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Weekly Care Homes Evidence Digest

Prevention and control of COVID-19 in home care/care homes settings
25th June 2020

Summary

This weekly digest contains a selection of evidence published in the last 7 days, in relation to the prevention and control of COVID-19 in home care/care home settings. We search a number of Covid-19 review repositories, an existing PHE Covid-19 evidence digest, Ovid Medline and Embase, Social Care Online, medRxiv (pre-print server) and various websites. We select peer reviewed and non-peer reviewed publications (pre-prints), as well as systematic reviews, guidance and evidence summaries.

The digest is produced by PHE [Knowledge and Library Services](#) (KLS), in conjunction with a small editorial team.

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Peer-reviewed

Publication date	Title / URL	Journal / Article type	Digest
17.06.20	Cardiac Rehabilitation During COVID-19 Pandemic: Highlighting the Value of Home-Based Programs	Telemedicine and e-Health / Article	<ul style="list-style-type: none"> • During the coronavirus 2019 (COVID-19) pandemic, an even greater gap in Cardiac Rehabilitation care has been present due to decreased availability of on-site services. • The COVID-19 pandemic presents a time to highlight the value and experiences of home-based models as clinicians search for ways to continue to provide care. Continued review and standardization of HBCR models are essential to provide care for a wider range of patients and circumstances.
17.06.20	Caring for Frail Older Adults During COVID-19: integrating public health ethics into clinical practice	Journal of the American Geriatrics Society / Article	<ul style="list-style-type: none"> • This paper explores the COVID-19 Ethical Decision Making Framework to familiarize clinicians and policy makers with how ethical principles can guide systems change, in the service of frail older adults • In British Columbia, the health care system launched resources to support clinicians in proactive advance care planning discussions, and is providing enhanced supportive and palliative care options to residents of long term care facilities. • If the pandemic truly overwhelms the healthcare system, frailty, but not age alone, provides a fair and evidence-based means of triaging patients for critical care and could be included into ventilator allocation frameworks.
17.06.20	COVID-19 epidemic: Regional organization centered on nursing homes	Journal of the American Geriatrics Society / Letter	<ul style="list-style-type: none"> • Authors consider the effect of COVID-19 on nursing homes in Brittany, western France and the need for improved collaboration among healthcare organisations, regardless of status. • They reported that nursing homes felt hard pressed to implement recommended protection measures, especially for residents with challenging behaviour. Early banning of

			<p>family visits and shortage of personal protective equipment added to their burden.</p> <ul style="list-style-type: none"> • Authors outline the support given to nursing homes such as access to medical expertise, the organized collection of nasopharyngeal swabs, and access to coordinated human and logistical support. This support was deployed on the initiative of the Rennes University Hospital Geriatrics Department.
17.06.20	COVID-19 highlights the need for universal adoption of standards of medical care for physicians in nursing homes in Europe	European Geriatric Medicine / Article	<ul style="list-style-type: none"> • Authors discuss the requirement for an update to previously published (by the European Geriatric Medicine Society in 2015) medical standards of care in response to the Covid-19 pandemic. • The standards consisted of seven core principles of medical care for physicians working in nursing homes as a first step in developing a programme of clinical, academic and policy engagement in improving medical care for older people who are living and frequently also dying as residents in nursing homes.
17.06.20	Covid-19: Woman whose father died in care home launches legal review over government's "litany of failures"	BMJ / Article	<ul style="list-style-type: none"> • A woman whose father died in a care home has launched a judicial review case in the High Court over the government's "litany of failures" in protecting the vulnerable elderly residents who were most at risk from covid-19.
17.06.20	Dementia care and COVID-19 pandemic: a necessary digital revolution	Neurological Sciences / Article	<ul style="list-style-type: none"> • Authors suggest different telemedicine and digital technology approaches that can be easily used to keep on providing acceptable standards of care during this pandemic. • Technological devices such as videoconference or smartphone apps might be used for follow-up visits and support to patients and caregivers and to acquire digital markers of clinical progression.
17.06.20	Home-visit medical care for COVID-19 patients	Acute Medicine & Surgery / Letter	<ul style="list-style-type: none"> • Authors started a home-visit medical care for COVID-19 patients from April 2020. The home-visit medical care team is composed of a doctor and several staff members of the

			<p>regional public health-care centre. A staff member calls each patient daily; based on the patient’s condition, the home-visit medical care team prioritizes the most serious patients for early visit and arranges the visiting order for the day accordingly.</p> <ul style="list-style-type: none"> • Authors conclude that home-visit medical care is an effective strategy to avoid the collapse of the regional healthcare system and to maintain the health of the residents with limited resources, in COVID-19 hotspots.
17.06.20	Long-Term Care Facilities and the COVID-19 Pandemic: Lessons Learned in Madrid	Journal of the American Geriatrics Society / Letter	<ul style="list-style-type: none"> • Authors stated that the high fatality rate among older adults living in LTCF in Madrid during the COVID-19 pandemic showed strengths such as being aware of the geographical distribution of all LTCF and keeping in close contact between hospitals and LTCF in a consolidated continuing healthcare program lead by a hospital-based geriatrician. • Authors stated that they failed to do was not to reallocate resources earlier, as they focused first in acute care in tertiary hospitals, and not to test as much patients as possible to implement better successful isolation measures
18.06.20	Asymptomatic SARS-CoV-2 infection and COVID-19 mortality during an outbreak investigation in a skilled nursing facility	Clinical Infectious Diseases / Article	<ul style="list-style-type: none"> • Authors investigated the first known outbreak of SARS-CoV-2 at a skilled nursing facility (SNF) in Illinois on March 15, 2020 and followed residents for 30 days. • Of 126 residents tested, 33 had confirmed SARS-CoV-2 on March 15. Nineteen (58%) had symptoms at the time of testing, 1 (3%) developed symptoms over follow-up, and 13 (39%) remained asymptomatic. Thirty-five residents who tested negative on March 15 developed symptoms over follow-up; of these, 3 were re-tested and 2 were positive. The 30-day probability of death among cases was 29%.
18.06.20	Bringing radiology to patient’s home using mobile equipment: A weapon to fight COVID-19 pandemic	Clinical Imaging / Article	<ul style="list-style-type: none"> • Authors discuss the use of mobile x-ray equipment. • Authors conclude mobile x-ray at patient's house or nursing home could represent a safe approach reducing social contacts during pandemic, reduce the risk of infected subjects referring to family doctors’ office or emergency

			departments and can reduce general practitioner visit, nurse performing swab and transportation to the hospital costs.
18.06.20	COVID-19 infections and deaths among Connecticut nursing home residents: facility correlates	Journal of the American Geriatrics Society / Article	<ul style="list-style-type: none"> • Study to determine the associations of nursing home registered nurse (RN) staffing, overall quality of care, and concentration of Medicaid or racial and ethnic minority residents with COVID-19 confirmed cases and deaths by April 16, 2020 among Connecticut nursing home residents. • The average number of confirmed cases was 8 per nursing home (zero in 107 facilities), and the average number of confirmed deaths was 1.7 per nursing home (zero in 131 facilities). Among facilities with at least 1 confirmed case, every 20 minutes (per resident day) increase in RN staffing was associated with 22% fewer confirmed cases; compared to 1- to 3-star facilities, 4- or 5-star facilities had 13% fewer confirmed cases and facilities with high concentration of Medicaid residents or racial/ethnic minority residents had 16% and 15% more confirmed cases, respectively, than their counterparts. • Nursing homes with higher RN staffing and quality ratings have the potential to better control the spread of the novel coronavirus and reduce deaths. Nursing homes caring predominantly for Medicaid or racial and ethnic minority residents tend to have more confirmed cases.
18.06.20	Case study: WhatsApp support through the COVID-19 pandemic	Nursing and Residential Care / Case Study	<ul style="list-style-type: none"> • As care homes seek innovative ways to support their residents through the lockdown, one care home group has turned to WhatsApp to connect and inspire its staff. Author reports on the establishment of the group and how the sharing of ideas has benefited both residents and staff
18.06.20	David Oliver: Let's be open and honest about covid-19 deaths in care homes	BMJ / Editorial	<ul style="list-style-type: none"> • The author believes that some of the now clearly mistaken decisions in local services about care homes were made in good faith, in novel and urgent contexts—and many European countries have experienced similar care home death rates from covid-19.

18.06.20	Does the Coronavirus (COVID-19) Pandemic Call for a New Model of Older People Care?	Frontiers in Public Health / Article	<ul style="list-style-type: none"> • Discussion article considering the weakness of Italy's residential older people care system. • Authors also consider interventions at the community care level through the development of formal and informal support networks.
18.06.20	Establishment of a COVID-19 Recovery Unit in a Veteran Affairs (VA) Post-Acute Facility	Journal of the American Geriatrics Society / Article	<ul style="list-style-type: none"> • Authors report on a novel approach of utilizing long-term care beds at a Department of Veterans Affairs healthcare facility for managing recovering COVID-19 patients. • They conclude that preventive interventions such as better and more frequent monitoring of residents, improved infection control, vaccinations, early identification of infected residents, and developing different models of care such as the CRU, will play significant roles in reducing the morbidity and mortality that devastates this precious population, as well as decrease the need for acute hospital beds.
18.06.20	How to ... develop an in-house COVID-19 training programme for care home staff	Nursing and Residential Care / Article	<ul style="list-style-type: none"> • Author provides some ideas for developing in-house staff training for staff during lockdown, when external trainers are not permitted, in order to effectively care for and support older people through the pandemic
20.06.20	Mental health perspectives of COVID-19 and the emerging role of digital mental health and telepsychiatry	Archives of Medicine and health Sciences / Article	<ul style="list-style-type: none"> • This review paper looks at the role of psychiatry and psychiatrists and the mental health challenges faced by us during this pandemic. The role of mental health interventions, the issues faced and the emerging role of telepsychiatry with its ethical and clinical dilemmas are discussed. • The review is based on data available till now and further reviews shall be needed as the pandemic progresses and data-based research papers shall start coming in. • There is a huge role of psychiatry, psychiatrists and mental health professionals during this pandemic and there is a need for developing mental health interventions that are needed for psychiatric patients to help them tide over the pandemic. Telepsychiatry has come into vogue and we must

			exploit the benefits and utility of telepsychiatry to the fullest at this point of time.
21.06.20	A telemedicine system for the monitoring of progressive COVID-19 patients and management of home-quarantined cohorts: Evidence from China	Journal of Medical Internet Research / Article	<ul style="list-style-type: none"> • A telemedicine system was developed to continuously monitor the progression of home quarantined COVID-19 patients. The system was built on a popular social media smartphone app called WeChat, which established two-way communication between a Multi-Disciplinary Team (MDT) consisting of seven medical workers and 188 home-quarantined individuals (including 74 confirmed COVID-19 patients). • By continuously monitoring the changes of several key symptoms, the telemedicine system reduces the risks of delayed hospitalization for COVID-19 patients quarantined at home due to disease progression. The system uses a set of scales of quarantine management assessment for patients to self-assess their conditions. The results are useful for medical staff to identify disease progression, and hence, make appropriate and timely treatment decisions.
20.06.20	COVID-19 and the elderly: insights into pathogenesis and clinical decision-making	Aging Clinical & Experimental Research / Article	<ul style="list-style-type: none"> • A literature review that examines the pathogenesis and clinical implications of ageing in COVID-19 patients. Also discusses management in the long-stay residential care homes and aspects of end-of-life care for elderly patients with COVID-19. • Authors conclude that elderly patients are particularly susceptible to adverse clinical outcomes in SARS Cov-2 infection and assessment and treatment is challenging. Long-stay residential care homes and hospitals need to urgently design adequate health care plans for elderly patients.
23.06.2020	Asymptomatic SARS-CoV-2 Infection in Nursing Homes, Barcelona, Spain, April 2020	Emerging Infectious Diseases / Research Letter	<ul style="list-style-type: none"> • From April 10–24, 2020, a total of 5,869 persons were screened for SARS-CoV-2 at nursing homes. • Among residents, 768 (23.9%) tested positive; among staff, 403 (15.2%).

			<ul style="list-style-type: none"> • Of those testing positive, 69.7% of residents and 55.8% of staff were asymptomatic.
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Preprints (non-peer reviewed)

Publication date	Title / URL	Journal / Article type	Digest
17.06.20	National Early Warning Scores (NEWS / NEWS2) and COVID-19 deaths in care homes: a longitudinal ecological study	MedRxiv / Article	<ul style="list-style-type: none"> • Longitudinal ecological study to investigate whether patterns of National Early Warning Scores (NEWS/NEWS2) in care homes during the COVID pandemic correspond with area-level COVID-19 death registrations from care homes. • 460 Care home units used the same software package to collect data on residents, from 46 local authority areas in England. • NEWS may make a useful contribution to disease surveillance in care homes during the COVID-19 pandemic. Oxygen saturation, respiratory rate and temperature could be prioritised as they appear to signal rise in mortality almost as well as total NEWS.
18.06.20	Introduction to and spread of COVID-19 in care homes in Norfolk, UK	MedRxiv / Article	<ul style="list-style-type: none"> • Authors undertook a secondary analysis of a dataset about 248 care homes in the county of Norfolk, eastern England. • Authors found that the counts of non-care workers had strongest relationships (and only link significant at $p < 0.05$) to any introduction of SARS-CoV-2 to the homes. After a home had at least one detected case, higher staff levels and more severe PPE shortages were most linked to higher case counts ($p < 0.05$) during the monitoring period. • Authors conclude that better managing aspects of staff interaction with residents and some working practices should help reduce ingress to and spread of COVID-19 within residential homes for the elderly.

23.06.20	<p>Association Between Nursing Home Crowding and COVID-19 Infection and Mortality in Ontario, Canada</p>	MedRxiv / Article	<ul style="list-style-type: none"> • Population-based retrospective cohort study of over 78,000 residents of 618 distinct nursing homes in Ontario, Canada. • COVID-19 infection was distributed unevenly across nursing homes: 4,496 (86%) of infections occurred in just 63 (10%) of homes. The crowding index ranged across homes from 1.3 (mainly single-occupancy rooms) to 4.0 (exclusively quadruple occupancy rooms); 308 (50%) homes had high crowding index (≥ 2). Incidence in high crowding index homes was 9.7%, versus 4.5% in low crowding index homes ($p < 0.001$), while COVID-19 mortality was 2.7%, versus 1.3%. • Simulations suggested that converting all 4-bed rooms to 2-bed rooms would have averted 988 (18.9%) infections of COVID-19 and 271 (18.7%) deaths.
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Guidance

Publication date	Title / URL	Author(s)	Digest
17.06.20	<p>CQC publishes data on deaths in care settings broken down by ethnicity</p>	Care Quality Commission	<ul style="list-style-type: none"> • A targeted piece of work to analyse the impact of coronavirus (COVID-19) on different ethnic groups in care settings. This data indicates a disproportionate number of deaths among people from BME groups. • While the vast majority of all reported deaths from adult social care settings were White people the proportion of deaths in all adult social care services due to confirmed or suspected COVID-19 was higher for Black (49%) and Asian (42%) people compared to White people (41%) and people from mixed or multiple ethnic groups (41%). • This difference increases when looking at care home settings only, where 54% of deaths amongst Black people and 49% of deaths amongst Asian people are related to

			COVID-19 compared to 44% of deaths of White people and 41% for mixed or multiple ethnic groups.
19.06.20	Coronavirus (COVID-19): reducing risk in adult social care	Department of Health and Social Care	<ul style="list-style-type: none"> The adult social care (ASC) risk reduction framework has been developed in response to requests from employers and concerns that workers who are potentially more vulnerable to infection or adverse outcomes from COVID-19, may not be adequately supported. The framework focuses specifically on how employers can support workers with factors which may make them more vulnerable to infection or adverse outcomes from COVID-19 to make decisions about their risks in the workplace.
Updated 19.06.20	Coronavirus (COVID-19): admission and care of people in care homes	Department of Health and Social Care, Care Quality Commission, Public Health England, and NHS England	<ul style="list-style-type: none"> This guidance is for care homes, local health protection teams, local authorities, clinical commissioning groups (CCGs) and registered providers of accommodation for people who need personal or nursing care. It sets out how to admit and care for residents safely and protect care home staff.
19.06.20	Visitors' protocol - CPA briefing for care providers	The Care Provider Alliance	<ul style="list-style-type: none"> This protocol has been produced following understandable calls from residents, friends and families, providers and staff to enable visiting to residential homes after a long and protracted period of 'lockdown', in line with changes within the wider community. It has been produced in response to this request from some very practical help. It is primarily aimed at care settings which cater for older people, including people with dementia, such as residential and nursing homes.

Evidence Summaries

Publication date	Title / URL	Author(s)	Digest
17.06.20	Strategies to Reduce the Impact of a Second Wave of COVID-19 in Long-Term Care Facilities	Newfoundland & Labrador Centre for Applied Health Research	<ul style="list-style-type: none"> • Long-term care facilities need integrated infection prevention and control programs to both identify and effectively respond to COVID-19 outbreaks. • Lessons learned from the first wave of COVID-19 must be implemented in operational practices and policies, including: better supports for residents, managing and supporting healthcare workers, and managing both visitation and facilities. • Only a few of the articles included in this review speak directly to reducing the impact of a second wave of COVID-19 on long-term care facilities.
24.06.20	What is the potential role of post-acute telerehabilitation for COVID-19 patients?	National Health Library & Knowledge Service (NHLKS)	<ul style="list-style-type: none"> • Telerehabilitation may be employed both in the acute phase of COVID-19 patient care and also in the post-acute phase. • A range of technological solutions have been put forward as facilitators of telerehabilitation including instructional videos, videoconferencing, live streaming and online guidance • The limitations of telerehabilitation are also discussed in the literature; these limitations include: availability of equipment; technical malfunctions; potential for inadvertent personal data disclosure; limited scope for physical examination; and the reliance on patients to be able to attend, communicate and interact