-arrest-out-of-hospital-care/background-information/causes/
- 238. Resuscitation Council UK. Epidemiology of cardiac arrest. Guidelines. Available from: https://www.resus.org.uk/library/2021-resuscitation-guidelines/epidemiology-cardiac-arrest-guidelines
- 239. Scottish Government. Out of hospital cardiac arrest: strategy 2021 to 2026. Available from: https://www.gov.scot/publications/scotlands-out-hospital-cardiac-arrest-strategy-2021-2026/
- 240. NHS Scotland. Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) Integrated Adult Policy. Available from: https://www.sad.scot.nhs.uk/media/16026/409019_dnacpr-p5.pdf
- 241. Healthcare Improvement Scotland. Cardiopulmonary Resuscitation (CPR) Decisions. Framework, forms and teaching tools. Available from: https://www.healthcareimprovementscotland.org/our_work/person-centred_care/information_for_dnacpr_leads.aspx
- 242. Scottish Government, Cardiopulmonary resuscitation decisions: information for patients, relatives and carers. Available from: https://www.gov.scot/publications/decisions-cardiopulmonary-resuscitation-information-patients-relatives-carers/

- 243. Equality and Human Rights Commission, Equality in residential care in Scotland during coronavirus (COVID-19). Available from: https://www.equalityhumanrights.com/sites/default/files/briefing-care-homes-equality-in-residential-care-scotland-coronavirus-covid-19-december-2020.docx
- 244. Age Scotland. Inquiry into use of Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) decisions. Available from: https://mcusercontent.com/479296d7e37b3f189c80c67f0/files/47493b6c-db3f-49f2-aa70-3506045ad02e/DNACPR_Inquiry_Healthcare_Improvement_Scotland_Age_Scotland_180321.pdf
- 245. The Queen's Nursing Institute. The experience of care home staff during COVID-19. Available from: https://www.qni.org.uk/wp-content/uploads/2020/08/The-Experience-of-Care-Home-Staff-During-Covid-19-2.pdf
- 246. Mental Welfare Commission for Scotland. COVID-19 FAQs for Practitioners. Available from: https://www.mwcscot.org.uk/sites/default/files/2020-04/Covid-19%20advice%20note%20v3%202%20April%202020.pdf
- 247. Care Quality Commission. Protect, respect, connect decisions about living and dying well during COVID-19. Available from: https://www.cqc.org.uk/publications/themed-work/protect-respect-connect-decisions-about-living-dying-well-during-covid-19
- 248. Compassion in Dying. Better understanding, better outcomes: what we've learned about DNACPR decisions before and during the Coronavirus pandemic. Available from: https://compassionindying.org.uk/wp-content/uploads/2021/03/Better-Understanding-Better-Outcomes-DNACPR-decisions-before-and-during-the-pandemic.pdf

- 249. Care Inspectorate. About us. Available from: https://www.careinspectorate.com/index.php/about-us
- 250. Care Inspectorate. Notifications. Available from: https://www.careinspectorate.com/index.php/notifications
- 251. Care Inspectorate. Revised notification guidance in light of coronavirus outbreak. Available from: https://www.careinspectorate.com/index.php/news/5592-revised-notification-guidance-in-light-of-coronavirus
- 252. Care Inspectorate. Revised notifications guidance for care service providers. Available from: https://www.careinspectorate.com/index.php/news/5611-revised-notifications-guidance-for-care-service-providers
- 253. Care Inspectorate. COVID-19 notifications. Available from: https://www.careinspectorate.com/index.php/covid-19/covid-19-notifications
- 254. Care Inspectorate. Archived updates 2020. Help us support you to deliver care (updated 10 April). Available from: https://www.careinspectorate.com/index.php/work-with-us/our-jobs/10-organisation/6450-archived-updates-2020
- 255. Care Inspectorate. COVID-19 notifications. Available from: https://www.careinspectorate.com/index.php/covid-19/covid-19-notifications
- 256. Scottish Government. Coronavirus (COVID-19): care home staffing and escalation resources. Available from: https://webarchive.nrscotland.gov.uk/20200530193433 /www.gov.scot/publications/coronavirus-covid-19-care-home-staffing-and-escalation-resources
- 257. Care Inspectorate. Update for care service providers on coronavirus. Available from: https://www.careinspectorate.com/index.php/news/5594-update-for-care-service-providers-on-coronavirus

- 258. Care Inspectorate. An update on our support activity what it means for your service and care across Scotland. Available from: https://www.careinspectorate.com/images/documents/coronavirus/An_update_on_our_support_activity_16_April_2020.pdf
- 259. Care Inspectorate. The Care Inspectorate's Role, Purpose and Learning During the COVID-19 Pandemic. Available from: https://hub.careinspectorate.com/media/4167/ci-role-purpose-learning-during-covid-19.pdf
- 260. Care Inspectorate. Key question: how good is our care and support during the COVID-19 pandemic? Available from: https://www.careinspectorate.com/images/documents/coronavirus/Quality_indicators_Key_question_7.pdf
- 261. Care Inspectorate. Inspection during COVID-19. Available from: https://www.careinspectorate.com/index.php/covid-19/inspection-during-covid-19
- 262. Care Inspectorate. A quality framework for care homes for adults. Available from: https://hub.careinspectorate.com/media/3803/quality-framework-for-care-homes-for-adults-2020.pdf
- 263. Reilly J, Crawford D, O'Boyle D. Care Home Review: A rapid review of factors relevant to the management of COVID-19 in the care home environment in Scotland. Available from: https://www.gov.scot/publications/root-cause-analysis-care-home-outbreaks/
- 264. Care Inspectorate. COVID-19 SAT. Available from: https://www.careinspectorate.com/images/documents/coronavirus/COVID_Scrutiny_Assessment_Tool_SAT_002.pdf?utm_medium=email&utm_source=govdelivery
- 265. Care Inspectorate. Inspection during COVID-19. Available from: https://www.careinspectorate.com/index.php/covid-19/inspection-during-covid-19

- 266. Care Inspectorate. COVID-19 SAT. Available from: https://www.careinspectorate.com/images/documents/coronavirus/COVID_Scrutiny_Assessment_Tool_SAT_002.pdf?utm_medium=email&utm_source= govdelivery
- 267. Care Inspectorate. Risk Assessment Information for Care Service Providers. Available from:

 https://www.careinspectorate.com/images/documents/
 148/Risk%20Assessment%20%E2%80%93%20
 Information%20for%20Care%20Service%20Providers.
 pdf
- 268. Scottish Government. Coronavirus (COVID-19) update: Health Secretary's statement 21 April 2020. Available from: https://www.gov.scot/publications/coronavirus-covid-19-update-health-secretarys-update-tuesday-21-april-2020/
- 269. Scottish Government. Available from:
 https://www.gov.scot/binaries/content/documents/
 govscot/publications/advice-and-guidance/2020/05/
 coronavirus-covid-19-care-home-oversight/documents
 /letter-from-cabinet-secretary-for-health-and-sportregarding-multi-professional-oversight-in-care-homes--may-2020/letter-from-cabinet-secretary-for-healthand-sport-regarding-multi-professional-oversight-incare-homes---may-2020/govscot%3Adocument/
 Letter%2Bfrom%2BCabinet%2BSecretary%2Bfor%2B
 Health%2Band%2BSport%2Bregarding%2Bmulti%2B
 professional%2Boversight%2Bin%2Bcare%2Bhomes
 %2B-%2B17%2BMay%2B2020.pdf

- 270. Scottish Government. Coronavirus (COVID-19): enhanced professional clinical and care oversight of care homes. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/05/coronavirus-covid-19-care-home-oversight/documents/coronavirus-covid-19-enhanced-professional-clinical-and-care-oversight-of-care-homes/coronavirus-covid-19-enhanced-professional-clinical-and-care-oversight-of-care-homes/govscot%3Adocument/Coronavirus%2B%2528COVID%2B19%2529%2B-%2Benhanced%2Bprofessional%2Bclinical%2Band%2Bcare%2Boversight%2Bof%2Bcare%2Bhomes%2B%2528003%2529.pdf
- 271. NHS Education for Scotland. Turas Care Management User Guides. Available from: https://learn.nes.nhs.scot/34427/turas-care-management-user-guides
- 272. Scottish Government. Coronavirus (COVID-19) initial health and social care response: lessons identified. Available from: https://www.gov.scot/publications/lessons-identified-initial-health-social-care-response-covid-19-scotland/documents/
- 273. Health and Social Care Scotland. Scottish Government Integration Division. Lessons Learned from Reducing Discharges and Hospital Admissions. Available from: https://hscscotland.scot/couch/uploads/file/resources/covid19-reports/lessons-learned-report-final.pdf
- 274. Scottish Care. The Ingredients for Growth Care Providers Experience of Regulation and Oversight. Available from: https://scottishcare.org/the-ingredient-for-growth-care-providers-experience-of-regulation-oversight/
- 275. Scottish Government. A National Care Service for Scotland: consultation. Available from: https://www.gov.scot/publications/national-careservice-scotland-consultation/pages/6/

- 276. The Scottish Parliament. Official Report. Meeting of the Parliament (Hybrid) 13 May 2020. Available from: https://archive2021.parliament.scot/parliamentary business/report.aspx?r=12636
- 277. The Scottish Parliament. Official Report. Meeting of the Parliament (Hybrid) 13 May 2020. Available from: https://archive2021.parliament.scot/parliamentary business/report.aspx?r=12636
- 278. Public Health Scotland. COVID-19: Information and Guidance for Care Home Settings (Adults and Older People). Version 2.7. Available from: https://publichealthscotland.scot/media/11346/ 2022-01-27-covid-19-information-and-guidance-forcare-homes-v27.pdf
- 279. Police Scotland. 20-2008-C19-Operation Koper deaths in care homes. Available from: https://www.scotland.police.uk/access-to-information/freedom-of-information/disclosure-log/2020/december/20-2008-c19-operation-koper-deaths-in-care-homes/
- 280. Scottish Care. Scottish Care comments on Operation Koper. Available from: https://scottishcare.org/scottishcare.comments-on-operation-koper/
- 281. Health and Social Care Scotland. Scottish Government Integration Division. Lessons Learned from Reducing Discharges and Hospital Admissions. Available from: https://hscscotland.scot/couch/uploads/file/resources/covid19-reports/lessons-learned-report-final.pdf

- 282. Scottish Government. Social Care Analytical Unit. Open with Care: Care home managers feedback on implementation survey findings. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2021/02/open-care-supporting-meaningful-contact-care-homes/documents/open-care-care-home-managers-feedback-implementation-survey-findings/open-care-care-home-managers-feedback-implementation-survey-findings/govscot%3Adocument/open-care-care-home-managers-feedback-implementation-survey-findings.pdf
- 283. Scottish Government. Coronavirus (COVID-19) initial health and social care response: lessons identified.

 Available from: https://www.gov.scot/publications/lessons-identified-initial-health-social-care-response-covid-19-scotland/documents/

Transcribed into Etext by A2i Transcription Services Unit 4 Montpelier Central, Station Road, Bristol BS6 5EE 01179 44 00 44 info@a2i.co.uk www.a2i.co.uk

We welcome feedback so please get in touch with your comments! Ref number: 35193