

Understanding the Starting Point as Long Term Care Moves Forward from COVID-19

New Jersey, with 1,474,443 older adults, has one of the fastest growing number of older adults in the [nation](#). Supporting their health as they age should be a societal priority. COVID-19's attack on New Jersey's older adults, especially those who live in settings like nursing homes and assisted living residences, has focused a harsh spotlight on the frailties of this population and the challenges of our long term care system. The road forward requires an unflinching look at the problems revealed in the COVID-19 pandemic and their underlying causes.

Improvements in preventive care and infection prevention and control; federal funding for preparedness planning, response training, and simulations; a more coordinated, cohesive system of care for aging residents; and improved use of data to identify risks and predict outcomes are all areas demanding further exploration. But it begins with a better understanding of New Jersey's aging population and the factors that make them vulnerable to a virus like COVID-19.

Chronic Conditions

Older adults in New Jersey suffer from more chronic disease than those in many other parts of the nation, according to the Centers for Medicare and Medicaid Services. This data, representing senior citizens enrolled in Medicare fee-for-service programs, reveals the chronic disease burden for New Jersey residents in several underlying conditions that have been shown to place individuals at higher risk for COVID-19 or greater COVID-19 acuity. The novel coronavirus, which initially presented as a respiratory infection, is now emerging as a vasculotropic virus as well, meaning that it is both a [respiratory and vascular illness](#).

New Jersey's older adults have a higher prevalence of vascular conditions including hypertension, diabetes, hyperlipidemia and ischemic heart disease. Table 1 shows New Jersey's prevalence of a number of chronic conditions compared with the national average.

New Jersey's older adults who live in nursing homes or assisted living communities often have more than one of these conditions along with physical impairments and some degree of memory loss. Under New Jersey's Medicaid managed long term services and supports program, at least 60 percent of nursing home residents have between one and five chronic conditions.

Alzheimer's disease/dementia as an underlying condition provides an example of the complexities in caring for older adults in the face of COVID-19. The symptoms of COVID-19 often present differently in the frail elderly. Fever, for example, may not be evident in older individuals whose bodies regulate temperature less effectively, while disorientation is seen much more frequently than in younger people infected with the virus. That can make identifying COVID-19 more challenging in people with Alzheimer's or dementia, who also may have greater difficulty in communicating symptoms. In fact, the Centers for Disease Control and Prevention recently added dementia to the list of underlying conditions linked to severe coronavirus illness. These factors also underscore the importance of a widescale testing program for long term care residents during a pandemic.

New Jersey's older adult population suffers from more chronic disease than the nation's population older than 65.

| CHRONIC CONDITION (2017) | NEW JERSEY | NATIONWIDE |
|------------------------------|------------|------------|
| Alzheimer's Disease/Dementia | 13.0 | 12.1 |
| Cancer | 10.6 | 9.2 |
| Chronic Kidney Disease | 25.1 | 24.4 |
| COPD | 11.3 | 11.6 |
| Depression | 13.9 | 15.4 |
| Diabetes | 32.0 | 27.4 |
| Heart Failure | 15.9 | 14.5 |
| Hyperlipidemia | 49.5 | 43.0 |
| Hypertension | 65.2 | 59.9 |
| Ischemic Heart Disease | 34.0 | 28.8 |
| Stroke | 5.0 | 4.0 |

SOURCE: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/CC_Main

Table 1: Chronic Conditions Among NJ's Senior Residents

Immune System Vulnerabilities

In addition to the presence of underlying conditions, older adults are more vulnerable to infectious disease because of natural declines in their immune systems. Dr. Mark Mulligan, director of the division of infectious diseases at NYU Langone Health and NYU Grossman School of Medicine, testified in May before the U.S. Senate Special Committee on Aging on this problem of “immunosenescence,”

“Seniors are at increased risk due to the inexorable waning of the immune system,” he stated. That same decline in immunities could also make any future COVID-19 vaccine less effective for seniors, [according to Dr. Mulligan](#).

One parallel may be found in [research](#) on influenza in custodial long term care residents. According to the Centers for Disease Control and Prevention, the vaccination rate for nursing home residents in New Jersey for the 2017-18 flu season was 75.8 percent, which placed the state 26th in the country. Some researchers have noted that the effectiveness of influenza vaccination of residents is uncertain. In a 2017 [study](#) in long term care settings, results showed that vaccination may be only slightly or moderately more effective than no vaccination in preventing flu-like illness, pneumonia, hospitalization, overall mortality and mortality from flu or pneumonia in elderly persons living in closed communities. Researchers concluded that a multifaceted approach is pivotal to successful influenza prevention and implementation of infection prevention and control protocols.

Additional research published in the British journal *The Lancet* indicated that immune responses to influenza vaccines decline with age, reducing clinical effectiveness. Further, the researchers reported that “high-dose influenza vaccine was more effective than standard-dose vaccine in reducing hospital admissions for either all-cause or respiratory

illness in nursing home residents, despite being a year in which A/H1N1 was predominant. Establishing improved vaccine effectiveness in a nursing home population is noteworthy, considering this population typically has a reduced vaccine response because of immune senescence and multiple morbidities, and are at a high risk for being admitted to hospital for multiple reasons, in addition to respiratory illness.”

While development of a vaccine is critically important in the fight against COVID-19, it cannot be viewed as a solution to protecting frail elderly in long term care communities.

Racial Disparities

New Jersey’s data has shown clear evidence of racial disparities in COVID-19 associated mortality. An [analysis](#) of hospital discharge data from April 2020 by NJHA’s Center for Health Analytics, Research and Transformation showed that black New Jerseyans have the highest COVID-19 age-adjusted mortality rate of 8.4 per hundred population for males and 7.4 per hundred population for females. White patients followed, with a 7.9 per hundred population mortality rate for males and 5.7 per hundred population for females. Hispanics had the third highest COVID-19 mortality rate, at 7.8 per hundred population for males and 5 per hundred population for women.

Nursing homes often reflect the communities in which they are located, because people who need nursing home care usually want to stay close to home. Consistent with the disparities shown in the data, nursing homes with traditionally underserved populations are seeing some of the worst outcomes. Speaking before the recent hearing before the U.S. Senate Special Committee on Aging, Dr. R. Tamara Konezka noted in her [analysis](#), which included New Jersey data, that nursing homes with the lowest percent of white residents were more than twice as likely to have COVID-19 cases or deaths as those with the highest percent white residents.

COVID-19’s impact on the residents of long term care communities should serve as a pivotal moment in re-examining the delivery and design of care systems for our most frail elderly residents. There are numerous challenges for stakeholders to confront in the months ahead, from preventive and chronic care, to care coordination, to pandemic planning, response training and coordinated simulations within the health delivery system. A better understanding of “how we got here” will help guide us to where the system needs to go.

Visit www.njha.com/chart/ for additional resources.