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## **Commentary**

## Unprecedented solutions for extraordinary times: Helping long-term care settings deal with the COVID-19 pandemic

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Our healthcare system faces an unprecedented strain as it struggles with the coronavirus disease 2019 (COVID-19) pandemic. With cases now reported in 53 states and territories, community spread is either already occurring or is imminent in most localities. Most healthcare systems are experiencing limited access to diagnostic tests accompanied by delays in test results of >24 hours. Trials to assess potential treatments are underway, with mounting difficulty in acquiring agents as the demand for them increases.

Without question, the segment of our population most at risk for severe and potentially lethal COVID-19 are older adults.<sup>2</sup> Among older adults, residents living in long-term care (LTC) settings are among the most vulnerable by virtue not only of their healthcare needs but also by living in a communal setting populated by other individuals at high risk for disease acquisition. To date, LTC settings are the segment of the healthcare system with the most notable burden of COVID-19 cases.<sup>3</sup> What is more alarming is that the overall quality ratings of LTC settings with COVID-19 outbreaks in King's County, Washington, are least 3 of 5 stars.<sup>4,5</sup> Furthermore, the average daily hours for direct care of residents by licensed nursing staff at these sites is at or above the national average. This finding suggests that the outbreaks of COVID-19 reported in these settings are not due to lapses in infection prevention and control; rather, the outbreaks detected are occurring in LTC settings despite reasonable practice.

The mandate for LTC settings is to provide a "safe, clean, comfortable, and homelike environment." Although they provide some medical care, LTCs are not staffed or otherwise resourced to care for acutely ill individuals. Furthermore, at present staffing levels, few LTCs even have the capacity for effective and facility-wide monitoring of their residents for rapid clinical deterioration. This situation is acceptable in ordinary circumstances, but with the COVID-19 pandemic, we have entered into extraordinary times.

These extraordinary times call for unprecedented measures to protect our vulnerable LTC residents. Inevitably, hospitals will need to discharge patients to LTC settings, including some individuals that are known to have COVID-19 and, as is the nature of infections, some that are not yet known to have COVID-19. To that

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end, we propose the following measures to help protect the 1.4 million individuals that already occupy beds in 1 of 15,600 LTC settings.<sup>7</sup>

First, LTC settings should only accept patients with an active COVID-19 infection if they can provide effective airborne isolation. Although the Centers for Disease Control and Prevention no longer recommends negative pressure room for the care of COVID-19 patients, several essential elements remain including a single room in which the resident can safely reside with the door closed, which stipulates that the person is not at risk for falls or wandering. Other necessities include ensuring an adequate supply of personal protective equipment (PPE), which includes regular masks for routine care and N95 respirators for aerosol-generating procedures and ensuring that enough staff members are available who are trained in proper use of PPE to meet all the care needs for those residents. The LTC setting's infection preventionist, administrator, director of nursing, and medical director need to jointly determine whether their building can provide these resources, and this team should reassess that capability on at least a weekly, if not daily, basis.

Second, patients who are recovering from a known COVID-19 infection will need to have 2 negative COVID-19 tests on 2 consecutive days, remain afebrile off scheduled antipyretics for at least 48 hours, and not require ventilatory support that generates aerosols (eg, continuous positive airway pressure or bilevel positive airway pressure). Currently, this requirement may lead to significant delays in discharge. As testing becomes more readily available, this process should become less onerous for hospitals. Third, LTC settings should screen potential admissions for both typical and atypical signs and symptoms of COVID-19 (Table 1). As with many infections, older adults may initially show only atypical manifestations of COVID-19 and may never manifest an increase temperature high enough to meet typical criteria for a fever. At present, frontline clinicians report hypoxemia as the most common recognized manifestation of COVID-19 in older adults, which may represent a sign of severe infection. Because severe symptoms may take several days to develop, older adults hospitalized for what appears to be an exacerbation of a known condition, such as chronic obstructive pulmonary disease, may be discharged to a LTC setting before there is clinical suspicion, let alone test results, for COVID-19. On March 13, 2020, the Center for Medicare and Medicaid Services (CMS) issued an emergency

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Table 1. Typical and Atypical Signs and Symptoms of COVID-19 in Older Adults

Typical Signs and Symptoms
Fever ≥ 37.5°C (99.5°F)
Cough
Shortness of breath
Atypical Signs and Symptoms
Confusion or change in mental status (If noted, check pulse oximetry to determine whether increased oxygen is required.)
Exacerbations of congestive heart failure or chronic obstructive pulmonary disease
Muscle aches, headache
Sore throat, runny nose
Chest pain
Diarrhea, nausea, and vomiting

declaration temporarily suspending the requirement for patients to have a 3-day qualifying stay prior to discharge to a skilled nursing facility; this renders the potential for delayed recognition of COVID-19 occurring in a LTC setting much greater.<sup>8</sup>

Fourth, LTC settings that are currently COVID-19 naïve should not accept any new admissions about whom there may be a concern for COVID-19. People recovering from emergent surgeries and other acute illnesses may have needs that exceed what can be provided at home; thus, they will need LTC settings for rehabilitation and recovery. Unfortunately, the number of COVID-19-naïve LTC settings will dwindle as staff, despite the best of intentions, become inadvertent vectors. Fifth, acute and LTC settings need to work together to find places for COVID-19 patients who are ready to leave the hospital but are not able to return to the community. Healthcare systems and networks are best suited to implement this recommendation. LTC settings that already have residents with COVID-19 may consider temporarily designating their building as a COVID-19 recovery site. Those buildings should then also be supported with increased staff and resources, including increased access to COVID-19 tests and to PPE including N-95 or equivalent respirators. The goals are to increase capacity and to help keep hospital beds open while separating patients with COVID-19 from those without the infection.

Finally, state, local, and hospital systems need to include LTC settings as high-priority sites for increased access to respiratory viral tests, including for SARS-Cov-2, and to PPE. Limited availability of testing and inadequate supplies of PPE contributed to the rapid spread of COVID-19 in King's County, Washington.<sup>3</sup> The symptoms of COVID-19 overlap with other respiratory viruses, and as testing expands, we may find that coinfection is more common than previously thought.<sup>9</sup> Access to rapid testing for multiple respiratory viruses that can be achieved from a single nasopharyngeal swab would greatly enhance both optimal infection control and prevention efforts and guide supportive care and, for cases of influenza, treatment. Many LTC settings are on the verge or have already exhausted their supply of gowns, gloves, and facemasks, despite attempts to practice PPE stewardship.

Without PPE, LTC staff cannot carry out current recommendations to protect themselves or their residents from COVID-19. As staff develop respiratory symptoms and cannot care for residents, the number of healthcare workers available to care for residents will diminish. Inadequate staffing jeopardizes patient safety. Rather than increased inspections, to support the care and safety of their residents, LTC settings need increased access to COVID-19 testing and to PPE.

Although some LTC settings may be perceived as refusing to accept new admission, in most cases they are appropriately seeking to protect their residents and staff. In summary, our healthcare system needs to support, and not hinder, the efforts of LTC settings to prioritize the safety of the residents already entrusted to their care.

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