Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Their courage, dedication, and resilience are something to be admired. Never have I been prouder to be a nurse.

There is, however, a price to pay for our work as nurses in this pandemic environment. Some have begun to think about retiring; some potential nurses are dropping out of nursing school or deciding not to enroll; some are deciding not to engage in clinical care for fear of their own health or the health of their families; some continue to work despite significant mental and physical health-related stress; and some have died or become chronically ill due to coronavirus disease 2019 obtained in the line of duty.[1,2]

What do we owe the nurses in long-term care? First and foremost it is the availability of appropriate and sufficient personal protective equipment (PPE) to keep them as safe as possible while they are providing the intimate care necessary for residents within these settings. Availability of PPE for nursing staff is critical to residents as well – to prevent the spread of disease as staff move from one resident to the next. Further, ready availability of PPE provides an important statement to the staff, which is that we as a society care about keeping them safe and healthy.

In addition to PPE, nurses deserve to be recognized for their knowledge about the residents. Although telehealth is a wonderful alternative to face-to-face visits when those are not possible, telehealth visits are not ideal. The input from nurses and other members of the healthcare team is invaluable during or associated with telehealth visits. Nurses evaluate the function and behavior of their residents day by day, as opposed to the moment of time that a telehealth visit provides. This is especially important in post-acute and long-term care, where residents may present as lethargic one moment and later in the day blossom and engage in activities. Moreover, direct care workers and nurses in long-term care can provide the assessment information needed to diagnose and treat a resident following a more careful and comprehensive work-up.

Lastly, nursing home nurses deserve to be able to work to the full scope of their practice. There are not too many silver linings from the 2020 coronavirus, but one of them has been the release of some regulatory issues that limit scope of practice. For example, on April 9 the Centers for Medicare and Medicaid Services made it easier for providers to practice across state lines.[3] Further, advance practice nurses can now order home health care services for patients, and we are all aware of the changes in allowing for telehealth visits across multiple settings. Nurses deserve to have these "waivers" remain as recognition of their training, skills, and ability as well as increasing access to care for all older adults.

In closing, remember to thank the nurses providing care to your residents. They are heroes but they are also human. They are tired and afraid but committed to the pledge they took as a nurse, the Nightingale pledge,[4] and they are doing their best with limited staff and resources to provide care for the world's older adults.

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Home Health Services in the Time of Coronavirus Disease 2019: Recommendations for Safe Transitions

To the Editor:

As the coronavirus disease 2019 (COVID-19) pandemic has led health systems to focus on hospital capacity, hospitals are emphasizing early discharges to prepare for and mitigate patient surges. This has resulted in greater numbers of older adults with COVID-19 who require home health (HH) services. HH care of older adults with COVID-19 leads to several unique risk categories: (1) risks to HH providers; (2) risks to patients/families; and (3) risks to subsequent patients/families the HH provider will visit. We describe challenges in providing HH services in the time of COVID-19 and present recommendations to improve transitional care and the safety of older adults, families, and HH providers (Table 1).

HH providers are delivering care to older adults who, during nonpandemic times, would have remained in the hospital. Many older adults prefer to be at home instead of in hospitals or residential facilities, because of visitor restrictions and concerns over severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmission. Furthermore, while hospitalized older adults requiring post-acute care often go to residential facilities, many of these facilities are infection hotspots and may be closed to new patients, particularly persons with COVID-19.

Older adults receiving HH services after hospitalization are at the highest risk of unplanned healthcare utilization compared with other care transitions even during nonpandemic times.[4] Homebound older adults have increased unmet needs[5] and are at risk for complications related to social isolation,[6] challenges that are exacerbated by the pandemic.[7] Ambulatory care sites conducting telemedicine approaches may leave many older adults at risk for incomplete clinical evaluations. Meanwhile, HH agencies often lack infection prevention professionals[8] to prepare them to care for patients during a pandemic.

HH Provider Safety

Health care workers in all care locations including HH are experiencing personal protective equipment (PPE) shortages. Attempts to mitigate PPE shortages in hospitals have focused on reuse. However, PPE reuse is difficult in HH, where processes for safe HH PPE reuse without self-contamination and when traveling between homes are not clearly established. Ensuring appropriate PPE use, including donning, wearing, and doffing, is equally

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Table 1
Available Training Resources for HH Workers for Managing Patients During the COVID-19 Pandemic

Training Material	Link to Resource
National Association for Home Care and Hospice Coronavirus Resources for Home Care and Hospice	https://www.nahc.org/resources-services/coronavirus-resources/ [1]
Centers for Disease Control and Prevention Coronavirus Disease 2019 (COVID-19): Using Personal Protective Equipment (including videos and posters)	https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html [2]
Infusion Nurses Society COVID-19	https://www.ins1.org/covid-19/ [3]

essential in keeping HH providers safe.[9] Hospital-based strategies to ensure appropriate PPE use include repeated trainings, videos, dedicated spaces to don and doff PPE, checklists, and trained observers. However, HH providers lack training materials and strategies tailored to their needs and realities (eg, storing PPE in a backpack or the trunk of a car, placing supplies on home surfaces, etc). HH providers typically drive or walk between patient homes and may lack appropriate locations to don and doff PPE (eg, front porches, apartment hallways).

Attention should also be paid to appropriately cleaning durable medical equipment provided for medical care in the home (eg, hospital beds, oxygen) prior to being provided to another patient.[10] Guidelines on how to clean these durable medical equipment appropriately without contaminating HH employees are essential.

Finally, expanded telemedicine services could be used in HH to reduce employee exposure to COVID-19 for monitoring of and evaluation of older adults.

Older Adult and Family Safety

Family members are essential members of the HH team. They perform tasks including cooking, cleaning, bathing, dressing, toileting, ambulating, dispensing medications or treatments, monitoring the patient, and providing social contact. Meanwhile, the Centers for Disease Control and Prevention recommends household transmission prevention through hand-washing, avoiding touching faces, sleeping in different rooms, using different bathrooms, avoiding sharing personal items, cleaning surfaces, and limiting contact with pets and uninfected family members.[11] Performing care tasks while following this infection prevention guidance is difficult for families caring for homebound older adults with COVID-19, especially in a small or crowded household. HH providers are essential in providing guidance on infection prevention practices among families, aiding families with COVID-19 management, and providing emotional support. Specific infection prevention strategies should be provided to HH providers to disseminate to older adults and families.

Strategies to Ensure Optimal Transitional Care Workflows

HH agency and hospital collaborations can ensure adequate information transfer and care provision during hospital-to-home transitions.[12] These collaboratives can also develop optimal home visit workflows, such as scheduling HH providers to visit patients with COVID-19. Finally, HH agencies should develop strategies for the optimal balance of performing in-person visits vs remote monitoring. HH agencies and health systems would benefit from strategies to improve team performance, such as multidisciplinary remote rounds, incident command structures, predischarge checklists, real-time evaluation of care transition quality, and inclusion of HH in the rapid expansion of telemedicine services.

The COVID-19 pandemic has led to a large-scale change to American society. We view this as an opportunity to improve care for at-risk older adults across the health system continuum, including the most common and understudied health care setting—the home.

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Hydroxychloroquine Sulfate Prescribing Trends and Pharmacist-Led Outbreak Preparedness in Long-Term Care Pharmacy during Coronavirus Disease 2019

To the Editor:

The acute respiratory disease, Coronavirus disease 2019 (COVID-19), caused by the novel Coronavirus severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), is a worldwide pandemic affecting millions of people.[1,2] Residents of long-term care (LTC) settings have been severely impacted by the current COVID-19 outbreak.[3] Hospitalization rates in COVID-19 positive LTC residents are over 50%, and case fatality rates are over 30%.[4] Limitations in effective infection control and prevention and staff members working in multiple facilities have been found to be associated with intra- and interfacility spread. COVID-19 can spread rapidly in LTC facilities, and persons with chronic underlying medical conditions are at greater risk for COVID-19-associated severe disease and death.[5] Pharmacists serving LTC facilities perform a number of important activities to improve quality of medication usage, including tracking anti-infective prescribing trends and issuing prescriber recommendations and alerts.[6] It is unknown how COVID-19 may be affecting anti-infective prescribing trends in LTC, as well as agents such as hydroxychloroquine sulfate.

Shortly after the first case of COVID-19 was confirmed in the United States, we assembled a cross-functional team of leaders and formed an Outbreak Preparedness and Action Committee, including our Chief Pharmacy Officer. The committee enacted a comprehensive preparedness plan as previously described.[7] The infection control measures our pharmacy locations implemented were adapted from the Centers for Disease Control and Prevention. [8,9] In February 2020, all consultant pharmacist activities, including medication therapy management, were transitioned to remote engagement and we delivered over 130,000 recommendations to prescribers. We used 1750 contract couriers to deliver medications and took numerous additional infection control steps, including symptom and temperature screenings of employees and contractors and use of appropriate personal protective equipment. We also transitioned to a single-drop-point delivery system and used disposable paper-based delivery containers. In addition, we implemented a 7-day quarantine period for the 450,000 medications returned for credit or destruction. Our pharmacists tracked anti-infective prescription counts weekly at all facilities, as well as those for hydroxychloroquine sulfate.

In the 100-day period between January 20, 2020 and April 30, 2020, we provided pharmacy services to 1689 nursing facilities and 488 assisted living facilities. Our pharmacists issued several special prescriber alerts to client facilities, including one on hydroxychloroquine and its potential risk for cardiac arrhythmia, and another on the potential risk associated with nebulized breathing treatments increasing aerosols generated in COVID-19 positive patients. In the 1 month following this alert, dispensing of nebulized medications decreased by 12%. Our pharmacists tracked the number of prescriptions for anti-infective agents during the study period. We observed stable levels of the number of LTC residents receiving prescriptions for antibiotics such as cephalosporins and fluoroquinolones. We observed a typical seasonal pattern in prescriptions for oseltamivir phosphate, but we noted atypical trends in prescriptions for azithromycin and hydroxychloroquine sulfate. The number of LTC residents receiving hydroxychloroquine for rheumatologic conditions in the first 60 days of the pandemic was steady, but increased over 6-fold in the 3-week period following the Food and Drug Administration's emergency use authorization. After April 24, 2020, the date that the Food and Drug Administration issued a drug safety communication on the potential risk of cardiac arrhythmias associated with use of hydroxychloroquine, we saw its use decrease by nearly 50% within 1 week (Figure 1).

At least 7700 of the 44,500 LTC facilities in the United States have 1 or more confirmed cases of COVID-19.[10] Because COVID-19 has spread rapidly in LTC settings, keeping cases out of homes and mitigating spread when infections occur are important priorities. LTC pharmacy can support best practices in infection control, continue pharmacist consulting using technology to enable remote work, monitor anti-infective prescribing trends, and issue prescriber alerts to provide education and support to LTC facilities during an outbreak. Careful tracking of anti-infectives and other agents, such as hydroxychloroquine, can help prescribers, facilities, and organizations such as Centers for Disease Control and Prevention study prescription trends during a pandemic. A multifaceted, pharmacist-led approach that includes monitoring affected facilities, supporting facility staff and prescribers, monitoring anti-infective prescription trends, and