

For Senior and Assisted Living, Smart Design and Operational Choices Will Ensure Post-Pandemic Viability

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by Michael E. Liu



In the span of the few months, the Covid-19 pandemic spread nationwide, the senior and assisted living industry has had to confront an existential challenge that is both design and operational. Before the pandemic, most providers focused largely on lifestyle. Now, ensuring resident security in the face of heightened health concerns has become paramount in order to preserve market viability — but as lifestyle will remain important to the marketplace, industry leaders will need to think creatively about integrating safety measures without compromising the residential character that residents and their families have come to expect.

As architects who have spent decades working with many of the country’s top senior living developers, owners, and operators, we see cause for optimism – if we approach this challenge thoughtfully. Here are a few key considerations that will help leaders in senior living prepare for a complex future:

Short-term design and programming strategies will need to focus on enhancing compartmentalization and enabling containment.

The ability to physically segregate residents is critical to reducing the impact of acute infectious events in senior or assisted living facilities. Immediate, easy-to-implement solutions include temporary or demountable screens and doors that preserve free-flowing common area layouts while adding flexibility to limit the spread of infection. Owners and operators may also convert existing rooms or units to isolation suites for residents who may be ill and contagious. Similarly, we’ve explored strategies to isolate groups of units by aggregating them into smoke compartments, dramatically limiting overall facility exposure.

Facility management will emphasize limiting transmission of pathogens through touchless controls and better HVAC.

Of course, enhanced sanitary measures are now essential. Reducing touch points must form part of any first-round set of facility improvements. Lever-less door hardware and touchless elevator controls, along with touchless faucets and paper towel and soap dispensers for common restrooms, will likely all become common measures. Other important strategies include reducing the number of shared areas utilizing a common mechanical makeup air system, and enabling individual residential units to convert to isolation rooms with capacity for 100% outside air provision and humidification control, or to switch between positive and negative pressure depending on patient health status. Owners and operators may consider bi-polar ionization and/or UV supplemented HVAC systems to reduce or eliminate airborne pathogens.

Long-term success requires rethinking long-held practices.

Facilitating visits of friends and family is central to every senior and assisted living social program, and the current pandemic has underscored the need to provide for such visits in spite of such an event. We have recently designed several facilities with safe visit areas, with glass-walled separations within a residential unit. The visitors’ side has its own HVAC system and direct entry exterior door.

We may also see a shift towards clusters of discrete individual buildings — an approach known as “Green House design,” or the replication of that model in larger facilities. In some ways that approach may represent a return to an enhanced “neighborhood” approach common in earlier generations of assisted living facilities, possibly designed to facilitate the use of the Greenhouse concept of the “Universal Worker” to limit the exchange of staff in an out of compartmentalized neighborhood sub-groups.

The senior and assisted living industry provides a crucial service in our society. By employing strategies such as these, and preparing for long-term shifts as well as immediate changes, leaders in this sector can chart a path for continued success.



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