Perspectives of Physicians with Experience in Nursing Home Care on Telehealth Use During the COVID-19 Public Health Emergency

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ABSTRACT

BACKGROUND: Despite expanded access to telehealth services for Medicare beneficiaries in nursing homes (NHs) during the COVID-19 public health emergency, information on physicians' perspectives on the feasibility and challenges of telehealth provision for NH residents is lacking.

OBJECTIVE: To examine physicians' perspectives on the appropriateness and challenges of providing telehealth in NHs.

PARTICIPANTS: Medical directors or attending physicians in NHs.

APPROACH: We conducted 35 semistructured interviews with members of the American Medical Directors Association from January 18 through January 29, 2021. Outcomes of the thematic analysis reflected perspectives of physicians experienced in NH care on telehealth use.

MAIN MEASURES: The extent to which participants used telehealth in NHs, the perceived value of telehealth for NH residents, and barriers to telehealth provision.

KEY RESULTS: Participants included 7 (20.0%) internists, 8 (22.9%) family physicians, and 18 (51.4%) geriatricians. Five common themes emerged: (1) direct care is needed to adequately care for residents in NHs; (2) telehealth may allow physicians to reach NH residents more flexibly during offsite hours and other scenarios when physicians cannot easily reach patients; (3) NH staff and other organizational resources are critical to the success of telehealth, but staff time is a major barrier to telehealth provision; (4) appropriateness of telehealth in NHs may be limited to certain resident populations and/or services; (5) conflicting views about whether telehealth use will be sustained over time in NHs. Subthemes included the role of resident-physician relationships in facilitating telehealth and the appropriateness of telehealth for residents with cognitive impairment.

CONCLUSIONS: Participants had mixed views on the effectiveness of telehealth in NHs. Staff resources to facilitate telehealth and the limitations of telehealth for NH residents were the most raised issues. These findings suggest that physicians in NHs may not view telehealth as a suitable substitute for most in-person services.

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INTRODUCTION

Prior to the COVID-19 public health emergency (PHE), restrictions on Medicare payment for telehealth visits posed a major barrier to the provision of telehealth services to post-acute and long-term care residents in nursing homes (NHs).[1] Increased Medicare coverage of telehealth during the PHE, including interactive audio and video visits, remote patient monitoring, and brief check-ins, along with the inherent benefits of remote care allowing NH residents to be treated in place while reducing the risk of COVID-19 transmission, have provided new opportunities to examine telehealth use in NHs.[2]

Despite the potential benefits of telehealth allowing for timely consultations,[3] potentially reducing avoidable hospitalizations,[4,5] and facilitating frequent touch points for residents across multiple parties (e.g., patient, family, physician),[1] its use requires NHs to have the technological infrastructure to deliver telehealth visits, and staff and clinician time to be diverted from in-person care.[6–8] Increased coverage of telehealth services may also lead to more unnecessary or duplicative services and fragmented care if patients' care needs cannot be adequately met through telehealth.[9,10] Using technology may also be challenging for older patients and for patients with cognitive impairement.[11] Furthermore, while telehealth was useful during the early months of the PHE, it is unclear whether telehealth provision will continue to be prioritized in NHs.

While studies on the provider perceptions of telehealth use in NHs prior to 2020 focused on interest in telehealth use or on voluntary early adopters,[12–14] who tend to be more well-resourced than later adopters,[15] the population of NHs utilizing telehealth changed substantially during the PHE. As a much wider array of NHs deployed remote care since 2020, it is important to understand whether

perceptions of telehealth previously studied in the early adopters apply to a broader sample.

We conducted semistructured interviews with physicians experienced in NH care to examine their experiences with telehealth during the PHE, their perceptions on the value of telehealth, and barriers and facilitators to telehealth in NHs. To our knowledge, this is the first paper focused on physicians' views of telehealth in NHs during the pandemic.

METHODS

Setting and Study Population

We conducted semistructured interviews with physicians experienced in NH care, defined as physicians who currently or previously served as medical directors and/or attending physicians in NHs. The study sample was recruited from an overall list of 1528 members of the American Medical Directors Association (AMDA) – The Society for Post-Acute and Long-Term Care Medicine, who were surveyed about their primary facility, demographics, and specialty area as participants in a project on NH medical staff organization.[16] Among survey participants (566 respondents), 421 physicians provided enough data to be considered for our study sample.[16] After initially emailing these 421 physicians, we received 69 responses within a week and stopped enrollment. Among the 69 respondents, we purposively selected 35 physicians in the Northeast, Midwest, West, and South, in order to increase variations in perspectives. The participant characteristics in Table 1, including region of the country they were located in, indicates that broad representation was achieved.

Table 1 Characteristics of the 35 Study Participants

Physician Characteristics	No. (%)
Physician specialty	
Internal medicine	7 (20.0)
Family medicine	8 (22.9)
Physical medicine and rehabilitation	1 (2.9)
Geriatrics	18 (51.4)
Other	1 (2.9)
Employment type	
Private practice	12 (34.3)
Government	4 (11.4)
Academic institution	4 (11.4)
Private organization contracting with a nursing home to provide care or care management services	14 (40.0)
Nursing home	1 (2.9)
Female	17 (48.6)
Location	
Northeast	7 (20.0)
Midwest	6 (17.1)
West	11 (31.4)
South	11 (31.4)

Data Collection

Participant interviews were conducted for 30–60 min over Zoom by three interviewers (H.J., M.U., and H.Y.) using a semistructured interview guide, which included questions about the extent to which participants used telehealth in NHs, the perceived value of telehealth, and barriers to telehealth use (Table S1). The interview protocol development was part of a larger project and included questions on topics other than telehealth, including on the value of medical specialization in NH medicine.[17] The study was approved by Weill Cornell Medical College's institutional review board and participants provided verbal informed consent to record them and publish deidentified excerpts.

Data Analysis

Interview recordings were professionally transcribed and inductive thematic analysis was conducted[18] by four researchers (H.J., H.Y., E.O., J.Y.), as described in Jung et al. (2022).[17] Three investigators (H.J., H.Y., E.O.) then reviewed three transcripts and developed a preliminary codebook. Subsequently, these investigators coded each transcript and updated the codebook until no new codes were found, which was achieved at the 33rd interview.[17] The final codebook included 39 unique telehealth-related codes (Table S2).

Two investigators (H.Y., E.O.) then separately coded four identical transcripts to review interrater reliability, where a Krippendorff's alpha of 0.81 was achieved.[18] This analysis was conducted using ATLAS.ti, version 8 (ATLAS.ti Scientific Software Development GmbH, Lietzenburger Straβe 75, 10,719 Berlin, Germany). Investigators who were involved in codebook development (H.J., M.U.) reviewed codebook versions and coded transcripts to strengthen analysis objectivity, further consolidating codes into broader groups. Three investigators (H.J., H.Y., E.O.) then developed unifying themes inductively, iteratively reviewing transcripts and developing final themes, with any disagreements resolved through consensus.

RESULTS

Nearly all physicians were generalists, including seven (20%) internists, eight (22.9%) family physicians, and 18 (51.4%) geriatricians (Table 1). Fourteen (40%) participants were employed by private third-party organizations, and 12 (34.3%) belonged to a private solo or a group practice. Seventeen (48.6%) of the participants were women. All participants had experience providing telehealth visits. Data analyses resulted in five major themes and seven subthemes related to NH telehealth use (Table S3).

Theme 1: Direct Care Is Needed to Adequately Care for Residents in NHs

Subtheme 1a: Telehealth Does Not Replace Hands-on Care in NHs. Participants stated that it is likely more difficult to diagnose residents via telehealth than via face-to-face interaction due to the lack of nonverbal cues and physical examinations, which may in turn cause physicians to miss critical diagnostic clues. Furthermore, multiple interviewees stated that telehealth does not replace direct care, despite its potential benefits and convenience.

> Participant A: "I've also learned that video visits can miss things. I didn't know that the patient had a central line left over from the hospital…I didn't notice that the swollen elbow was a septic joint because I wasn't in the room."

> Participant K: "On the one hand, you can do more visits if you can do telehealth visits…but the question is are they as good? I don't know, it's kind of hard to get a good feel for a wound over a video… and you'll lose that direct care activity."

> Participant V: "I think there's a great role for telehealth in a lot of ways even in terms of talking to nursing staff as a group…. I think it's another way of seeing the patient and better than a phone call but not as good as a visit. It certainly could never replace it."

Subtheme 1b: Telehealth May Be Suitable for Improving In-Person Care in the NH Setting. While most physicians stated that telehealth cannot replace existing care, a subset of interviewees stated that telehealth can supplement existing in-person care services, including facilitating more timely decision-making for patients.

> Participant D: "It could enhance decision-making once there's a change in condition, I think, if you have an appropriately trained individual who can use the resources properly."

Furthermore, one participant noted that telehealth can build rapport beyond in-person visits due to the use of masks during in-person visits.

> Participant E: "I think, interestingly enough, I have a lot of my patients who are perfectly happy with it. Because it's the only time they can see me without a mask…and they can see my face, and we can convey emotion in the discussion."

Another viewpoint on the capacity of telehealth to supplement in-person care was expressed by two interviewees discussing the role of telehealth in the absence of no in-person care.

> Participant L: "So if I was to put it in the spectrum of no interaction versus the best interaction, it's right somewhere in the middle…it's able to serve the purpose where nothing would be the worst scenario."

Theme 2: Telehealth May Allow Physicians to Reach NH Residents More Flexibly During Offsite Hours and Other Scenarios When Physicians Cannot Easily Reach Patients

Telehealth may lower the burden for physicians to provide care to NH residents, particularly when physicians cover multiple NHs or need to examine residents during weekends or evenings while offsite.

> Participant S: "When we're on call for facilities and something comes up, a weekend or late at night, it is an advantage. In some cases, turning a call in to a telehealth visit and really having a more comprehensive look at someone and being able to troubleshoot…which you can do in the middle of the night. Sometimes that has a positive impact on readmission rates."

> Participant R: "Telehealth is an excellent way to deal with health care with limited ability of providers to go on a moment's notice, support the staff at a nursing home when there's a changing condition, and maybe avoid a hospital or emergency room."

Another physician discussed the flexibility that telehealth offers physicians delivering care to multiple NHs in rural areas.

> Participant T: "If you have a doctor covering three or four buildings, you can stay in one place and see all patients. It's much more efficient than been traveling around especially. Again, in rural areas, it maybe two hours between buildings."

> Participant G: "Telehealth enables us to reach those hard to staff parts of our country, very remote or rural areas where the brain drain has led there to be no physicians left…we can put a quality physician in that facility by telehealth pretty much whenever they need them. We can also put sub-specialists into that building without having to move that patient out."

Theme 3: NH Staff and Other Organizational Resources Are Critical to the Success of Telehealth, But Staff Time Is a Major Barrier to Telehealth Provision

Most interviewees stated that nursing staff are necessary to facilitate telehealth visits.

> Participant Q: "But for a setting like this, where you have many ill people…the big reason it's challenging…is because you need an intermediary there to assist the patient in using telehealth."

Nursing staff may physically examine patients prior to or during the telehealth visit, as well as hold up and move the telecommunications device as needed, in order for the physician to see the patient.

> Participant O: "I can review a lot before I even talk to that nurse and then I tell the nurse, you know 'before you get in there and start holding up the phone, go in there and examine the patient and kind of take a listen to the heart and lungs and the belly and look for swelling…or if they had some other incision somewhere.'".

> Participant A: "And the video visits…you're also having to schedule with the nursing staff and you're tying up a nurse typically who has to take the tablet in. And I usually ask the nurse to listen to the heart and lungs for me."

Beyond operating the telehealth equipment or providing direct care, the nurse may also communicate on behalf of the patient to the physician, particularly for patients with difficulty providing oral histories.

> Participant B: "Because my patients cannot tell me how they think, how they feel. It's all through the nurses…so we take a lot of nurses' time."

Beyond telehealth visits likely needing nurses that can effectively communicate patients' needs to physicians, interviewees stated that a major barrier to telehealth provision is the need for clinical staff to take time out of their existing duties to assist in telehealth visits.

> Participant H: "You have to have the nursing staff facilitate the visit…but to me, the reality of nursing home care is people are so strapped already for time, and I feel like they're already struggling to be staffed appropriately…especially when we had our outbreak, it was really, really hard to ask the nurses to give up their time. More well-resourced [skilled nursing facilities] will be more likely to provide effective telehealth visits."

Theme 4: Appropriateness of Telehealth in NHs May Be Limited to Certain Resident Populations and/or Services

Subtheme 4A: NH Residents May Be Cognitively Impaired and Have Limited Telehealth Readiness. Many participants noted that a high proportion of residents in NHs have some degree of cognitive impairment, and therefore have difficulty communicating remotely with providers.

> Participant L: "Oftentimes, a patient living in a [skilled nursing facility] is very disabled. Either, you know, they're bedridden or they have chronic wounds, pain, psychiatric issues, or functionally they are so compromised with visual or hearing problems that they're not able to engage with the interface as well as…another able patient in the community."

Another participant commented that telehealth visits are typically done when there is a caregiver present, and therefore a resident's cognitive status may not necessarily prevent them from having a successful telehealth visit.

> Participant R: "Well, you're doing telehealth with the caregiver, whether it's the nurse or the family. You're not doing it with the patient. But if you had video telehealth, you could look at the patient and you can make a determination about how uncomfortable they are."

Subtheme 4b: Telehealth May Be More Appropriate for Specialty Care Rather Than Primary Care in NHs. Participants acknowledged that it is difficult for some NH residents to access specialty care, but telehealth increases opportunities for timely specialty care, including dermatology and mental health services. This may be particularly true in rural areas, as noted by one participant.

> Participant I: "I think there's a big opportunity for mental health services in nursing facilities to use telehealth. I think that for most of us it's too difficult to do the actual nursing facility care of our patients through telehealth."

> Participant N: "One thing we have discovered is that telehealth could be fabulous for some kinds of consultations. And they would be really crazy to take that away…where [it] has been really extraordinarily difficult to get specialty care…. I mean, for example, it's fabulous for dermatology. I mean, you put a camera on the rash, …the dermatologist takes a look at it. They spend just as much time with you as they would in their office…"

Despite the capacity for telehealth to delivery specialty care, several interviewees stated that telehealth is not appropriate for delivering primary care in NHs.

> Participant N: "I think that even though some cardiology and other systems limited interventions might be done fairly effectively through telehealth…I think primary care that telehealth is a real step back in terms of quality with regard to primary care in nursing homes."

Subtheme 4c: Unclear Whether Telehealth Is More Appropriate for Short-Stay or Long-Stay NH Residents. There were mixed views about whether telehealth is more appropriate for short-stay NH residents receiving post-acute care or for long-term care residents. Several participants responded that telehealth may be more effective for post-acute care, including allowing physicians to continue to treat residents after hospital discharge.

> Participant N: "I think it's going to increase the temptation for doctors not to give up patients but continue to follow the nursing home…. They don't have to drive there, and park, and find their patients…".

> Participant P: "I think, the issues that keep the post-acute patient there are usually mechanical. So those are pretty easy to assess, especially with aid, and the input from therapists. So I suppose, I believe, that telemedicine is generally appropriate."

Other participants stated that many short-term residents have very complicated medical issues that arise during hospitalization and wounds that require in-person care. Rather, telehealth may be more effective for long-stay residents who are stable with functional limitations.

> Participant T: "In terms of short-term patients, a lot of them have surgery or really complicated, medical issues, hospitalizations, stroke…. A lot of those, you need to see the wounds in an in-person setting."

Subtheme 4d: Prior NH Resident-Physician Relationships May Impact the Quality of Care Delivered via Telehealth. Several participants noted that telehealth may be more effective in cases where there is an established clinical relationship between residents and physicians, due to familiarity with the patients' clinical needs, behaviors, and prior histories that may not be easily seen or communicated via telehealth.

> Participant U: "The physician can listen to the heart, the lungs…but still, they don't know the patient…. As you go and see patients over the years and you get to know them well, you feel like you're doing more what you would be best for them. You know their wishes and the family."

> Participant P: "We have had a couple patients admitted who have only been seen by telehealth geriatricians in their care, and it has not been appropriate in many cases. They require cohort staff that know them very well for know their nonverbal expressions…their patterns of behavior…all those things are very hard to quantify."

Theme 5: Conflicting views About Whether Telehealth Use Will Be Sustained Over Time in NHs

Some participants felt that due to the uncertainty in the quality of care provided via telehealth (Theme 1), barriers to telehealth provision (Theme 3), and limited applicability of telehealth visits in NH settings, particularly for older residents requiring in-person exams to detect subtle changes in clinical needs (Theme 4), increased telehealth use past the PHE will be limited in NHs. Some participants noted that changing rules and uncertainty surrounding how NH telehealth visits would be reimbursed after the PHE is central to its continued provision.

> Participant A: "I think once everyone gets vaccinated and the epidemic actually subsides, then I think we should go back to in-person visits, but reserve the video visits for when there's a clinical need and the patients are a long distance away."

> Participant H: "So I don't know if that's going to change things, because I also don't know if telehealth rules will change after the pandemic."

> Participant D: "The critical thing is always is going to be financial reimbursement…what's going to be billable is what's going to drive what happens…. But there's no question that telehealth has a significant potential when it's used effectively and appropriately."

Two interviewees noted their general distrust of telehealth for addressing patient needs and stated that telehealth may lead to wasteful care practices.

> Participant J: "I see a lot of people who will take advantage with, and there will not be any hands-on physical diagnosis and care of patients, if it's all done through telehealth."

The majority of interviewees, however, stated that telehealth will continue to be delivered in NHs in some capacity.

> Participant C: "I do realize its value and its worth. If it's not necessary to drag a nursing home patient and put them on transport to go see another provider, and the visit can be done at the bedside…with some specialist and I think having regular ongoing access is very important. So yes, I do see that this will likely continue in my nursing home."

> Participant D: "I hope it doesn't go away. I think it certainly has a place; maybe it's for certain limited health interventions, but it certainly could enhance coverage."

DISCUSSION

Most respondents believed that telehealth should not replace face-to-face visits for primary care, although telehealth may be appropriate for providing specialty consults in NHs and lowering barriers to care in rural areas or when NH physicians are offsite. The availability of staff to pivot towards telehealth while continuing to deliver in-person care was the most frequently discussed barrier to telehealth use.

Our findings mostly aligned with those from surveys of clinicians and administrative staff on telehealth use in NHs, both prior to and during the PHE.[12–14,19,20] In a recent survey of primarily NH administrators, respondents stated that using telehealth may be difficult for residents with cognitive impairment.[19] Respondents in our interviews also mostly stated that given the high proportion of NH residents with cognitive disabilities, and/or visual or hearing problems, telehealth is not a viable option for most residents. In another recent study during the pandemic, NH staff expressed that they preferred to conduct routine primary care services in-person rather than by telehealth, echoing concerns from our physician respondents about the appropriateness of telehealth for delivering primary care.[20] Finally, similar to our findings, previous surveys showed that physicians strongly agreed that specialty telemedicine may fill existing service gaps and improve timeliness of appropriate resident care.[14]

In sharp contrast to our finding that NH staff are perceived as critical to telehealth provision, however, prior AMDA surveys administered before the PHE ranked personnel involved in the telehealth as the least important attribute of a telehealth program.[13] Additionally, whereas previous survey results indicated strong disagreement with the notion that telemedicine would reduce care effectiveness, our results showed mixed views about the quality of care provided via telehealth.[12,13] The disagreements between our qualitative findings and past surveys indicate that increased experiences among physicians navigating telehealth implementation and provision in NHs during the pandemic, including a deeper understanding of staffing needs for telehealth visits,[20] may have led to a change in physician perceptions.

Despite widespread telehealth use in NHs during the PHE, the future of NH telehealth use is unclear.[21] Given changing Medicare payment flexibilities for telehealth since the onset of the pandemic, with CMS terminating the waiver that telehealth can be used for federally mandated NH visits on May 7, 2022, and all other NH visits subject to pre-pandemic restrictions on telehealth after the end of the PHE, telehealth provision in NHs is likely to decline.[22,23] Furthermore, significant shortages in NH staff during the pandemic are likely to have further exacerbated already significant staffing barriers to telehealth provision. In particular, recent studies have shown that NHs experiencing severe COVID-19 outbreaks led to a 5.5% drop in staffing levels.[24] Therefore, despite telehealth being particularly suited for allowing patients in NHs with high rates of COVID-19 to continue to be treated, outbreaks likely lowered staff availability to facilitate telehealth visits. High rates of contract staff and turnover in NHs during the pandemic may have further depressed routine provision of and training related to telehealth.[24,25]

With most Medicare beneficiaries slated to lose access to telehealth after the end of the PHE, updated Medicare coverage of telehealth services informed by newer evaluations is a federal policy priority.[26] Early empirical work evaluating telehealth use in NHs prior to the pandemic showed that telehealth programs led to a reduction in emergency department visits and hospitalizations.[4,5,21,27,28] However, these studies have been focused on a convenience sample of patients and/or have not been done in the current policy and pandemic environment. The mixed views in our interview findings about telehealth's impacts on care quality suggest that there are important heterogenous effects of telehealth, wherein future evaluations should be conducted for different types of procedures (primary care versus specialty care), telehealth applications, and disease conditions.

Our study was subject to several limitations. First, interviews were limited to physicians. Second, our study collected self-reported data; and therefore, recall and social desirability biases may impact our findings. Third, this study had a 16% response rate (35 out of 421 physicians). However, this is in line with, if not higher than expected from, email outreach to physicians; prior studies have achieved a response rate of 11% for physicians.[29] Fourth, although all participants were asked about telehealth, the study was not designed to focus on telehealth but rather the quality of care provided by NH physicians. Fifth, although the sample size of 35 interviewees was appropriate for this qualitative study, our sample may overrepresent physicians specializing in geriatrics. While over 50% of participants in our sample were geriatricians, only 6.5% of NH physicians nationally specialize in geriatrics.[30] Nevertheless, the next two largest categories of physicians in our study making up 43% in our sample, specialized in internal and family medicine, the next most common types of NH physician specialties.[30]

CONCLUSION

Generalist physicians with experience in NH care had mixed views on the effectiveness of telehealth for both short-stay and long-stay NH residents. Staff resources to facilitate telehealth visits and the perceived appropriateness of telehealth visits for NH residents were among the biggest barriers to its use.

Supplementary Information *The online version contains supplementary material available at https://doi.org/10.1007/s11606-023-08087-6.*

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