

LETTERS TO THE EDITOR**RESEARCH****Persistent challenges of COVID-19 in skilled nursing facilities: The administrator perspective****INTRODUCTION**

Skilled nursing facilities (SNFs) have borne enormous burdens from COVID-19, accounting for 40% of COVID-19 deaths in the United States (US).^{1,2} Moreover, SNFs have faced tremendous operational, clinical, and financial hurdles during the pandemic.³⁻¹⁰ Despite broad recognition of such problems, there is little systematic evidence about the experience of SNFs from the perspective of SNF leadership.¹¹ In this study, we assessed SNF administrator views of challenges after the first wave of COVID-19 cases and what they anticipated for the future.

METHODS

We conducted a nationally representative survey of 223 SNF administrators by phone and online, July 22 through September 11, 2020. The sample was drawn from a comprehensive listing of Medicare- or Medicaid-certified SNFs in the United States (Nursing Home Compare). The study was approved as exempt by Harvard TH Chan School of Public Health's Office of Regulatory Affairs and Research Compliance.

The questionnaire included open-ended questions to elicit administrator views of their greatest challenges in the past 30 days and predicted challenges in the event of future COVID-19 waves. It also asked closed-ended questions about issues previously identified as important for resilience: staffing, supplies, and screening.³⁻¹⁰

The completion rate among administrators who could be reached by telephone was 96%; response rate at the SNF level was 23%. To compare respondents to all SNFs with respect to facility characteristics and COVID-19-specific characteristics (e.g., community case counts), the dataset was merged with Medicare COVID-19 Nursing Home Database, the National Institute on Aging-funded LTCFocus.org database, and the *New York Times* coronavirus database. Respondents were similar to all SNFs across characteristics except that respondents were

less likely to be in for-profit facilities (64% vs. 70%). To mitigate non-response bias, we weighted the data by profit status.

RESULTS

The top recent challenge, identified by 52% of administrators, was staffing. More than 40% noted challenges with COVID-19 protocol implementation (46%), including keeping up with changing requirements, and procuring supplies like personal protective equipment (PPE) (41%) (Table 1). More than a quarter noted testing problems (30%) and disruption to communal activities (29%), while few brought up morale (16%) or finances (15%) as the biggest challenges. Approximately two-thirds of administrators (63%) anticipated that staffing would remain among the greatest challenge in future waves and 45% said the same of supplies. Substantially fewer administrators noted other issues.

When asked closed-ended questions, 47% agreed they had staffing shortages, including 15% who said this affected clinical care (data not shown). Shortages occurred despite multiple efforts to extend resources: extending hours at regular (80%) or higher pay (76%); using non-clinical staff for tasks (63%) and per diem contracting (40%). Approximately half (52%) said their facility had a shortage of at least one essential supply identified (e.g., N-95 masks, alcohol-based sanitizer), including 35% who said this impacted quality of care. Substantial fractions said there had been no screening of staff or residents in the past 30 days (27% and 42%, respectively).

When asked what would occur if there were another wave of COVID-19, only a third of administrators (33%) said their facility would be "very likely" to have adequate staffing. The vast majority (85%) said their facility would be "very likely" to have shortages of at least one essential supply. Administrators were more optimistic about screening. Two-thirds (65%) and three-quarters (72%) felt they would be "very likely" to have adequate screening for staff and residents respectively.

TABLE 1 Biggest COVID-19 challenges in past 30 days as viewed by SNF administrators

Challenge	% Respondents saying it was one of biggest challenges in past 30 days	% Respondents predicting it would be one of biggest challenges for next wave of cases
Staffing	52%	63%
Staffing shortages	52%	63%
COVID-19 protocols and requirements	46%	26%
Keeping up with changing requirements	20%	17%
Implementing new protocols and requirements	19%	5%
Staff education and protocol adherence	14%	5%
Supplies	41%	45%
Personal protective equipment (PPE)	37%	42%
General and other supplies	6%	7%
Testing	30%	17%
Testing result delays/testing turnaround	13%	8%
Staff testing	7%	2%
Testing supplies	3%	2%
Resident testing	1%	1%
General testing issues	11%	6%
Visitation and communal activities	29%	20%
Loss of visitation or communal activities	17%	11%
Managing visitors and visitation processes	12%	11%
Morale	16%	20%
Resident/patient morale	12%	14%
Staff morale	9%	14%
Finances	15%	14%
Financial challenges and new expenses	11%	10%
Census	8%	9%
Other	16%	17%
COVID spread or rates in the community	8%	9%
Clinical decline of residents	2%	1%
Other	7%	8%

Note: Responses of “do not know” or refusals on any question were <3%. SNFs could suggest any number of sub-categories (non-shaded rows), therefore the items within each larger category (Staffing, COVID-19 Protocols and Requirements, Supplies, Testing, Visitation and Communal Activities, Morale, Finances and Other) may not add up to the sum of their component sub-categories.

DISCUSSION

Results show that even months into the pandemic, many administrators felt SNFs faced problems across multiple domains and these would likely continue. These findings suggest that policy to date has not adequately supported SNFs during COVID-19 and improvements are needed.

Administrator views would suggest the first policy priority is to retain SNF staff, a long-standing challenge exacerbated by COVID-19.^{12,13} Possible approaches include using federal relief funds for staff hazard pay, updating regulations to enable surge staffing pools for COVID-19 hot spots, and providing targeted support to SNFs with outbreaks to help control spread among staff and residents. A second priority is to address gaps in supplies. A possible approach includes a national, centralized strategy for SNF PPE procurement. Third, respondents called for keeping new policies and regulations as clear, consistent and coordinated as possible in order to relieve SNFs from excessive administrative burdens while they try to focus on clinical care. Such conclusions are consistent with prior policy discussions but highlight the perspective of administrators.^{4,14,15}

Study limitations include smaller sample size, the risk of non-response bias, and social desirability bias in responses. Nonetheless, results provide a novel and important perspective for SNF policy discussions.

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CONFLICT OF INTEREST

Gillian SteelFisher's husband is a minority owner of a company that does consulting work for Eli Lilly. David Grabowski serves as a paid consultant to Vivacitas and CareLinx.


AUTHOR CONTRIBUTIONS

All authors have read and approved of the submission of this manuscript. All authors contributed to the study design and concept, as well as the acquisition, analysis and interpretation of data. Gillian K. SteelFisher and Michael L. Barnett drafted the manuscript. All authors contributed to critical revisions of the manuscript for intellectual content. Michael

L. Barnett was responsible for statistical analysis, alongside the independent survey fielding firm, SSRS. Michael L. Barnett obtained funding and provided study supervision.

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REFERENCES

1. State Data and Policy Actions to Address Coronavirus. Henry J Kais. *Fam. Found.* 2020; <https://www.kff.org/coronavirus-covid-19/issue-brief/state-data-and-policy-actions-to-address-coronavirus/>. Accessed January 14, 2020.
2. Centers for Disease Control and Prevention. *CDC COVID Data Tracker* [Internet. Atlanta, GA: CDC; [updated December

- 7, 2020; cited December 8, 2020. <https://covid.cdc.gov/covid-data-tracker/index.html#demographics>.
3. Barnett ML, Grabowski DC. Nursing homes are ground zero for COVID-19 pandemic. *JAMA Health Forum*. 2020;1(3):e200369-e200369.
 4. Ouslander JG, Grabowski DC. COVID-19 in nursing homes: calming the perfect storm. *J Am Geriatr Soc*. 2020;68(10):2153-2162. <https://doi.org/10.1111/jgs.16784>. Epub 2020 Sep 2 PMID: 32735036.
 5. Gorges RJ, Konetzka RT. Staffing levels and COVID-19 cases and outbreaks in U.S. nursing homes. *J Am Geriatr Soc*. 2020;68(11):2462-2466. <https://doi.org/10.1111/jgs.16787> Epub 2020 Aug 28. PMID: 32770832; PMCID: PMC7436613.
 6. McGarry BE, Grabowski DC, Barnett ML. Severe staffing and personal protective equipment shortages faced by nursing homes during the COVID-19 pandemic. *Health Aff (Millwood)*. 2020;39(10):1812-1821. <https://doi.org/10.1377/hlthaff.2020.01269> Epub 2020 Aug 20. PMID: 32816600; PMCID: PMC7598889.
 7. Frosh D. Covid-19 testing is hampered by shortages of critical ingredient; lack of reagents is forcing health systems to limit who can get tested and end community testing programs. *Wall Street J* (Online) Retrieved from <http://search.proquest.com.ezp-prod1.hul.harvard.edu/newspapers/covid-19-testing-is-hampered-shortages-critical/docview/2444583689/se-2?accountid=11311>.
 8. McGarry BE, SteelFisher GK, Grabowski DC, Barnett ML. COVID-19 test result turnaround time for residents and staff in US nursing homes. *JAMA Intern Med*. 2020;e207330. <https://doi.org/10.1001/jamainternmed.2020.7330> Epub ahead of print. PMID: 33125044; PMCID: PMC7600050.
 9. Grabowski DC, Joynt Maddox KE. Postacute care preparedness for COVID-19: thinking ahead. *Jama*. 2020;323(20):2007-2008. <https://doi.org/10.1001/jama.2020.4686> PMID: 32211831.
 10. Barnett ML, Hu L, Martin T, Grabowski DC. Mortality, admissions, and patient census at SNFs in 3 US cities during the COVID-19 pandemic. *JAMA*. 2020;324(5):507-509. <https://doi.org/10.1001/jama.2020.11642> PMID: 32579161; PMCID: PMC7315390.
 11. White EM, Wetle TF, Reddy A, Baier RR. Front-line nursing home staff experiences during the COVID-19 pandemic. *J Am Med Dir Assoc*. 2021;22(1):199-203.
 12. Kirkham C, Lesser B. Special Report: Pandemic exposes systemic staffing problems at U.S. nursing homes. Reuters [Internet]. 2020 [cited December 8, 2020]; Health news: [about 19 p.]. <https://www.reuters.com/article/us-health-coronavirus-nursinghomes-speci/special-report-pandemic-exposes-systemic-staffing-problems-at-u-s-nursing-homes-idUSKBN23H1L9>
 13. National Citizens' Coalition for Nursing Home Reform. The nurse staffing crisis in nursing homes – consensus statement for the campaign for quality care [Internet]. 2001; [cited 2020 December 8, 2020]. 4 p. https://theconsumervoice.org/uploads/files/issues/Consensus_Statement_Staffing.pdf.
 14. Caring for Seniors Amid the COVID-19 Crisis: Hearing Before the Senate Special Committee on Aging, 116th Cong., 2d Sess. (May 21, 2020). Testimony of R. Tamara Konetzka, PhD [Internet]. <https://covid.cdc.gov/covid-data-tracker/index.html#demographics>.
 15. Powell T, Bellin E, Ehrlich AR. Older adults and Covid-19: the most vulnerable, the hardest hit. *Hastings Cent Rep*. 2020 May;50(3):61-63. <https://doi.org/10.1002/hast.1136> PMID: 32596888.

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Role and impact of interdisciplinary rehabilitation in an acute COVID-19 recovery unit

INTRODUCTION

The ongoing coronavirus-2019 (COVID-19) pandemic has challenged healthcare systems to create innovative models of care to maximize bed availability and provide stepped-down care for patients who are medically stable with continued acute care needs. Older adults are disproportionately hospitalized and die from COVID-19.¹ As such, older adults are more vulnerable to greater hospital-associated declines in function, which hold implications for rehospitalizations, long-term disability, and community living.²⁻⁴ To address these needs, the Minneapolis Veterans Affairs (VA) Healthcare System converted an inpatient unit into a 12–18 bed COVID-19 Rehabilitation Unit (CRU) similar to that described by Sohn et al.⁵ The purpose of this letter is to expand upon the description provided elsewhere⁵ to outline rehabilitation staffing and

preliminary data on outcomes. Our facility's ability to rapidly address the needs of patients and the healthcare system demonstrates a model for innovative, future approaches to addressing healthcare challenges.

REHABILITATION STAFFING: STRUCTURES, RESPONSIBILITIES, AND IMPLICATIONS

The rehabilitation team consists of medical providers (two medical providers at a time [five total in the rotation], nurses [4–5 day/evening and 3–4 overnight]), physical therapists (PTs, two full-time and two alternates), occupational therapists (OTs, two full-time and two alternates), speech language pathologists (SLP, two), a respiratory therapist, a dietician, two psychologists, social workers