RESEARCH ARTICLE



Perspectives of nursing home administrators across the United States during the COVID-19 pandemic

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Abstract

Objective: To characterize the experiences of nursing home administrators as they manage facilities across the United States during the COVID-19 pandemic.

Data Sources and Study Setting: We conducted 156 interviews, consisting of four repeated interviews with administrators from 40 nursing homes in eight health care markets across the country from July 2020 through December 2021.

Study Design: We subjected the interview transcripts to a rigorous qualitative analysis to identify overarching themes using a modified grounded theory approach to applied thematic analysis.

Data Collection Methods: In-depth, semi-structured qualitative interviews were conducted virtually or by phone, and audio-recorded, with participants' consent. Audio recordings were transcribed.

Principal Findings: Interviews with nursing home administrators revealed a number of important cross-cutting themes. In interviewing each facility's administrator four times over the course of the pandemic, we heard perspectives regarding the stages of the pandemic, and how they varied by the facility and changed over time. We also heard how policies implemented by federal, state, and local governments to respond to COVID-19 were frequently changing, confusing, and conflicting. Administrators described the effect of COVID-19 and efforts to mitigate it on residents, including how restrictions on activities, communal dining, and visitation resulted in cognitive decline, depression, and weight loss. Administrators also discussed the impact of COVID-19 on staff and staffing levels, reporting widespread challenges in keeping facilities staffed as well as strategies used to hire and retain staff. Administrators described concerns for the sustainability of the nursing home industry resulting from the substantial costs and pressures associated with responding to COVID-19, the reductions in revenue, and the negative impact of how nursing homes appeared in the media.

Conclusions: Findings from our research reflect nursing home administrator perspectives regarding challenges operating during COVID-19 and have substantial implications for policy and practice.

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KEYWORDS

COVID-19, nursing homes, pandemic, qualitative, residents, skilled nursing facilities, staffing

What is known on this topic

- COVID-19 has had an enormous negative impact on nursing homes, their staff, and their
- · Existing research is largely quantitative and does not capture the depth of experiences and perspectives regarding the COVID-19 crisis in nursing homes.
- Our research helps to fill this gap through repeated, semi-structured, in-depth interviews with nursing home administrators across the country, conducted over the course of the pandemic.

What this study adds

- Through 156 repeated interviews with 40 nursing home administrators around the country, we learned about the daily and persistent challenges nursing homes faced and the strategies used to respond to COVID-19.
- Administrators discussed challenges in implementing governmental policies and expressed a need for additional support and resources, collaborative relationships with policymakers, and a place at the table in decision-making.
- · Administrators described concerns for the sustainability of the nursing home industry due to costs associated with responding to COVID-19, reductions in revenue, and negative portrayal of nursing homes by the media.

INTRODUCTION

The COVID-19 pandemic has had a devastating impact on United States nursing homes. As of October 2022, more than 1.2 million nursing home residents had confirmed cases of COVID-19. of whom over 158,000 have died. 1-3 Increased resident isolation due to infection control measures, 4,5 such as halting family visitation and stopping communal dining and activities, contributed to resident weight loss, depression, and cognitive decline.⁶

Further, nursing homes have been impacted by severe staff shortages.⁷⁻⁹ Despite receiving the largest relative increase in wages compared to other health care providers, nearly 400,000 workers left the nursing home setting since COVID-19 appeared in the United States. 10,11 Many facilities were unable to obtain personal protective equipment (PPE) or provide adequate rapid testing to protect their workforce, 12 with a resulting approximately 2750 nursing home staff losing their lives during the pandemic, making nursing home worker the most dangerous job in America in the year 2020. 13

Facilities have also experienced a significant decline in the resident census. Nursing homes depend on short-stay Medicare patients to cross-subsidize long-stay Medicaid residents, but these post-acute patients have not yet returned to nursing homes. Occupancy rates fell from 85% pre-COVID-19 to 74% as of September 2021.14 Nursing homes benefitted from short-term revenue during the pandemic including COVID relief funds, the Paycheck Protection Program, and public health emergency waivers, 15 but these funding sources will likely not be permanent. Although nursing home closures were rising prior to the pandemic, 16,17 the pace with which nursing homes closed during the pandemic has accelerated, 18 and it is projected that nationwide an additional 400 nursing homes will close in 2022, impacting nearly 13,000 residents. 19,20

Research documenting the impact of the pandemic to date is largely quantitative, relies on one-time surveys with nursing home administrators or staff, or is limited to one location. 21-23 Beyond what we know from existing quantitative research, this knowledge does not capture the actual and potential depth of experiences and perspectives of the COVID-19 crisis in nursing homes. Our qualitative research helps to fill this gap, through repeated, semi-structured, indepth interviews with nursing home administrators across the country, conducted over the course of the pandemic. Findings from our research in the form of common themes across facilities reflect important nursing home administrator perspectives. The themes that are described in this paper augment previous staff perspectives and quantitative findings regarding the serious challenges and the innovative strategic responses operating during COVID-19.

METHODS

In this paper, we present findings from an extensive qualitative study of nursing homes during the pandemic. This included 156 total interviews, made up of four repeated interviews with administrators at 40 nursing homes in eight health care markets across the United States.



2.1 | Market selection, nursing home selection

Markets were selected to reflect different nursing home utilization patterns. We used the Hospital Referral Region (HRR) table from the Centers for Medicare and Medicaid Services (CMS) 2017 Geographic Variation Public Use File to identify all beneficiaries and the percent of Medicare beneficiaries within an HRR that had any post-acute nursing home use in the year. This population-level measure of nursing home use incorporates a region's propensity to use skilled nursing facility care and rank orders HRRs to identify areas with varying rates of nursing home use. HRRs were separated into four categories of nursing home utilization: HRRs 1–75 (nursing home use ranged from 1.36% to 4.03%), 76–150 (4.04% to 4.67%), 151–225 (4.68% to 5.37%), 225–306 (5.38% to 7.44%). Two markets from each of these four categories (8 markets total) of nursing home utilization in different geographic areas were selected.

Using 2018 data from the Certification and Survey Provider Enhanced Reporting (CASPER) system, a list of every nursing home in the eight selected markets, and each facility's unadjusted bed count, percent of Medicare-paid patients, and for-profit status was generated. Nursing homes were identified in CASPER by a federal provider number, which was used to link the facility's overall quality star rating (1–5), which is publicly reported by CMS.²⁵ Nursing homes were excluded if they had fewer than 50 beds or fewer than 5% of their patients paid for by Medicare. From each HRR, five nursing homes were selected for qualitative interviews with administrators that varied in quality, size, payer mix, and profit status.

2.2 | Recruitment

As noted, five nursing homes in each of the eight markets were selected. Administrators' contact information was gathered through Google searches, nursing home websites, and cold calls. Administrators self-identified were identified by the receptionist/facility staff or were identified as the administrator on the facility website. We recruited participants via email, requesting participation in four virtual or telephone interviews of 1 h each. In instances where the participant left the facility between interviews, we made a concerted effort to interview the new administrator to follow the nursing home over the course of the project. Recruitment materials and the interview protocol were sent to the Brown University IRB for review and determined to not be human subjects' research. For additional information about recruitment and retention rates, see Supplement S1.

2.3 Interview protocol design and piloting

The qualitative team developed an interview guide with questions designed to elicit administrator perspectives on the impact of the COVID-19 pandemic on nursing home residents, families, and staff, strategies used to respond to COVID-19 in nursing homes, and the role of policy in infection control, among other topics. Three cognitive

interviews to test the interview guide were conducted to test question flow, clarity, and comprehension. Based on these interviews, we revised the interview guide to enhance the flow of question order, clarify question probes, and improve introductory and segue verbiage. We then conducted pilot interviews with three nursing home administrators to further test question flow, clarity, and response depth. Final revisions were then made to the interview guide. See Supplement S2 for the interview guide.

2.4 | Interview procedures

Participants were recruited between April 2020 and April 2021. Interviews were conducted between July 2020 and December 2021, were approximately 60 min in length, and occurred virtually or by phone, depending on participants' preferences, from locations of the participants' choosing. Only the interview participant and researchers were present for the interviews. At the beginning of each interview, participants gave consent to audio record the interview. At the end of each interview, the lead interviewer scheduled the next interview for 3 months in the future. A total of four interviews per facility were completed. Audio files were professionally transcribed, then reviewed, corrected, and de-identified by qualitative team members.

Prior to the third interview, a summary of the researchers' interpretations of findings to date was shared with each participant. During the third interview, participants were asked their thoughts on this summary, including if the researchers had appropriately interpreted what they heard, if the participants agreed or disagreed with the findings and if participants had any edits or additions to the summary. Participants overwhelmingly approved of the summary.

Two qualitative team members participated in each interview: one conducted the interview while the other took detailed notes. Interview summaries were written, reviewed, and reconciled by both interviewers before sharing them with the entire project team. Including two qualitative team members in each interview maximized the consistency of observations, consistency across multiple interviews (at least one team member was present for all four interviews with a participant), and consistency in adherence to the interview protocol.

Our goal was to conduct four interviews in each facility. To appropriately recognize that the COVID-19 pandemic created an unprecedented, stressful time to work in the nursing home industry with increased pressure on administrators and consequently greater demands on their time, we designed stepwise increases in compensation for each completed interview. Incentives were sent as e-gift cards at the completion of each interview to the participant's preferred email.

2.5 | Research team and reflexivity

Four team members conducted the interviews (EG, RS, AM, and JB). These included two PhD-level faculty members and two Master's level research staff. All interviewers are female and had between

5 and 35 years of experience in conducting qualitative research. The researchers did not have relationships with interview participants prior to the first interview, although working relationships were built over the course of the four interviews, conducted over a one-year period. The purpose of the research was shared with interview participants during recruitment and at the start of each interview.

2.6 | Analysis

We qualitatively analyzed the interviews to identify overarching themes using a modified grounded theory approach to applied thematic analysis.²⁶ A preliminary coding scheme based on interview questions was initially developed and subsequently discussed and adjusted in an iterative fashion to add/delete codes and refine code definitions. Four researchers (EG, RS, AM, and JB) independently coded interview transcripts and met in pairs once per week to reconcile coding differences and identify overarching themes. The members of each coding pair rotated to ensure rigor and coding consistency throughout the analysis phase. After 84 transcripts were reconciled using these methods, we confirmed a high level of coding agreement among analysts. We then divided the remaining transcripts such that 54 were individually coded by one member of the team and 18 were still coded by rotating pairs. During analysis, we kept a comprehensive audit trail to record team decisions, questions and comments, code definitions, and emerging themes.²⁷ During the analysis, it was determined that saturation was achieved. Coded data were entered into the qualitative software package NVivo Version 12 Plus (QSR International) to facilitate comparative analyses across themes.

3 | RESULTS

We conducted 156 total interviews in 40 nursing homes across the country between July 2020 and December 2021. These included 10 facilities in the Northeast, 15 in the South, five in the Midwest, and 10 in the West (see Supplement S3). Facilities varied in their 5-star rating, with six facilities with one star, 10 facilities with two stars, eight facilities with three stars, eight facilities with four stars, and eight facilities with five stars. Twenty-eight facilities were forprofit and 12 were not-for-profit. Facilities also varied in size and in the percentage of residents for whom the facility was paid by Medicare. Administrators self-reported a range of education and backgrounds, including registered nurse, certified nursing assistant, master of business administration, social worker, finance, marketing, health care administration, and public administration, among others. Experience ranged from several months to over 30 years.

Interviews with nursing home administrators revealed a number of important themes. In talking to administrators several times over the course of the pandemic, we heard perspectives regarding the stages of the pandemic and how they varied over time. We also heard how policies implemented by federal, state, and local governments to respond to COVID-19 were frequently changing, confusing, and conflicting. Although

perceptions about these policies shifted throughout the pandemic, this and the subsequent themes report on overall takeaway points. Across interviews, administrators described the effect of COVID-19 and efforts to mitigate it on residents, including how restrictions on activities, communal dining, and visitation resulted in cognitive decline, depression, and weight loss. Administrators also discussed the impact of COVID-19 on staff and staffing levels, reporting widespread challenges in keeping facilities staffed as well as commenting on strategies to hire and retain staff. Administrators described concerns for the sustainability of the nursing home industry resulting from the substantial costs associated with responding to COVID-19, the reductions in revenue, and the negative impact of how nursing homes appeared in the media. These themes and representative quotes are explored below.

3.1 | Theme 1: Administrators described several stages of the COVID-19 pandemic and how COVID-19 was experienced in nursing homes over time

Administrators described the experience of managing a nursing home throughout the course of the pandemic. These are roughly divided into four stages, as we heard this entire experience was fluid and varied. At the start of the pandemic, administrators reported an initial shock marked by fear and confusion, and frequently changing and conflicting policies and regulations. The phrase "the new normal" (S7N1.1, September 2020, South, <100 beds, Star rating 4, Not for profit) was used to describe the second stage when administrators noted that residents, staff, and families began to adjust to life with COVID-19, albeit with more masking and distancing. In cases of a second outbreak, many administrators described increased confidence in knowing how to respond. Administrators discussed the third stage of the pandemic as marked by the approval of vaccinations for emergency use and their distribution to nursing homes. Administrators also used the phrase "a light at the end of the tunnel" (S3N3.2, April 2021, South, 126-150 beds, Star rating 2, For profit) as vaccination rates increased and morale began to improve. When variants of COVID-19 continued, even after the availability of vaccinations, administrators then described a fourth stage marked by a dimming of hope and caregiver fatigue. In a final interview, one administrator noted: "We survive it hour-by-hour. It used to be day-by-day. Now, it's hour-byhour." (S3N4.4, November 2021, South, <100 beds, Star rating 3, For-profit) Despite the reported challenges, administrator participants expressed the importance of maintaining a positive outlook in order to provide the highest level of care for residents through all the stages of COVID-19. For additional representative quotes, see Table 1.

3.2 | Theme 2: Administrators reported challenges associated with changing, confusing, and conflicting governmental policies

Interview participants described how policies and guidelines from the federal, state, and local levels were frequently changing, confusing,



TABLE 1 Administrators described several stages of the COVID-19 pandemic.

Concept	Representative quote, nursing home characteristics
Initial Stage: Fear & confusion	"I think in the very beginning everybody was afraid. I think we just did not know what this COVID-19 virus was like. We just did not know because the only thing we would hear from is from the news, and, 'This is the scariest pandemic we have ever faced and if you get it and you could be young and healthy, you could die,' and what have you." S8N3.1, October 2020, West, 151+ beds, Star rating 5, For profit
Initial Stage: Frequent changes	"People need to understand that in the beginning, nursing homeswere being told to do different things every other week." S2N3.3, April 2021, Northeast, $151+$ beds, Star rating 1, For profit
Second stage: "The new normal"	"Of course, we have to wear PPE that we were not regularly wearing before, so masks at all timesOverall, though, I feel like, as this has gone on over the months, we have hit a bit of an adjustment phase to it where this is kind of our new normal, but certainly at the beginning, there was a heightened sense of anxiety and fear." S7N1.1, September 2020, South, <100 beds, Star rating 4, Not for profit
Second stage: Second outbreak	"I think having stockpiles of really anything has become our new norm. I hate that word, new norm. But, it's just weird. It's like, 'Okay, it's new, it's not the norm.' [laughs] But, I think I feel well prepared. As I said before, I felt well supported by the company, because they worked hard to procure a stockpile of PPE for us, hand hygiene, sanitizers, you know, whatever we needed to get, they got. And, we have a whole dedicated room, like a room out of service, that is nothing but precautions, PPE, sanitizer, face shields, everything that we would need like you know for an outbreak. So, I feel like we are well prepared, and I feel like we have a good system." S2N4.4, August 2021, Northeast, 151+ beds, Star rating 3, Not for profit
Third stage: Availability of vaccinations	"We just got our second dose of the vaccine, Monday. So I think overall you are starting to see a turn for the better among the attitude of the staff." S3N2.2, January 2021, South, 100–125 beds, Star rating 5, Not for profit
Third stage: "A light at the end of the tunnel"	"It seems since the vaccine, since the clinic, it seems that we have been allowed to kind of take a breath. Things are more encouraging than they were at this time last year, of course, like a light at the end of the tunnel." S3N3.2, April 2021, South, 126–150 beds, Star rating 2, For profit.
Fourth stage: COVID variants dim hope	"We had gone a year with no COVID-positive patients so we had a good experience, but then the Delta variant really hit us hard and we had 80 residents who tested positiveroughly, 97% were vaccinated." S6N2rep.3, September 2021, South, 100–125 beds, Star rating 5, For profit
Fourth stage: Caregiver fatigue	"When you are in it and working through it, sometimes you do not even have time to stop and think or reflect, and that's what's happening to a lot of us is that we are just doing itWhen I had time to reflect on it, I came back and realized how much it had affected morale. People are just tired of caring and tired of doing and tired of just being in health care nowadays because everything is just so consuming." S4N2.4, September 2021, Midwest, <100 beds, Star rating 5, Not for profit
All stages: Perseverance	"You've got corporate demanding things and expectations from, you have got the state and federal government demanding expectations and stuff, you have got family membersYou've got residents who are just, 'I do not want to be here' And then you got staff who are: 'I cannot take more, this work is too hard.' If you cannot take all that, because it's very negative sometimes, and if you cannot try to turn that into a positive, you have got to be, 'I see the glass half full, not half empty,' because if you see it half empty, you are going to empty your whole pitcher. And you know as well as I do this, that you got to keep your pitcher full so that you can take care of others, and it really is. You got to be able to have that temperament to where that they are not going to get to you." S7N4.4, September 2021, South, 151+ beds, Star rating 3, For profit)

and conflicting, especially at the beginning of the pandemic. As one administrator said "There's always changes. Let's just put it that way. There's consistent policy changes." (S2N4.4v1, August 2021, Northeast, 151+ beds, Star rating 3, Not for profit) As the policies were changing quickly, sometimes new policies were announced with insufficient time to implement them properly. Administrators reported that occasionally, new policies or regulations were "operationally impossible," (S2N3.3, April 2021, Northeast, 151+ beds, Star rating 1, For profit) due to the reported perception that those creating or enforcing the policies were trying to make quick decisions during times of uncertainty and that some policy-makers lacked current nursing home experience. Administrators described that those enforcing the policies, namely state surveyors, were more punitive than collaborative. Administrators also reported that the pace of changes caused difficulty in keeping families, residents, and staff updated

regarding the latest policies. One administrator noted a wish for more communication among different regulatory agencies:

I think as far as CMS and our local health department authorities...their communication with each other, there has to be some sort of improvement with that. The frustration that I know I personally felt and others in the industry with me, obviously about just not having a clear set guideline of this is what you need to do, and this is what is widely acceptable for you to do. To be held accountable for a few different standards is very frustrating, so some change to their communication strategies would be helpful. (S7N1.4, June 2021, South, <100 beds, Star rating 4, Not-for-profit)

TABLE 2 Administrators reported challenges associated with governmental policies.

Concept	Representative quote, nursing home characteristics
Confusing and conflicting policies	"It gets a little confusing in that [state] Department of Public Health regulations may be a little bit different than the CMS regulations, so even though where the confusion comes in is if some [state] regulations are not as stringent as the CMS regulations, we are supposed to follow the CMS regulations." S2N2.3, April 2021, Northeast, 151+ beds, Star rating 5, For profit
Insufficient time to implement policies properly	"The biggest disconnect is that often the guidance gets released to the public or like a governor spews it out in a press conference prior to the nursing homes being made aware, or we get to find out at the same time. And then everybody still has that sense of urgency to scurry around and update their practices so we are being compliant and that still feels chaotic." S6N1.4admin2, June 2021, South, 126–150 beds, Star rating 4, Not for profit
Perception that policymakers did not have current nursing home experience	"We have that state call everyWednesday at 11:00. They talk about changes and they talk about how things should be, but none of them have a clue what it's like to really work in COVIDBecause they are all working from home when they are on the Zoom call. They're all in their living rooms or their bedrooms. [laughs] It's kind of hard to know what's going on in the real world when you sit in your home all the time." S3N4.1, January 2021, South, <100 beds, Star rating 3, For profit
Regulators more punitive than collaborative	"And I think that's been the frustration all along is, all we hear from the Department of Health is how we are here to support you, but they are not. They come in here and do not tell us anything and then try to write tags about it." S4N4.2, January 2021, Midwest, 151+ beds, Star rating 3, Not for profit
Difficult to communicate policy changes	"Updating policies almost weekly, daily, monopolizes our time, because then we have to turn around and write letters to families and send that out. And then the next week we are like, 'Oh, my god, this has changed,' and then we send that out to families that there's another change. Nobody can keep up, and family members get upset with us it does make our relationships with family members really strained and adversarial. It's created quite a wedge between the relationships we used to have with families and residentsand it's going to take a while to repair that." S6N1.3admin2, March 2021, South, 126–150 beds, Star rating 4, Not for profit
Corporations helped interpret policy changes	"We just have one person for the company that takes the time to [join the weekly calls with the Department of Health] and then disseminates it to us instead of every facility being consumed for that 2 h, and multiple people from the facility, and that has really helped- It takes the noise out of it. Or I interpret it one way and my director of nursing interprets is another. It stopped that." S4N3.1, October 2020, Midwest, 100–125 beds, Star rating 1, For profit

Fortunately, if an administrator had questions about what to do in a given situation, at least one helpful person was usually available to provide answers based on the latest information available. For some, this help was found at the local Department of Health, although nursing homes that were part of a larger corporation were often able to rely on their corporation to interpret and answer questions about policy changes. For representative quotes, see Table 2.

3.3 | Theme 3: Nursing home administrators noted profound negative outcomes of the pandemic on resident wellbeing

In addition to frequently changing, conflicting, and confusing policies described in the previous theme, nursing home administrators described the substantial negative impacts of the pandemic on nursing home residents. Firstly, residents had to contend with the high incidence of disease burden and mortality, as well as the associated fear and anxiety of being part of a high-risk group, all while they were more isolated from the outside world than usual. Additionally, infection control responses to COVID-19 resulted in significant reductions to activities and socialization, group dining, visitation from friends and family, and access to services such as rehabilitation and behavioral

health support, among others. One administrator summarized this commonly reported perspective:

We're not doing the concerts. And, we're not doing the large gatherings. And, we're not having family and friends come over to visit and be there for birthdays. Even some anniversaries have been missed. You can just see it in the residents' demeanor. And, you can see it in the staffs' demeanor, that we're doing everything that we can, but there is nothing that's going to replace having somebody that you love there, or missing special moments like the birth of a grandchild, or the wedding of a granddaughter or even the funeral of one of your children that we don't and we couldn't allow them to go to. It's heartbreaking. (S3N2.1, October 2020, South, 100-125 beds, Star rating 5, Not for profit)

Nursing home administrators also described residents' feelings of fear and isolation, and physical impacts including cognitive decline, depression, and weight loss. In an effort to mitigate these challenges, interview participants discussed their numerous strategies, including modified and virtual visitation, new and creative activities, and innovative ways to enhance staff and resident morale, and one-on-one



TABLE 3 Nursing home administrators noted negative outcomes of the pandemic on resident wellbeing.

Concept	Representative quote, nursing home characteristics
Outbreaks, negative outcomes for population	"We did have residents here that saw their friends die and at a fast and alarming rate. Where they are still around and those friends have gone, and loss is real." S4N2.4, September 2021, Midwest, <100 beds, Star rating 5, Not for profit
Visitation, activity, dining restrictions and impact on wellbeing	"We've obviously had to put a lot of safeguards into place. So we have no visitations at this point. We only have designated staff that are able to work in our health care unit. They are still restricted as far as not being able to do communal dining, communal activities, group activities. So there's been a major shift for our residents, certainly, as far as the psychosocial point of view." S7N1.1, September 2020, South, <100 beds, Star rating 4, Not for profit
Reduced access to rehabilitation, behavioral health	"There's not the access that there should be. I only have a couple people that are able to meet with somebody because they were already hooked into a system prior to this. So, I still have no means to get my other individuals who I feel could benefit access at this stage There's not enough mental health resources to begin with. Secondly, because they'd be new clients, they would be expected to be like a walk in and to sit there, and I cannot let them do that. They cannot just sit there for five or six hours waiting for somebody not to have shown up for their appointment And for as many advances as we did with telehealththe mental health center has not been able to incorporate those mechanisms into doing an intake via telehealth or Zoom." S1N4.4, April 2021, Northeast, <100 beds, Star rating 2, For profit
Cognitive decline	"I see a change in their mental capacity, or I think some have just failed in general, just not having the same, the routine they had and the social interaction to the level they had it before. And Activities is just trying very hard to do things in the hallway where they can sit outside their door and participate in an event or whateverI think there's signs of depression. Yeah, mobility, yes. However, we do have an in-house therapy team that is really focused on the long-term residents. They actually have a pretty big caseload of folks that they are trying to pick up and work with every day, to make sure they are still moving and grooving and maintaining their functional ability. I mean, I'd say, yes, there's a decline if you look at the population overall. But between therapy services and the limited activities we can do, there is some depression. Luckily we have not had a lot of weight loss, we are not seeing that, but I think a little down in the mood department." S1N3.3, January 2021, Northeast, 100–125 beds, Star rating 5, For profit
Depression, needing to shift mental health services to virtual	"I would have to say COVID-19 has had an immediate impact on our residents' mental health, their engagement with other residents and staff. It has, I do not want to say isolated them, but it has increased our need for mental services, which we contract out. We have a provider for that service. And complicating that even more is we have had to do that very, very important function virtually and, under the circumstances, given the very nature of the intimacy between the therapist and his or her patient, it's been complicated at best to walk around with a tablet and set the resident up, especially if the resident has never used a tablet, that technology before." S2N3.1, October 2020, Northeast, 151+ beds, Star rating 1, For profit
Weight loss	"And then, you know, when you have a COVID outbreak of any kind, even if we have one person, they have to go to their rooms, so they feel isolated. We had to stop the communal dining, so they all had to eat in their rooms our weight loss went up tremendously at that point." S3N4.1, January 2021, South, <100 beds, Star rating 3, For profit
Staff taking on family-like role for residents	"Something we have done more recently is we have a guardian angel program where we have staff that are The message we are trying to give is, be the family for the resident, to the extent that the resident does not have family or does not have family that can come in and visit. We're an extra set of eyes and ears, that type of thing, for the family. Try to take the resident outside, get some fresh air, visit with them, get to know them. Kind of get to know their baseline, and if there's any changes, involve nursing with that so we can detect early if there was any signs of infection or anything. But really more from a psychosocial and a wellbeing standpoint, check in on that resident. And as we do that, they look more forward to those visits, and becomes something that gives them hope and something to look forward to." S6N2rep.1, March 2021, South, 100–125 beds, Star rating 5, For profit

attention from staff, among other initiatives. For representative quotes, see Table 3.

3.4 | Theme 4: Administrators described the impact of the COVID-19 pandemic on staffing, the use of agency to offset staffing shortages, and strategies to retain staff

Administrators noted that the COVID-19 pandemic had a profound impact on their ability to staff their facilities due to high staff turn-over and significant staff shortages. Many staff left the industry due to fear of infection for themselves or their families, others

caught COVID-19 and were out sick for extended periods of time, and still, others retired. Compounding this loss of staff, administrators reported that they were faced with the shutdown of health care training schools and programs which effectively cut off labor source pipelines. Additionally, staffing regulations around infection control forced RNs and CNAs, who typically worked per diem or part-time at multiple facilities, to pick one facility and drop their remaining commitments. In some cases, administrators reported having to limit admissions to meet staffing ratios in response to staffing challenges. Many administrators turned to agencies to offset staffing shortages, some for the first time in their company's history. As this administrator noted, even with agency staff, coverage was difficult:

TABLE 4 Administrators described the impact of the COVID-19 pandemic on staffing.

Concept	Representative quote, nursing home characteristics
Staff leaving the industry and the loss of new staff pipelines	"I would say that three major things happened when COVID hit. One, we ended up having 43 staff members that were sick, recovered, and returned to work. Through the surge, that hindered us a bit. We also had a number of individuals that just turned and ran for the hills. They were so afraid of catching it'I live with an asthmatic,' 'I'm an asthmatic,' 'I live with my grandparents,' whatever the reason, people just up and quit. And we lost probably, I would say, 15% of our front line to that. And so that was difficult for us. And then the third way that it impacted is the pipeline, the existing pipelines for new staff that we depended on, especially for CNAs, that just dried up overnight because all the schools were shut down." S2N3.1, October 2020, Northeast, 151+ beds, Star rating 1, For profit
Staff retiring	"So what's happened is you have had people leave health care. Part of it is your older people who were close to retirement, COVID kind of pushed them over the edge to say, 'I'm done. I'm not going to expose myself to this.'" S1N5.4, July 2021. Northeast. <100 beds, Star rating 4, For profit
Rules and regulations around infection control impacting staff retention	"In the beginning, the staff were just as dumbfounded as I was. People that work at other facilities, most CNAs have two or three jobs. This is not their only facility. So of course, when COVID got really bad, people figured out that CNAs were working at different facilities, we had to limit them. We had to give them a choice. 'Do you want to work here at [Facility] or your other facility?' Where you are only per diem at my facility and full-time at the other facility, well, you are probably going to go there to work and stay thereWe had to eliminate quite a few per diem people But, I will tell you that staffing dwindleSame thing with nurses. If nurses worked at other facilities, they could not work here. So, I will tell you that my management staff including myself had to work as a nurse on the floor, and sometimes a CNA." S1N1.rep1, April 2021, Northeast, 126–150 beds, Star rating 1, For profit
Admissions/low census impacting staffing	"Well, [deep breath] staffing is a challenge daily and it has got worse as the months have passed it's a daily challenge to meet our staffing. [State C], we have staffing per person per the hours that we have to dedicate to residents. And if you do not, you can get cited. And at the same time, we have ratios to meet and daily averages. So there's quite a few things we have to monitor to be in compliance when it comes to staffing. And sometimes I actually have to curtail admissions because I cannot meet our daily per person per day hours." S6N4.3, June 2021, South, 100–125 beds, Star rating 1, For profit
Use of temporary/ agency staffing	"I have never had to use, [or] put staffing agency in my building. I had to do it, and they are still in my building." S7N4.2, March 2021, South, 151+ Beds, Star rating 3, For profit
Strategies	"We've done a lot of stuff with employees throughout the whole thing. A few times we did like a food pantry where we gave away a bunch of foods to all the staff, they can come down after their shift, get the stuff, bring it home. We did a lot of just grab and go, like meals for the staff, just stuff like that, just to say thanks, give something." S4N4.2, January 2021, Midwest, 151+ beds, Star rating 3, Not for profit
Frustration with diminishing community support	"Our families they are upset because they cannot see mom and they are commenting 'Well you get to see her every day,' and what they do not realize is that anybody that's working in this industry, we have also missed weddings, we have missed funerals, we have missed graduations, we have missed birthsI understand their anger and their frustration, but the staff would not get it [COVID-19] if people out in the community were also doing what they should've been doing and wearing their mask and staying at home when they did not have to, and not doing stupid stuff." S3N2.2, January 2021, South, 100–120 beds, Star rating 5, Not for profit

The hard thing for me is the nurse staffing. Usually there's a way to figure out, how do you get more staff or let's get agency in, but we're really struggling to support filling all the shifts. Even with - we had 10 agencies on board, and we fill maybe 5 to 10% of our open shifts. There's just not enough nurses... We've tried job fairs, raising wages, sign-on bonuses. It just seems like whatever we do, there's just not enough help out there. (S5N4.3, August 2021. West, 126-150 beds, Star Rating 2, For profit)

Nursing home administrators also shared strategies for retaining staff as well as their ongoing frustration with diminishing community support for their efforts to keep residents safe from infection with COVID-19. For representative quotes, see Table 4.

3.5 | Theme 5: Administrators expressed concerns regarding the fragility of the nursing home industry revealed through the course of the pandemic, including doubts about nursing homes' ability to recover

As the next theme describes, administrators expressed substantial concern over the sustainability of the nursing home industry. As a result of the COVID-19 pandemic, nursing homes experienced significant additional costs resulting from PPE and testing expenditures, as well as wage increases to maintain staffing levels, among other costs. Concurrently, administrators reported decreases in revenue due to reductions in the census as patients avoided the nursing home setting in favor of non-institutional settings. Administrators also described long-standing difficulties with how nursing homes are portrayed in the media. COVID-19 exacerbated these challenges and contributed



 TABLE 5
 Administrators expressed concerns regarding the fragility of the nursing home industry.

Concept	Representative quote, nursing home characteristics
Decreased census, increased costs associated with staffing, PPE, testing	"It's been a tough year financially. Obviously, our dip in census overall that happened was hard. At the same time we were losing census, we had to increase our staffing to make sure we were appropriately meeting the needs of our residents. Financially, on top of that, the costs associated with our PPE supplies we were getting and our testing supplies we were getting, was hard to account for. We did not make any profit in the last year." S7N1.4, June 2021, South, <100 beds, Star rating 4, Not for profit
Decreased census resulted in decreased revenue	"Number one, the census has been just up and down, up and down, and I think in many ways patients are choosing to go home from the hospitals if they were to have a choice. If they were to have a choice of, 'Hey, you can go to a nursing home, stay there for two weeks to get PT, OT, or antibiotics or what have you, or you can go home, and we'll hook you up with a home health and have you just simply go home.' We're seeing a consistent trend of having less, less occupancy, even before the pandemic we are seeing the occupancy rate drop in the nursing home world. That's one, we are seeing that, so that obviously impacts us financially." S8N3.4, July 2021, West, 151+ beds, Star rating 5, For profit
Unsure future, sustainability concerns	"So, it's crippling. I mean I honestly I do not know what the future of our facility is and we are a high end We're in, I think the most densely populated area for nursing home residents in the country. There's 70 of these facilities in our county. I expect some to go belly up from this. It's already a tough business and very minimally profitable and all that. I'm seeing the losses. It's not that we are not making enough money, it's that we are losing money and that's not sustainable over a long period." S6N2rep.4, December 2021, South, 100–125 beds, Star rating 5, For profit
Long-standing media portrayal	"And it's easy for them to do because there are bad players out there. All they have to do is pick one of the bad players and talk about the deficiencies and how horrible the place is and pressure sores and people die and blah blah blah and that's the entire industry. We're all painted like that. So the reality is the media is not our friend. I do not think the media has ever been our friend just because, pretty much for the last 20 years, it's been a real big push for home and community-based services. And, I'm fully in favor of that. The right care at the right time at the right level. But unfortunately, I'm going back to the government, many people in government look at nursing homes and say, 'Oh, these people can be taken care of at home. Look at that little old lady. She's walking around with just a walker.' What they do not realize is that little old lady was at home and was on her death bed because she wasn't eating right, her meds were all screwed up, home care wasn't showing up. She ends up in the hospital. She comes to the nursing home. Her meds all get straightened out. She gets therapy. She's up. She's walking around. She's with people. She's being socialized. She rebounds." S1N5.4, July 2021, Northeast, <100 beds, Star rating 4, For profit
Media worse during COVID-19	"Nursing homes in general had a pre-negative stigma to begin with, but COVID has just driven that wedge between the trust, and again this is my opinion, the trust of the general community, in the health care community has driven a wedge further down and divided that even more." S2N3.3, April 2021, Northeast, 151+ beds, Star rating 1, For profit

to sustainability concerns. Such sustainability concerns were exemplified by this administrator, who reflected on the benefits of prior federal financial support:

Last year, there was government support and so I ended up in a stable place financially. This year, my budget is just devastated. And, there's really no recovery at this point that I can see. So, we are not going to meet our budget guidelines for this year at all. And I feel bad for our company. I don't know if that's across the board or if some facilities are more financially stable. But, because of the up and down of our census, we are in a negative position by so much that I don't think we can turn the ship at this point. (S5N3.4, September 2021, West, <100 beds, Star rating 5, For profit)

For representative quotes, see Table 5.

4 | DISCUSSION

Our interviews with nursing home administrators revealed several main themes. First, the COVID-19 pandemic has evolved over time, and as a result, nursing home administrators' responses to it have been varied, and reflect their ability to adapt to a frequently changing health care crisis. Second, nursing home administrators discussed how policies and guidelines designed to respond to COVID-19 impacted nursing home operations. Third, administrators described the effects of COVID-19 and efforts to mitigate the burden on residents, including how restrictions on activities, communal dining, and visitation resulted in cognitive decline, depression, and weight loss. Fourth, administrators discussed the impact of COVID-19 on staff and the resulting staffing shortages. Finally, administrators described their concerns for the long-term sustainability of the nursing home industry due to repercussions from the substantial costs associated with responding to COVID-19, the reductions in revenue, and the continued negative portrayal of nursing homes by the media. Our findings are

consistent with and expand on the existing literature on COVID-19 in nursing homes. Although the existing literature is largely quantitative, our rigorous qualitative approach including repeated interviews with nursing home administrators over the course of the pandemic adds significant depth and nuance to our understanding of how the COVID-19 pandemic was experienced in nursing homes over time.

Our research has several limitations. First, although we interviewed administrators from 40 nursing homes across eight health care markets which represents a robust sample size for qualitative research, our findings may not be generalizable to all nursing homes and all markets in the US. Additionally, because interviews were conducted between July 2020 and December 2021 and the pandemic has extended well into 2022, we are unable to explore the further evolution of administrator perspectives beyond 2021. Lastly, although we present perspectives from administrators, and include their observations of the impact of COVID-19 on residents, families, and staff, we did not interview residents, families, or other staff and thus are unable to present their points of view. Future research is needed to understand the long-term impacts of COVID-19 on all stakeholders.

Despite these limitations, our findings have significant implications for future research and policy. In describing difficulties associated with responding to COVID-19, administrators discussed the challenges of interpreting and implementing rapidly changing governmental policies and procedures during a pandemic. Although many administrators reported access to a helpful point person at the local level, most expressed the need for additional support and resources to help interpret and respond to policies that may be dependent on individual situations, or for specific facility characteristics (e.g., community rates, outbreak status, ability to accept COVID positive residents). Additionally, administrators indicated the need for 'real time' policy assistance such that critical information is conveyed immediately. In regard to COVID-19, administrators also expressed the need for collaborative relationships with government entities rather than the frequently-reported punitive relationships with state surveyors. Administrators expressed the perspective that many policies during the COVID-19 pandemic reflected limited knowledge or experience regarding the daily administrative requirements of running a nursing home.

Our findings have important implications for strategies to improve nursing home resident well-being in the face of ongoing and future pandemic crises, suggesting a need for improved access to telehealth, especially behavioral health, as well as a need to share and refine strategies to improve resident morale and wellbeing. Similarly, strategies to reduce staffing shortages are critically needed, and ideas generated from our interviews, to be presented in one of our subsequent papers, include increases in nursing home reimbursement that would facilitate increased staff wages, federal funding for staff training programs to ensure an ongoing pipeline of staff, modified regulations that enhance the strategic use of agency staffing, and improvements in federal/state supported sick time. Lastly, findings highlight concerns regarding the sustainability of the nursing home industry, including the need to consider further federal financial support, 28,29 as well as the need to recognize the role negative media has in compounding an ongoing crisis such as the COVID-19 pandemic.

Despite the difficult conditions under which nursing homes delivered care for residents during the COVID-19 pandemic, our interviews highlight the resourcefulness of personnel in these institutions who continue to find ways to overcome challenges, motivate staff, and maintain quality care for residents. The narratives recount instances that provide a necessary complement to quantitative data that in some cases may minimize the lived realities of nursing home experiences. We will expand upon and develop these and other strategies in the subsequent papers that use our in-depth data to further explore these issues. The COVID-19 pandemic has brought into sharp relief significant issues in the nursing home industry such as staffing, delivery of care, infection control, and long-term financial stability. Policymakers, in particular, need to focus efforts to address these issues and we need new and effective reform to support nursing homes within the continuum of care for vulnerable older adults in the US.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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