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## COVID-19 Preparedness in Nursing Homes in the Midst of the Pandemic

Nursing homes (NHs) are considered hotspots for coronavirus disease 2019 (COVID-19),<sup>1,2</sup> given their residential environments and patient vulnerabilities.<sup>3,4</sup> We describe the COVID-19 preparedness of NHs across the nation.

## METHODS

We used a convenience sample of NHs with available email addresses drawn from national surveys conducted in 2013 and 2017<sup>5,6</sup> (N = 942). We used Qualtrics software to email a 30-item survey on March 30, 2020. After two reminder emails, we closed the survey on April 5, 2020.

## RESULTS

Fifty-six NHs responded nationwide, including respondents from 29 states: Midwest (30%), West (25%), Northeast (23%), and South (22%). Most were for profit (68%), with fewer nonprofit (27%) and government owned (5%). Some (38%) were part of a chain. The sample distribution by ownership was similar to the nation. By region, the Northeast and West, two of the regions hit hard and early by COVID-19, were overrepresented. Nationally, 58% were part of a NH chain (Table 1).

## Guidance and Preparedness

On average, NHs used two to five guidance documents for COVID-19. The most common were: Center for Disease

Control and Prevention (88%), state or local health departments (84%), corporate (53%), World Health Organization (48%), local hospital/healthcare organization (39%), and the Association for Professionals in Infection Prevention and Epidemiology (27%). Staff responsible for preparedness most often included infection preventionists (39%), directors of nursing (32%), and administrators (27%).

Slightly more than half of NHS (54%) had separate COVID-19 plans, and others included COVID-19 in their current disaster preparedness plan (46%). All had: plans for training staff to address COVID-19 (100%), processes to limit/restrict visitors (100%) and outside vendors/consultants (100%), policies regarding ill employees returning to work (100%), and guidance for employees regarding COVID-19 outbreak (100%). Almost all (96%) had policies for screening visitors. Some (29%) conducted COVID-19 outbreak simulations.

NHs reported clear lines of communication and relationships with hospitals. Most (68%) indicated they had a local referral hospital accepting their patients under investigation for COVID-19. Most indicated clear lines of communication with public health officials (96%) and nearby hospitals (87%) regarding their role in containing/managing the pandemic. One-fourth (25%) indicated they were counted on as an alternative care site for hospitalized COVID-19 patients, and more than three-fourths (79%) were accepting non-COVID-19 patients as hospital overflow. Few (18%) planned to discharge residents to free beds for hospital patients.

## Testing, Supplies, and Staffing

Two-thirds reported access to COVID-19 testing (66%), with testing available for patients (100%) and some staff (53%). Nearly three-fourths (72%), however, reported having inadequate supplies. Among those were N-95 respirators (90%), gowns (90%), face guards/eye protection

**Table 1. Nursing Home Characteristics, by Survey Sample and the Nation**

	Survey Sample,	National Sample,
Characteristic	%	%
Region <sup>a</sup>		
Midwest	30.36	32.85
Northeast	23.21	16.55
South	21.43	35.21
West	25.00	15.39
Ownership <sup>a</sup>		
For profit	67.86	70.07
Government	5.36	6.49
Nonprofit	26.79	23.44
Chain facility <sup>b</sup>	37.50	58.30

<sup>a</sup>Region and ownership at the national level were calculated from Centers for Medicare and Medicaid Services' Nursing Home Compare data, updated March 31, 2020. Accessed on April 17, 2020. <https://data.medicare.gov/Nursing-Home-Compare/Provider-Info/4pq5-n9py>.

<sup>b</sup>Chain management at the national level was calculated from 2017 Certification and Survey Provider Enhanced Reports. Accessed on April 17, 2020. <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Skilled-Nursing-Facility-Quality-Reporting-Program/SNF-Quality-Reporting-Program-Public-Reporting>.

(88%), alcohol-based sanitizer (67%), surgical masks (64%), and gloves (39%). Five-sixths (83%) expected significant staff shortages. Common strategies to address staff shortages included having staff volunteer for extended hours (55%) and nonclinical staff filling different roles (45%). Less common were using contracted/agency staff (19%) and mandating extended hours (16%).

When asked their greatest COVID-19 preparedness concern, administrators cited lack of supplies (43%), staff shortage (34%), and resident health and safety (14%).

Equipment concerns typically related to availability of personal protective equipment (PPE) (29%), including N-95 masks and respirators, face shields, and plastic zipper tents. One administrator lamented, “*Not having enough PPE to keep up with a COVID-19 outbreak and sufficient staffing if staff become ill.*” Another noted, “*Not enough available supplies for staff, such as an N-95 masks or respirators or face shields; now we are using cotton-made face masks and...sanitary pads as an additional barrier.*”

Staff shortages focused on licensed staff. One cited, “*Licensed staffing availability, specifically RN/LPN [registered nurse/licensed practical nurse] are hard to recruit in our market. We have plenty of nonlicensed staff.*” Another cited, “*Not enough staff to deal with the increased needs of patient[s].*”

### Financial Effects

Few NHs indicated the COVID-19 financial impact was unknown (14%) or nil (13%). Most indicated increased costs for supplies (58%) and employee hours (38%), or fewer admissions (27%). One administrator said, “*Employee fears are affecting call-ins and the ability to replace staff on the floor, resulting in increased overtime.*” Another noted “social distance” requirements meant more staff time was needed to serve meals. Several noted postponement of elective surgeries led to fewer admissions for postsurgery rehabilitation.

### DISCUSSION

NHs are having trouble responding to the COVID-19 pandemic, despite Medicare and Medicaid changes that have recently increased infection prevention infrastructure.<sup>7</sup> Our national results are similar to a survey of Michigan NHs,<sup>8</sup> demonstrating the extent of this problem. Our small sample means we can only offer descriptive results. Nevertheless, our results do indicate the need for NHs to continue refining their preparedness strategies in response to local virus prevalence, resident population, and local regulations, including state policies on accepting COVID-19 patients discharged from hospitals.

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**Author Contributions:** Denise Quigley, Lona Mody, and Patricia Stone formulated the study concept and design, analyzed the data, prepared the manuscript, and worked with Mansi Agarwal, who administered the survey and drafted the table, along with Andrew Dick, Patricia Stone, and Karen Jones, who helped in the interpretation of the data and final drafting of the manuscript. Lynn Polite assisted with formatting and submission of the documents.

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## COMMENTS

### Comment on: Coronavirus 2019 in Geriatrics and Long-Term Care: The ABCDs of COVID-19

*To the Editor:* I applaud Drs D'Adamo, Yoshikawa, and Ouslander's excellent article on the ABCDs of managing the

coronavirus disease 2019 (COVID-19) epidemic in long-term care.<sup>1</sup> A critically important decision that requires additional examination is transferring a resident to a hospital. Clinicians and nursing staff must be prepared to engage in a forthright discussion about the risks and benefits of a hospital transfer. I am especially concerned for those residents with advanced dementia, who likely will not benefit from hospital transfers. Simply obtaining a code status and writing do not resuscitate orders are not enough because it only addresses the care that is not going to be provided. Instead, proxy decision makers should be offered a meaningful alternative, which I call intensive individualized comfort care (IICC).<sup>2</sup> IICC is a mode of care in which the entire healthcare team



#### Hospital Care

The hospital has services we cannot provide here at the nursing home, such as surgery, intensive care units, and ventilators.

*If the resident has advanced dementia you could add: Because your loved one has advanced dementia she/he is unlikely to survive even with these services. If she/he is to survive, it will not improve her/his dementia.*

There are also risks of going to the hospital. The risks include:

- It can be stressful
- Unfamiliar medical staff and surroundings
- Risk for skin breakdown and falls
- Exposure to infections



#### Intensive Individualized Comfort Care (IICC)

Another option is to keep your loved one here in the nursing home, and we will provide **intensive individualized comfort care**. Intensive individualized comfort care is a type of care in which our entire team, including the physician and nurse practitioner, work together to ensure that [name of resident] is comfortable and has the best quality of life for as long as possible. We will treat any condition that interferes with [name of resident]'s comfort. We will:

- Address physical aspects of care, including treating symptoms such as pain, shortness of breath, and nausea
- Encourage [name of resident] to eat and drink by offering frequent meals, snacks, and beverages
- Address psychological aspects of care, including anxiety, depression, and confusion
- Provide sensory stimulation, such as music, therapeutic touch, massage, and aromatherapy
- Will keep [name of resident] with familiar surroundings and with familiar staff
- Address spiritual aspects of care by including clergy or prayer



#### End-of-life care / Do not resuscitate (DNR)

If we see that [name of resident] is coming close to death, we will notify you. We will follow the facility's policies regarding allowing you to visit with your loved one. We will do all we can to be sure your loved one is not alone. If [name of resident] dies, we will not do cardiopulmonary resuscitation and try to bring her/him back to life or try to restart her/his heart. We will allow natural death to occur.

**Figure 1.** Sample script to talk about intensive individualized comfort care (IICC). DNR, do not resuscitate.