Editorial

Coronavirus-19 in Geriatrics and Long-Term Care: An Update

Joseph G. Ouslander, MD

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1111/jgs.16464.

We finished drafting an article on COVID-19 in Geriatrics and Long-Term Care just over a week ago that is now available on the Journal website (1). As we suggested, the fluidity and evolution of the COVID-19 pandemic related to long-term care facilities (LTCFs) has already made it outdated. This editorial provides some key updates and resources. Readers should continue to monitor the Centers for Disease Control and Prevention (CDC) and Centers for Medicare and Medicaid Services (CMS) websites, as well as the many organizational websites and journals that are posting and publishing up-to-date information. Many state licensing agencies and local and state governments also continue to publish additional directives for health care providers across the United States, especially in regard to the screening requirements for team members and visitors.

It has become clear that many LTCFs will care for patients/residents who have documented COVID-19 if they are not among those who have done so already. This is because many LTCF staff may be infected with no or minimal symptoms and spread the virus to other staff and patients/residents unknowingly. In addition, many caregivers and nurses work for more than one health care provider, increasing the possibility of the spread of COVID-19 between sites. Moreover, it appears based on early experience in the state of Washington, just over half of LTCF patients/residents who are COVID positive have no or atypical symptoms and are shedding enough virus to be infectious to others including staff, patients/residents and visitors (2). Until more rapid COVID testing is available that will enable us to test all patients and staff (3), cases of COVID-19 infection are likely to continue to increase in the LTCF setting.

To complicate matters, LTCFs will be asked to accept patients with possible or known COVID from hospitals if the local or state government has not required the suspension of admissions during the presence of active COVID-19 cases. The CDC offers interim guidance on a test/no test strategy for LTCFs to accept patients with known COVID-19 infection (4). Where testing is available this requires two negative tests 24-hours apart. For patients without known

COVID-19 infection, most LTCFs will understandably require a negative test. In Louisiana, hospitals are prohibited from discharging patients with COVID-19 or those with symptoms to nursing homes (5). In contrast, New York requires all LTCFs across the state to accept these patients including those without any test results (6), regardless of the local availability of hospital and intensive care unit (ICU) beds. AMDA/ The Society for Post-Acute and Long-Term Care Medicine/American Medical Directors Association (AMDA-PALTC), the American Health Care Association, and the National Center for Assisted Living objected to mandates to accept all patients without testing in a joint statement (7). They recommended the creation of dedicated wings or units within a facility to accommodate hospital discharges or consolidate residents between facilities to create "new" facilities to accept hospital discharges. Another approach might be the development of "centers of excellence", and the use of swing beds in critical access hospitals for care of COVID patients outside the hospital where feasible (8), but will not mitigate the critical situation that is emerging in some areas.

Because older LTCF patients have multiple comorbidities, the mortality rate from COVID-19 infection will be high. Early reports suggest the case fatality rate for those over 80, which constitutes nearly half of LTC residents, is over 15 % (9). Thus, the importance of advance care planning and well-documented advance directives cannot be overemphasized (10). In areas where there is a shortage of ICU beds and respirators, even the most carefully thought out ethical approaches to rationing these resources will place our older patients at a lower priority (11).

Below several key points are listed that we hope will be helpful. Undoubtedly the situation will change even before this comes online. Further updates will be necessary, which the Journal and the American Geriatrics Society (AGS) are committed to providing.

1. LTCFs in most areas of the country must be prepared to manage patients who have had or have COVID-19 infection. In a survey with an initial voluntary sample of 350 responding

readers of a LTC newsletter, close to one-third rated the mood in their buildings as "panicked" or "fingers crossed", about half rated the mood as "coping day-to-day" or "a little shaky but confident overall", and only 10-20% expressed confidence they had the situation under control (12). Although this is a relatively small sample that is subject to response and selection bias, and the number of facilities represented among the responders is not documented, it does give us some idea of what front-line LTCF providers are feeling. National organizations such as the American Health Care Association (AHCA), AMDA-PALTC, AGS, and many others are working hard to support LTCFs and clinicians who work in them.

2. All LTCFs should develop an emergency plan that addresses patient/resident placement and staffing considerations before a cluster infection or outbreak occurs.

3. Until rapid testing for the virus and preventive or curative therapies are available, the best (and only) approaches are to employ intensive infection control practices, and behave as if all patients and staff are potentially infected with the virus.

    a. These practices are detailed on the CDC and CMS websites (13, 14). All staff must continue to be carefully screened, recognizing that some may be asymptomatic carriers of the virus and pass the screening. When rapid COVID-19 testing becomes available all staff and clinicians should be tested.
    b. In addition to restricting visitors, communal dinning and other group activities should be cancelled as should all leaves of absence by the patients/residents, and therapy should be provided in the patient/resident room when feasible; if not safe social distancing should be used in therapy areas.

c. Staff should wear plain surgical masks at all times and use N95 masks if available when performing high-risk procedures such as respiratory treatments (15). Nebulizer treatments can produce aerosol that lasts up to 1-2 hours, so metered-dose inhalers should be used whenever possible.

d. Full personal protective equipment (PPE) should be used when appropriate and available based on patient/resident symptoms and signs. There is a well-recognized shortage of PPE, even in many hospitals, and strategies to work around this shortage until more PPE is produced and distributed are available (15, 16). In the above referenced survey, 77% reported PPE shortages (12), so these strategies should be utilized until the shortage is resolved. The CDC has issued specific guidance on how to conserve PPE by altering traditional transmission-based precautions based on contingency and crises situations as well as what to consider should PPE be exhausted (15).

e. In the intermediate term, staff who have tested positive for COVID-19 and/or have antibodies to the virus (when the testing becomes available) and are asymptomatic are likely to be immune from recurrence, at least for a period of time. These individuals may be a critical resource because staff may be stretched very thin due to ongoing symptomatic disease or the need for quarantine. They may also become a valuable source of convalescent serum as treatment, if this proves to be effective.

f. Staff who are quarantined based on symptoms and wish to return to work must be tested to confirm they are not shedding virus. The returning healthcare workforce should be a priority for rapid testing.

4. Because illness including COVID-19 infection LTCF patients can present atypically, the threshold indications for placing a resident in contact precautions should be extremely low. Vital signs should be monitored at least daily and more frequently if indicated; and even

subtle changes in condition should be taken seriously and further evaluated when clinically indicated.

5. Because clinicians (physicians, nurse practitioners, physician assistants, psychologists, and other advance practice clinicians) often practice in multiple settings and are at high risk for contact with COVID-19 infected patients, visits should be done by telephone or other form of telemedicine whenever feasible and appropriate.

    a. Guidance on what requires immediate vs. non-immediate notification of the clinician, contained in the AMDA-PALTC Acute Change of Condition Clinical Practice Guideline (17) and the INTERACT "Change in Condition File Cards" (18), can be used to help determine which patients are appropriate for telephone only vs. in-person or virtual telemedicine visits.
    b. CMS will provide reimbursement for these visits if the proper procedures are employed and documented (19), and the World Health Organization has posted emergency use codes for COVID-19 (20). CMS is also waiving the requirement for physicians and non-physician practitioners to perform in-person visits for nursing home patients/residents and allow visits to be conducted, as appropriate, via telehealth options (21).

6. Outbreaks in LTCFs will occur and because of the nature of our patient population, mortality will be high. LTCFs must prepare for this possibility (22). In China, all hospitalized individuals who required ICU or ventilator care had an approximately 50% mortality risk (9), which is likely to be much higher among LTCF patients/residents who are older and have multiple chronic conditions compared to the general population.

a. LTCF staff and clinicians must be aggressive in advance care planning discussions and documentation of advance directives in order to provide person-centered, medically appropriate care. Older people living in LTCFs and their families are likely to choose care limiting orders when optimal discussions occur about the possibility of the discomforts of cardiopulmonary resuscitation and respirator care that result in a very small chance of surviving or surviving in their current state of health (10). In addition to tools available on the AMDA-PALTC and INTERACT websites (17, 18), several websites now offer COVID-19 specific advance care planning tools (23-24).
b. Many patients/residents may die in facilities that are successful with their advance care planning and/or do not have access to alternative sites of care. Currently, hospitals in some areas of the country are refusing to admit LTCF patients. Thus, facilities should ensure that they have appropriate medications available in their emergency kits to manage these symptoms at the end of life. The Center to Advance Palliative Care (CAPC) has a useful list of items for symptom management for patients suffering from respiratory symptoms related to COVID-19 at the end of life (25).
c. LTCFs should engage local hospice and palliative care providers to provide additional expertise in end-of-life care where available.
d. Because LTCF patients/residents cannot have visitors or participate in group activities, their isolation may have adverse effects on their mental health. Morale of staff may also be affected. Experience in China suggests that half or more of healthcare workers treating patients with COVID-19 infection had symptoms of depression, anxiety, insomnia, or distress (26). Thus, LTCFs should provide as much psychosocial care and support as feasible in this challenging time. Use of social media and video phone call options may also be useful for some patients/residents in order to facilitate interaction with family and friends.

e. Grief counseling for families and staff, as well as assistance with burial arrangements may be needed. Should this situation arise, which it unfortunately may, consideration should be given to modifying visitor restrictions to allow family and friends to comfort their loved ones who are at the end of life.

During this challenging and unprecedented pandemic of our lifetimes, we should be thankful for all of the front-line LTCF staff and clinicians who are risking their health and that of their families to care for the most vulnerable among us. Shortages of these professionals are anticipated, and the aging of our healthcare workforce makes many of us even more susceptible to acquiring COVID-19 and its complications. Of the approximately 1.2 million registered nurses employed outside of hospital settings, 24% are age 55 to 64 years and 5% are age 65 years or older. Of the approximately 1.2 million physicians in the United States, an estimated 230,000 (20%) are aged 55 to 64 years and an estimated 106,000 (9%) are aged 65 years or older. Many hospitals and health care systems are developing strategies to use these health professionals in productive ways that may not necessarily involve direct patient contact (27). CMS has issued many waivers that could help bolster the healthcare workforce and the capacity of our healthcare system to care for older COVID-19 patients (28).

We all have a role to play, and we should support our geriatric healthcare workforce, our patients, and their families in whatever ways we can contribute to meet this daunting challenge.

Acknowledgements

The author is grateful for the insightful and timely suggestions that have been incorporated into this editorial provided by Dr. David Gifford from the American Health Care Association, Dr. Sara Hamm from Lifespace Communities, and Dr. William Russell from Conviva Care Centers.

The author thanks Drs. Heather D'Amato and Thomas Yoshikawa from the VA Greater Los Angeles Healthcare System and the David Geffen School of Medicine at UCLA for their contributions to the original Special Article, and for review of this editorial.

And, special thanks and gratitude go to all geriatrics health professionals who are working day and night to manage this pandemic, especially those on the front-lines providing direct care to older patients and residents of LTCFs.

Conflicts of Interest

Dr. Ouslander is a full-time employee of Florida Atlantic University (FAU) and has received support through FAU for research on INTERACT from the National Institutes of Health, the Centers for Medicare & Medicaid Services, The Commonwealth Fund, the Retirement Research Foundation, the Florida Medical Malpractice Joint Underwriting Association, PointClickCare, Medline Industries, and Think Research. Dr. Ouslander and his wife receive royalties from Pathway Health, which currently holds the license to do training and sublicensing on INTERACT. Work on funded INTERACT research is subject to the terms of Conflict of Interest Management plans developed and approved by the FAU Financial Conflict of Interest Committee.

References

1. D'Adamo, H, Yoshikawa, T, Ouslander, JG. Coronavirus Disease 2019 in Geriatrics and Long-term Care: The ABCDs of COVID-19. Published online March 25, 2020. https://doi-org.ezproxy.fau.edu/10.1111/jgs.16445

2. Kimball, A, Harfield, KM, Arons, M, James, A, Taylor, J, Spicer, K et al. Asymptomatic and Presymptomatic SARS-CoV-2 Infections in Residents of a Long-Term Care Skilled Nursing Facility — King County, Washington, March 2020. Centers for Disease Control MMWR Early Release/Vol.69, March 27, 2020. Available at: https://www.cdc.gov/mmwr/volumes/69/wr/mm6913e1.htm?s_cid=mm6913e1_&deliveryName=USCDC_921-DM24113 Accessed March 29, 2020.

3. Sharfstein, JM, Becker, SJ, and Mello, MM. Diagnostic Testing for Novel Coronavirus. JAMA published online March 9, 2020. doi:10.1001/jama.2020.3864

4. Centers for Disease Control and Prevention. Discontinuation of Transmission-Based Precautions and Disposition of Patients with COVID-19 in Healthcare Settings (Interim Guidance). https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-hospitalized-patients.html Accessed March 29, 2020.

5. State of Louisiana. Healthcare Facility Notice/Order: Hospital to Nursing Facility Discharges. http://ldh.la.gov/assets/oph/Coronavirus/resources/providers/LDHMEMO-re-Hospital-Discharges-to-NF.pdf Accessed March 30, 2020

6. New York Department of Health. Advisory: Hospital Discharges and Admissions to Nursing Homes https://coronavirus.health.ny.gov/system/files/documents/2020/03/doh_covid19-_nhadmissionsreadmissions_-032520.pdf Accessed March 30, 2020.

7. Society for Post-Acute and Long-Term Care Medicine, the American Health Care Association, and the National Center for Assisted Living Joint Statement. State Advisories re: Hospital Discharges and Admissions to Nursing Homes and Assisted Living

Communities. https://paltc.org/sites/default/files/AMDA-AHCA-NCAL%20Statement%20on%20State%20Advisories%20FINAL.pdf Accessed March 29, 2020.

8. Grabowski, DC and Joynt Maddox, KE. Postacute Care Preparedness for COVID-19: Thinking Ahead. JAMA published online March 25, 2020. doi: 10.1001/jama.2020.4686

9. Wu, Z, and McGoogan, JM. Characteristics of and Important Lessons from the Coronavirus Disease 2019 (COVID-19) Outbreak in China: Summary of a Report of 72,314 Cases from the Chinese Center for Disease Control and Prevention. JAMA published online February 24, 2020. doi:10.1001/jama.2020.2648

10. Curtis, JR, Kross, EK, Stapleton, RD. The Importance of Addressing Advance Care Planning and Decisions About Do-Not-Resuscitate Orders During Novel Coronavirus2019 (COVID-19). JAMA published online March 27, 2020. doi: 10.1001/jama.2020.4894

11. White, DB and Lo, B. A Framework for Rationing Ventilators and Critical Care Beds during the COVID-19 Pandemic. Published online March 27, 2020. doi: 10.1001/jama.2020.5046

12. Berklan, JM. McKnight's COVID survey reveals vast PPE, staffing shortages. https://www.mcknights.com/news/mcknights-covid-survey-reveals-vast-ppe-staffing-shortages/?utm_source=newsletter&utm_medium=email&utm_campaign=MLT_DailyUpdate_20200330&hmSubId=qAYEKW2d4F01&hmEmail=pRBNRwKMmfLe3c74Ow5jb5uV7PRLUzV90&email_hash=228a7a0dc069e5ee9976e0d94b9c1c06&mpweb=1326-8518-501763. Accessed March 30, 2020.

13. Centers for Disease Control and Prevention. Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings. https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Finfection-control.html Accessed March 29, 2020.

14. Centers for Medicare and Medicaid Services: Guidance for Infection Control and Prevention of Coronavirus Disease 2019 (COVID-19) in Nursing Homes. https://www.cms.gov/files/document/3-13-2020-nursing-home-guidance-covid-19.pdf Accessed March 29, 2020.

15. Strategies to Optimize PPE & Equipment. Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html Accessed March 30, 2020.

16. Livingston, E, Desai, A, Berkwitz, E. Sourcing Personal Equipment During the COVID-19 Pandemic. JAMA published online March 28, 2020.

17. The Society for Post-Acute and Long-Term Care Medicine https://paltc.org/resources. Accessed March 29, 2020.

18. Interventions to Reduce Acute Care Transfers. https://pathway-interact.com. Accessed March 29, 2020.

19. Centers for Medicare and Medicaid Services. Medicare Fee-for-Service (FFS) Response to the Public Health Emergency on the Coronavirus (COVID-19) https://www.cms.gov/files/document/se20011.pdf Accessed March 29, 2020.

20. World Health Organization. Emergency use ICD codes for COVID-19 disease outbreak. https://www.who.int/classifications/icd/covid19/en/ Accessed March 30, 2020.

21. Centers for Medicare and Medicaid Services. Coronavirus Waivers & Flexibilities. https://www.cms.gov/about-cms/emergency-preparedness-response-operations/current-emergencies/coronavirus-waivers Accessed March 31, 2020.

22. Lynn, J. A Pragmatist's Advice for Nursing Homes. https://medicaring.org/2020/03/28/pragmatists-advice/ Accessed March 29, 2020.

23. Respecting Choices: https://respectingchoices.org/covid-19-resources/ Accessed March 29, 2020.

24. Vital Talk: https://www.vitaltalk.org/guides/covid-19-communication-skills/ Accessed March 29, 2020.

25. Center to Advance Palliative Care: https://www.capc.org/toolkits/covid-19-response-resources/ Accessed March 29, 2020.

26. Lai, J, Ma, S, Wang, Y. Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. JAMA Netw Open. 2020; 3(3):e203976. doi:10.1001/jamanetworkopen.2020.3976

27. Buerhaus, PJ, Auerbach, DI, Staiger, DO. Older Clinicians and the Surge in Novel Coronavirus Disease 2019 (COVID-19) JAMA Published online March 30, 2020. doi:10.1001/jama.2020.4978

28. Centers for Medicare and Medicaid Services. Long Term Care Facilities (Skilled Nursing Facilities and/or Nursing Facilities): CMS Flexibilities to Fight COVID-19 https://www.cms.gov/files/document/covid-long-term-care-facilities.pdf Accessed March 31, 2020.