

Critical Infection Control Adaptations to Survive COVID-19 in Retirement Communities

Retirement communities are among “high-risk settings for severe outcomes from outbreaks of COVID-19, owing to both the advanced age and frequent chronic underlying health conditions of the residents and the movement of healthcare personnel.”
—McMichael et al. (2020, p. 1)

A retirement community in Seattle, Washington reported their first COVID-19 case in early March 2020 and within 1 week, the community had a total of four positive resident cases and one positive staff case. The retirement community took swift and decisive actions from onset of the first case, including sequestering all residents to their apartments and clustering care for residents who were COVID-19 positive. One resident died, and by early April, the remainder residing in the community who had tested positive were retested and are now negative for COVID-19. Two new staff cases were identified in the serial and broad testing performed. As of this writing, all three staff members who tested positive are also now negative. The current guest editorial highlights the key infection prevention adaptations deployed by nursing and management staff at the retirement community in light of the COVID-19 pandemic. Please note, however, limitations must be acknowledged, as these adaptations are based on anecdotal cases and observational data.

ADJUSTING SCREENING CRITERIA

According to the Centers for Disease Control and Prevention (2020), fever, cough, and shortness of breath are key symptoms of COVID-19. However, clinical investigations revealed that our residents first presented with one or more of the following symptoms: altered mental status, diarrhea, and loss of appetite. Based on reports from peers in the industry, we also added conjunctivitis and changes in the sense of smell to the screening criteria. This screening process enabled us to identify potential residents with COVID-19 more quickly and proactively place them on droplet precautions.

ADVOCACY FOR BROADER TESTING

According to Nanduri et al. (2019), treating residents and staff affected by a common infection can improve outcomes. Knowing that certain individuals may be asymptomatic for days and still infect others with COVID-19 means broad testing can help prevent wide spread of the virus. Having seen the effectiveness of wide-

spread testing, an executive from the retirement community recommends health officials make COVID-19 broad testing available to prevent spread of the illness (Bowers, 2020).

CLUSTER CARE SCHEDULING

Lee et al. (2020) reported that person-to-person transmission could be responsible in as many as one half of cases of COVID-19. To avoid staff crossover between well and ill residents, we assigned the same group of care staff to the same group of residents (cluster scheduling). This strategy reduces the number of staff entering apartments of residents who are infected and also helps conserve personal protective equipment (PPE).

PERSONAL PROTECTIVE EQUIPMENT

We had to act quickly to stock additional PPE, such as gloves, masks, face shields, and gowns. PPE is worn to minimize exposure to air droplets and body fluids of other people. We also learned that medical supplies were in short supply. Without compromising the safety of residents and staff, we planned for possible extended use of and, in some cases, reuse of N95 masks. For example, each staff member would be issued one N95 mask for use each shift. If not soiled, wet, or compromised in other ways,

they would reuse the same mask after leaving work to air it out in a clean, dry, well-ventilated space for at least 72 hours. Fortunately, we have yet to need to reuse masks. We created an inventory system to track what quantities we had on hand at any given time.

ENGINEERING PROCESSES

Our team identified potential risks for cross-contamination involving COVID-19 and took steps to minimize those risks. For example, all dirty and clean laundry was carried in double plastic bags to prevent aerosol of materials from the laundry. Red biohazard bags were used for residents with COVID-19. This procedure is called “bag-in and bag-out.” Pens at the reception area were wiped before the next person used them. We implemented additional cleaning of commonly touched surfaces, such as elevator buttons, doorknobs, handrails, tables, and chairs, at least twice per day. According to Van Tiem et al. (2020), there are “roads from the room” (p. 400) that should not be missed in designing a comprehensive infection prevention plan.

MEAL DELIVERY

All group dining was suspended. Meals were delivered to residents’ doors for residents themselves to pick up so staff did not have to enter their apartments. Disposable plates and utensils were also used.

SOCIAL DISTANCING

Recreational outings and resident groups were canceled, and nonessential medical appointments were rescheduled to a future date. Families and guests were forbidden to visit. Essential workers, such as food services and oxygen delivery companies, were screened and their movement in the community supervised.

NURSING STAFF ADJUSTMENTS

At the onset of the first COVID-19 case, staff who unknowingly had close

contact with the infected person were immediately removed from the schedule and asked to self-isolate for 14 days or get tested before returning to work. Employees with any symptoms, including fever, gastrointestinal issues, or other unexplained illness, were asked to stay home until symptoms resolved. We prioritized critical care activities that could not wait and allowed for staff overtime where needed. We also lined up additional coverage from staffing agencies.

A NEW WAY TO INVESTIGATE INFECTIONS

With every new case, nursing staff traced back at least 14 days from the date of illness onset to identify persons who had been in close contact with the sick individual. This tracing entailed calling every employee and checking the community’s guest book to identify anyone who may need to be advised that they came in close contact with the person with COVID-19. This process is time sensitive and laborious, but critical in limiting spread of the virus.

NEW LEVELS OF TRANSPARENCY

Without violating privacy regulations, the retirement community management announced every new case to residents, their families, and staff. This practice helped create an environment of openness, trust, calmness, and confidence, all of which are needed in a pandemic. This practice has also been helpful in more timely identification of staff and residents potentially exposed to a person with COVID-19 and to ask these individuals to self-quarantine.

STAFF AND RESIDENT EDUCATION

Nurses conducted frequent routine staff in-servicing on infection control topics, including asking staff to make demonstrations of properly wearing their N95 mask or taking off gloves. According to Mumma et al. (2019), “safe removal of personal protective

equipment (PPE) can limit transmission of serious communicable diseases” (p. S214). Residents need reminders of what we are doing and why to keep them committed to these new and sweeping changes.

CONCLUSION

These adaptations, if embraced quickly, can help reduce transmission rate of COVID-19 in assisted living communities or similar congregate living settings. These strategies may be adopted in any order, but case tracking of potential close contacts should always be a top priority. When such outbreaks strike, it takes a village to prevent widespread infection. Nursing staff often take frontline leadership roles in times like these. Nurses are trusted members of the care community with a critical role to provide clinical leadership that has often yielded positive outcomes, such as in this COVID-19 response.

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