Introduction

On March 11th, 2020, the World Health Organization (WHO) announced that SARS-CoV-2 can be characterised as a pandemic (WHO, 2020a), defined as “an epidemic occurring worldwide, or over a very wide area crossing international boundaries and usually affecting a large number of people” (Kelly, 2011). The Chinese city of Wuhan presented the first epicentre. The SARS-CoV-2 type of coronavirus can cause a disease called COVID-19, which in turn can lead to viral pneumonia with severe and even lethal outcomes for infected people, including multiple organ failure. In comparison to other coronaviruses, this new virus is thought to be transmittable even by asymptomatic individuals or before an infected person shows any symptoms. Public health experts have argued that this pattern of transmissibility makes it particularly difficult to manage (Yu & Yang, 2020). However, due to the novelty of the virus there is still much to be learned about its symptomology.

To date (mid-August 2020), around 759,358 people are reported to have died worldwide (European Centre for Disease Prevention and Control, 2020) from COVID-19, with the probability of the actual number being substantially higher than recorded deaths. Early medical reports

RESEARCH

International Policy Responses and Early Management of Threats Posed by the SARS-CoV-2 Pandemic to Social Care

Caroline Emmer De Albuquerque Green*, Jill Manthorpe*, Nicole Steils*, Martin Stevens*, Stephen Martineau*, John Woolham*, Katharine Orellana*, Caroline Norrie*, Amelia Ionescu*, Esther Wiskerke†, Kritika Samsi†, Stephanie Bramley†, Michelle Cornes†, Anne Marie Rafferty†, Ivanka Ezhova‡ and Ann Leahy§

Context: People with prior health conditions are susceptible to severe and sometimes fatal outcomes of the novel coronavirus SARS-CoV-2, that causes the disease COVID-19. The protection of the capacity of systems for social care was thus an important consideration for governments in the early stages of the global pandemic.

Objectives: This paper reports and discusses the results of a rapid review of international early policy responses for the protection of social care systems after the World Health Organization (WHO) announced that SARS-CoV-2 had evolved into a pandemic. Literature was collected in March 2020.

Method: Rapid online review of government responses to the SARS-CoV-2 pandemic using official government statements and press reports from 13 countries.

Findings: The analysis of early responses in and about social care to the pandemic suggested an initial focus on avoiding the outbreak of the virus in care homes, with first steps being to limit visitors in these contexts and considering ways to isolate residents with symptoms or a confirmed infection. Responses to protect people receiving social care in their homes and schemes to support informal or family carers were less prominent.

Limitations: Only publications in the public domain and in local languages of the 13 countries were considered for this analysis. It is possible that further strategies and responses were not made available to the public and are therefore not included, which limits this article’s scope for analysis.

Implications: The findings of this article can support reflection on the trajectory of policy responses to the threats that SARS-CoV-2 poses to social care. They can thereby potentially inform planning and policy responses for enhanced pandemic preparedness and stronger social care systems in the future.

Keywords: COVID-19; social care; international responses
Industrialised nations around the world provide services to people who require support with activities of daily living, many of whom are likely to have underlying health conditions and comorbidities. In the United Kingdom (UK) these services are currently referred to as social care. Adult social care covers social work, personal care and practical support for adults with a physical disability, a learning disability, or physical or mental illness, as well as support for their carers’ (National Audit Office, 2018, p. 4). Settings where social care is provided include people’s own homes (home care), with paid care workers visiting to attend to individuals’ needs for care and support or staying on the premises around the clock. Many people requiring social care live in care or nursing or residential establishments to which people have moved to receive round-the-clock care and support (care homes). People may also be supported and cared for in retirement communities (at times referred to as retirement villages) and extra care facilities in which older people own or rent accommodation and receive care at home from contracted agencies or the facilities’ on-site services. Social care may also be provided in the community, for example, in day care centres. Besides formal social care, individuals in need of support frequently rely on unpaid/informal carers or caregivers, such as family and friends, to support them.

There are several factors in social care provision that increase the risk of a SARS-CoV-2 outbreak at home or in care facilities. Firstly, social care includes a large variety of tasks, such as help with intimate care, dressing and eating, that involve close physical contact between care worker(s) and the care recipient, favouring the transmission of SARS-CoV-2 from infected individuals. Secondly, in residential settings, people live together in a community, with visitors, volunteers and staff usually entering and leaving the premises constantly. This also creates an increased risk of infectious disease being imported into the setting and transmitted to residents. This also applies to social care at home where care workers - often different workers - enter and leave, sometimes several times a day, frequently visiting multiple different individuals. Thirdly, it is mostly older people with comorbidities, including dementia and people with lifelong or long-term disabilities or conditions, who receive social care and are thus more at risk of experiencing severe or lethal outcomes from COVID-19.

In mid-June 2020, it was estimated (Comas-Herrera et al., 2020a) that nearly half of all European COVID-19 deaths had occurred in care homes, with frequent reports at times of entire care home communities affected and many deaths in several countries (e.g. UK, Spain, Italy, Germany) and in other parts of the world such as the United States (US).

The threat of SARS-CoV-2 to the health and life of people with care and support needs was known early in the pandemic (Zhang, 2020). To avoid a large number of infections and deaths in populations receiving social care, a particular focus needed to be on people receiving social care as well as locations of social care when planning responses and management strategies.

This article reports the findings of a rapid review of policies and regulations from 13 countries conducted one week after the WHO declared SARS-CoV-2 a pandemic. It seeks to highlight countries’ initial responses to the threat posed by SARS-CoV-2 to people receiving social care in these early days.

**Methods**

The data collection for this rapid review was undertaken at the request of the Department of Health and Social Care (England) in the third week of March 2020 with the following underlying research question: What policies and/or regulations have been announced and/or put in place for the support and protection of people requiring social care in care homes or in their own homes in the case of a national SARS-CoV-2 epidemic? Further sub-questions led data collection by the research team to produce country profiles. The 13 countries reviewed were the following: United States of America (US), Denmark, France, Republic of Ireland, Germany, New Zealand, Switzerland, Greece, Austria, Spain, Romania, Finland and The Netherlands. These countries were selected for local connections or expertise and knowledge of the language by any one of the co-authoring team.

The main data sources for this review were official government websites, and national and local press reports on national and local government announcements regarding social care, care homes, home care or people receiving social care published between the SARS-CoV-2 outbreak being reported to WHO on 31 December 2019 and 23 March 2020. Data scrutinised included policy papers, regulations and laws that were put in place specifically to deal with a national SARS-CoV-2 epidemic and as a response to the pandemic. Data was collected using common search engines (e.g. Google, Yahoo, Bing), national regulatory databases, and by consulting national experts in social care policy, who either directly contributed to data collection under this review or pointed researchers to relevant sources and documents.

Thematic analysis was used to code the country specific data and identify themes. For this purpose, the qualitative coding software NVIVO was used. The coding framework was both deductive, using the sub-questions that had led data collection as well as inductive if new themes emerged from within the data. Some themes were more prominent...
in the data (i.e. several countries had put in place similar responses) than others and this will be reported in the findings section below. It was not the purpose of the review to evaluate or rank countries’ early responses against each other. However, the findings and discussion sections highlight individual country responses if they substantially differed from others.

This review has several limitations. It only includes data that was publicly available. Thus, it is possible and likely that it missed strategies that were not yet published. The method for data collection resulted in a non-exhaustive review of data. As such, it is possible that some relevant publicly available sources were not included. Furthermore, many of the countries operate federal systems, including the US and Germany. Within such federal states, responses often differed and not all of the states within these countries were reviewed. Rather, individual states in federal systems (e.g. Bavaria in Germany or Washington State in the US) were chosen for prominence of data. Of course, social care systems differ in each of the 13 countries, with some of them, for example, relying more heavily on family care than others (e.g. in Greece and Romania). We also acknowledge that each of these countries will have been at different phases in their response to the pandemic, with some of them already having more known infections than others. These differences were not specifically considered for this review, which is another limitation. Some sources, notably the initial guidance published by the government of New Zealand, are no longer available online with the situation changing rapidly and documents being updated, revised, or replaced frequently. The research is limited to the content of guidance materials or data. It does not engage with the implementation of this guidance.

More generally, some countries, like New Zealand, feature more prominently than others in this review’s findings section because more data was identified about them compared to others. There may be several reasons for this, which may be linked to the speed of which countries responded to the pandemic or the amount and accessibility of published data. Another reason may be the review’s method of data collection. As such, further research would be necessary to answer any questions regarding the quality and sufficiency of the speed of early responses across nations.

Findings
This section reports the review’s findings with exemplary references to particular countries. From the analysis of data, several common themes emerged across many nations with a focus on avoiding the transmission and spread of the virus in care homes for older people, but there was less on home care services, including in retirement villages, extra care facilities, and family provided care. The following sections outline the common themes.

Limiting or prohibiting visitors in care homes
Firstly, early responses included several degrees of limiting visitors to care homes, such as family members of residents and others not working in the home. Such policies were considered or adopted expressly by 11 out of the 13 countries, but nothing was found in this regard for Greece. Many governments, whilst considering the limitation of visitors to care homes as important, were initially hesitant to introduce blanket rules prohibiting all visits. Some US states, including Washington State, moved from regulations restricting visitors to prohibiting them inside long-term care facilities within a few days in mid-March (O’Sullivan, 2020; Washington Governor, 2020 a/b; New York State Department of Health, 2020; American Health Care Association, 2020). In New Zealand, government advice was for staff and visitors, “to stay away from aged care facilities” if they felt ill, and to be symptom free from any flu and cold for 48 hours before visiting (Ministry of Health New Zealand, 2020). However, it was reported that the managers of some care homes in New Zealand decided themselves to prohibit visits altogether (Gibson, 2020). The federal government of Germany guided care homes to ban all non-essential visits (Altenheim, 2020), whereas federal states such as Bavaria issued their own rules. In Bavaria, visits were restricted to one visitor for every resident per day and the prohibition of visits by children aged 16 or under, and those individuals experiencing a cough until 13 March 2020, after which all visitors to care homes were banned (Bayerisches Staatsministerium für Gesundheit und Pflege, 2020). Under its Emergency Powers Act, the Finnish government used its emergency powers to ban visitors from care institutions, health care units and hospitals, with some family exceptions on a case-by-case basis (Ammattiliitto Pro, 2020).

Ireland and the Netherlands were also among the countries that ruled out all visits to care homes on 6 March 2020 and 19 March 2020 respectively apart from visits to people receiving palliative care (Nursing Homes Ireland, 2020; Kruse et al., 2020). In Ireland this took place despite the Public Health Emergency Team not considering this measure to be necessary at the time (Pierce, 2020). Austria initially limited visits to one person and of one hour per day, but changed this policy in mid-March into a blanket prohibition of all visits except for visiting a dying relative (Madner, 2020), as did Switzerland, France and Denmark (Eidgenössisches Departement des Innern & Bundesamt für Gesundheit, 2020a; Ministère des Solidarités et de la Santé, 2020; National Board of Health, 2020). Though there were no official government policies in Romania, a quick review of public facing websites of Romanian private care homes showed that some had still adopted no visitor policies.

Some of the national discussions surrounding the prohibition of visitors to care homes included ethical considerations, for example in Switzerland (Schnyder, 2020). These debated the potentially damaging effects of social isolation on the mental health and rights of people living in care homes. In the Netherlands several early national initiatives proposed and produced systems to keep care home residents in touch with families, friends and other people, through for example, online platforms (Ministry of Health, Welfare and Sport The Netherlands, 2020). France announced plans to set up “group therapy
However, this order only came into force in early April.

Isolating residents with symptoms in the care home and reporting confirmed cases to authorities

Some governments quickly issued guidance or rules on how to isolate care home residents who were showing symptoms of COVID-19. Responses, such as in Spain, Austria and Switzerland, usually advised the management of care homes to isolate symptomatic residents in single occupancy bedrooms with good ventilation and private bathrooms as far as possible (Madner, 2020; Peinado, 2020a, Eidgenössisches Departement des Innern & Bundesamt für Gesundheit, 2020). In Austria, affected residents could be kept from leaving their room to visit communal areas or from participating in communal activities in the care home (Madner, 2020). In Spain, residents with acute respiratory symptoms were to be discouraged from moving around the care home’s communal areas (Ministerio de Sanidad, 2020).

A few countries, such as New Zealand, Ireland and Spain, formulated rules regarding the reporting of confirmed cases of COVID-19 to authorities for national monitoring (Ministry of Health New Zealand, 2020; Health Protection Surveillance Centre, 2020; Ministerio de Sanidad, 2020). Switzerland required care homes to also report suspected cases in addition to confirmed ones (Eidgenössisches Departement des Innern & Bundesamt für Gesundheit, 2020c).

Hygiene rules and infection control in care homes

Some governments issued statements or guidance regarding hygiene rules and the use of personal protective equipment (PPE) such as face masks, gloves and face shields, to be followed in care homes by all staff, residents and visitors. Hand hygiene was frequently flagged by many of the governments as essential to avoid the virus being introduced or spread in the home. France put in place a policy by which all staff were required to wear surgical masks and residents asked to eat in their bedrooms to help contain any potential spread of the virus (Ministère des Solidarités et de la Santé, 2020). New Zealand advised all care staff to wear full protective equipment when caring for a resident with COVID-19 symptoms (Ministry of Health New Zealand, 2020). However, this did not apply to non-care staff, such as receptionists. In Spain, all residents with acute respiratory infections were advised to wear face-masks when being attended to by care staff (Ministerio de Sanidad, 2020).

Romania ordered care workers to preventatively isolate for 14 days either at their workplace or at “specially dedicated areas to which people from the outside do not have access” (Ministry of Home Affairs Romania, 2020, Art 9) as well as a cyclical period of 14 days of preventative self-isolation at home. Care staff were to be organised in shifts in order to make the periods of preventative self-isolation possible (Ministry of Home Affairs Romania, 2020, Art 9). However, this order only came in force in early April.

Managing workforce absences in care homes

The management of workforce absences in care homes was addressed by a few countries with the introduction of contingency plans, notably in Germany, Austria and France. Germany issued a statement by which staff-resident ratios were to be relaxed for the duration of the pandemic (Ministerium für Gesundheit und Pflege, 2020). Furthermore, in the case of acute staff shortages in any given care home, providers could be allocated care staff from other facilities outside their own organisation. In Ireland too there was a recognition that healthcare workers were likely to be urgently needed, and a national call to encourage more healthcare workers into the system (Nursing Homes Ireland, 2020b) received nearly 40,000 expressions of interest according to a local newspaper (Carswell, McGee and Wall, 2020). Nursing Homes Ireland, the umbrella body for private nursing homes in Ireland, launched a recruitment drive targeting people who may have lost their jobs in other sectors at the outset of the pandemic (Nursing Homes Ireland, 2020c). In Austria, providers were encouraged to work together to register demand for care staff in care homes and to share staff. Young Austrian men, who had undertaken or were currently undertaking one year of community service in care facilities, were asked to volunteer or remain in their posts to address staff shortages (Jankowski, 2020). In the US, some states issued executive orders to amend childcare service regulations to enable care staff with children to work longer hours while nurseries and schools were shut (Washington Governor, 2020c; Executive Department State of California, 2020).

Hospital admission and discharge

Rules regarding hospital admission of care home residents suffering from COVID-19 were a further topic considered in some countries, with similar responses. As such, in the Netherlands and New Zealand care providers were advised that care home residents with COVID-19 symptoms or confirmed infection should be cared for in the care home unless hospitalisation was medically indicated (Ministry of Health, Welfare and Sport The Netherlands 2020; Ministry of Health New Zealand, 2020). Regulations regarding the discharge of care home residents from hospitals back to their care home were not covered in this rapid review.

Home care

Ensuring continuity of care at home and providing additional support during day centre closure periods

Home care provision did not seem to be the priority of many countries in the early stages of managing the pandemic. However, some nations such as New Zealand issued some early responses to manage and ensure continuity of care at home for people with suspected or confirmed SARS-CoV-2 infections. In two guidance documents for home care staff (Ministry of Health New Zealand, 2020), New Zealand set out a comprehensive strategy to provide home care safely (referred to as community management of patients). Steps in the strategy included, for example, determining whether a patient should be cared for in hospital or in the community with a pathway should
the patient’s condition worsen; to ensure that adequate support would be available to care workers and patients including protective equipment; and to minimise the number of close contacts (Ministry of Health New Zealand, 2020). Furthermore, New Zealand drew up a plan to ensure extended paid leave for care staff should they fall ill with the virus. Austria asked families to step in more, in case of staff shortages (Madner, 2020).

A number of Spanish regional councils put in place support for social care users living in the community following widespread workforce challenges in care homes and temporary closure of day centres affected by the two-week State of Emergency period announced on the 14th of March (Ministerio de la Presidencia, 2020). Some regional councils closed their day centres prior to the State of Emergency; over 200 older people’s centres in Madrid were shut as a result (Peinado, 2020b).

On March the 17th, the Spanish Government announced an extraordinary funding package which aimed to address the economic and social impact of SARS-CoV-2 – and the State of Emergency restrictions - by supporting the delivery of services in care homes (including meeting additional workforce requirements) and enabling additional home-based care and support and/or telephone support to be put in place for vulnerable people in the absence of day centres and other services (Ministerio de la Presidencia, 2020). Several regional councils had put in place support for day centre users while their centres were closed, for example distribution of free food, home care, laundry and medication support and telephone calls both for social purposes and to identify any needs (Junta de Andalucía, 2020; Carranco, 2020).

**Avoiding infections in home care**

Some other countries set out a few concrete steps in the management of home care services during the crisis with a view to avoid cross-infections between homes. Germany, for example, stopped all home assessment visits for social care needs in order to limit physical interaction (Ministerium für Gesundheit und Pflege, 2020). In the Netherlands, the National Institute for Public Health and the Environment (2020) gave some advice to home care staff about protecting themselves from infection when entering a home.

**Discussion**

This rapid review of early responses in social care for the management of the SARS-CoV-2 pandemic highlights the focus on care homes as locations of people at risk from the severe outcomes of the virus. Some governments addressed some points early on, which later in the pandemic proved to be particularly difficult to manage or handle. This includes the question on hospital admissions and discharge or the prohibition of visitors to care homes (Comas-Herrera, Ashcroft & Lorenz-Dant, 2020b). Perhaps unsurprisingly, at the early stage of the pandemic, many countries thought of strategies that might reduce the risk of the virus being introduced into care homes. However, there seemed to be a reluctance by Governments to announce blanket prohibitions of visitors in the first instance, with some care homes themselves putting such restrictions in place without these being required to do so. Nearly three months after the pandemic was declared, the large number of deaths from COVID-19 among care home residents in many of the countries examined in this rapid review seems to suggest that such prohibitions needed additional measures to help keep the introduction of viruses into care homes at bay. However, ethical considerations regarding limiting social contacts of care home residents with families and friends seem to have been relevant, with data increasingly suggesting a negative impact of a decrease of socialising on the mental health and well-being of care home residents, especially those affected by dementia (Alzheimer’s Europe, 2020; Hill, 2020).

Reports from some other countries not part of this review, like Singapore, indicate further risks of isolation such as increased rates of falls and the use of restraints in care homes (Tan and Seetharaman, 2020). Further research is needed here on the balance between risk and harm.

Socially isolating people with suspected or confirmed SARS-CoV-2 COVID-19 infections inside care homes was a key consideration in many countries at the beginning of the pandemic. But emerging evidence suggests that merely isolating individual residents was not enough to halt the spread of the virus in a particular care home. The lack of wide testing to identify asymptomatic cases, availability of protective equipment for staff and the movement of care staff between homes were some of the problems that have emerged as limiting the effectiveness of strategies around isolation of residents and preventing the spread of the virus (Diamantis et al., 2020; Arons, 2020). Indeed, access to testing for acute SARS-CoV-2 infections for care home residents and staff has emerged as a key strategy to manage virus outbreaks in care homes and protect staffing levels (Kruse et al., 2020).

Furthermore, policies around the admission and discharge of COVID-19 patients into and from hospitals back into their care homes turned out to be a crucial point in discussions around measures necessary to control the virus in these establishments. In some countries, such as England it has been argued that rapid hospital discharge of COVID-19 patients together with lack of PPE and testing was responsible for a significant amount of new cases in care homes (ADASS, 2020).

Many countries experienced severe staff shortages across care settings, for example Ireland (Pierce, Keogh & O’Shea, 2020). These were often linked not so much to staff being infected by the virus, but with wider government policies, for example relating to the availability of childcare for care workers (ibid.). This highlights the interdependence of social care and whole government approaches to the pandemic, which may at first not have been as evident, including the need to put in place further plans for staff absences early on and to consider the well-being of social care staff.

The data further suggested limited engagement of policy makers with the paid home care sector and informal/unpaid or family reliant support systems. Little seemed
to be known about how many people receiving care at home have experienced SARS-CoV-2 infections, whereas infection rates among care home residents were recorded in some countries such as Switzerland (Eidgenössisches Departement des Innern & Bundesamt für Gesundheit, 2020b). However, the tendency to overlook the risks to the those involved in care at home early in the pandemic may have created more difficulties later (Leiblfinger et al., 2020). For example, some countries that relied heavily on internationally recruited care staff, such as Austria, are reported to have suffered from the closure of borders. These border closures reportedly placed a greater burden on remaining or existing care workers, care users at home and families and friends of both groups (Schmidt et al., 2020; Leiblfinger et al., 2020; Leischensring et al., 2020).

We found no data regarding the closure of community-based support services, such as day services, in most of the reviewed countries at the time other than in Spain. However, in countries such as the UK, many services for people with social care needs shut after a nationwide lock-down came into force on the 23rd of March 2020. The consequences of this for people with social care needs and their families remain unknown, with national studies forthcoming.

Conclusion
This rapid review of the early responses of 13 countries to the SARS-CoV-2 pandemic suggests that many governments recognised the potential vulnerability of parts of the social care system and the people supported. The data suggest an initial focus on care homes rather than paid home care and unpaid/family care, yet with limited concrete plans beyond curtailing visitors’ and residents’ rights and initiating self-isolation of residents. Many of the topics identified in the early stages, such as hospitalisation and hospital discharge of care home residents or staff shortages across all social care settings, later turned out to be of acute importance and difficult to manage (Schmidt et al., 2020).

The nature of the pandemic, and its consequences for social care and nations as a whole, evolved very rapidly, with many early assumptions unravelling very quickly in the days, weeks and months following this review. High numbers of care home deaths globally and in the UK have been identified and policies have come under criticism as a result. This review’s findings suggest that proper assessment of how Governments responded to the pandemic, and the consequences of this on social care in various countries would be valuable in enhancing preparedness for possible future waves of the same or other diseases as well as a point of learning and reflection on potential weaknesses and strengths of social care systems, which have emerged as a result of the SARS-CoV-2 pandemic.

Acknowledgements
We are grateful to Professor Henk Nies (Director of Strategy & Development, Vilans, Utrecht; Professor of Organisation and Policy in Long-term Care, Vrije University, Amsterdam) for advice and input and others who advised on the topic.

Funding Information
Caroline Green, Jill Manthorpe, Kritika Samsi and Katharine Orellana are funded by the National Institute for Health Research (NIHR) Applied Research Collaboration South London (NIHR ARC South London) at King’s College Hospital NHS Foundation Trust. Nicole Steils, Martin Stevens, Stephen Martineau, John Woolham, Caroline Norrie, Amelia Ionescu, Stephanie Bramley, Jill Manthorpe, Kritika Samsi, Michelle Cornes, Anne Marie Rafferty & Ian Kessler are funded by the NIHR Policy Research Programme (Policy Research Unit in Health and Social Care Workforce (Ref. PR-PHU-1217-21002)). The views expressed in this publication are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

Competing Interests
The authors have no competing interests to declare.

References


Arons, MM, Hatfield, KM, Reddy, SC, Kimball, A, James, A, Jacobs, JR, Taylor, J, Spicer, K, Bardossy, AC, Oakley, LP, Tanwar, S, Dyal, JW,


Eidgenössisches Departement des Innern & Bundesamt für Gesundheit. 2020b. Neues Coronavirus (COVID-19) Verdachts-, Beprobungs- und Meldekriterien/New Coronavirus (COVID-19) Suspicion, sampling and reporting criteria. Berne: Eidgenössisches Departement des Innern & Bundesamt für Gesundheit. Available at: https://www.bag.admin.ch/bag/de/home/krankheiten/infectiönskrankheiten/kaempfen/meldesysteme-infektionskrankheiten/meldepflichtige-ik/meldeformulare/_jcr_content/par/externcontent.external.exturl.pdf/aHR0cHM6Ly9tZWxkZXN5c3RlbWUuYmFnc3RlbWUuaHR0cHM6Ly9tZWxkZXN5c3RlbWUuYmFnc3RlbWUuaHR0cHM6Ly9tZWxkZXN5c3RlbWUuYmFnc3RlbWUucGxhY2VzcGFjZS5nYz8vZmFjdGlvbk1lZGlhXzI1Q2xlc3Npbmdic2VydmljZS5qcGc=/Q09WSURFZC5wZGY=--.pdf (Accessed: 14 August 2020).


Kelly, H. n.d. WHO/The classical definition of a pandemic is not elusive. WHO. Available at: https://www.who.int/bulletin/volumes/89/7-1108815/en/#:~:text=A%20pandemic%20is%20defined%20as (Accessed: 14 June 2020).


Nursing Homes Ireland. 2020b. Be on call for Ireland. HSE.ie. Available at: https://www.hse.ie/eng/


