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Perceptions and Uses of Telehealth in the Care of Older Adults

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Abstract

Background: Clinicians identify challenges in using telehealth with older adults, yet they continue to use it at high rates. We conducted a nation-wide survey of US clinicians to assess the views and uses of telehealth for older adults (≥ 65 years old); as well as the perceived advantages and challenges of telehealth and use of age-friendly telehealth practices.

Materials/Methods: We distributed an online survey (Wallin Opinion Research) to assess the use of telehealth and clinicians' views on advantages/challenges of telehealth in care of older adults. Respondents were eligible if they were active US clinicians with self-attestation of patient population $\geq 10\%$ older adults. The survey was distributed through established professional networks. Eligible respondents received a gift card for participation, fulfilled by a third-party vendor. Survey participation was voluntary. Completion of the survey was considered consent to participate. The study was reviewed and determined exempt by the WCG's IRB Affairs Department. SPSS Version-26 was used for descriptive statistics.

Results: Approximately 13,300 surveys were distributed and there were 7,246 (55%) respondents. Over half (56%) respondents were licensed independent practitioners. The majority of respondents practiced geriatric medicine (22%) or primary care (9.7%). The most common use was in hospitals (53%), long-term care facilities (47%), and outpatient (47%) settings. The majority of respondents (55%) selected "telehealth improves healthcare for older adults by enhancing engagement between stakeholders" as a top advantage. Fewer primary care clinicians (47%) reported sufficient support in the use of telehealth, as compared with clinicians in geriatrics (62%) or other specialties (60%). A majority (65%) of respondents reported use one or more age-friendly practice (40% often; 25% always). Only 5% of respondents reported that their telehealth program never utilized age-friendly practices.

Discussion and Conclusion: Clinicians use telehealth in care of older adults, across clinical roles, sites, and purposes. Our survey results suggest perceived advantages of telehealth outweigh challenges, in care of older adults. This highlights an opportunity for guidance and resources to optimizing telehealth with older adults.

Keywords: telehealth, telemedicine, older adults, geriatrics, vulnerable populations

Introduction

When COVID-19 caused a public health emergency (PHE) in March of 2020, stay-at-home orders caused many clinician offices to temporarily close, thus making it difficult for older adults (65+) to get access to health care. At this time, few

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Medicare beneficiaries had ever used telehealth and most clinicians serving older adults did not offer telehealth.¹ The use of telehealth to serve older adults had historically been low because of reimbursement and policy-related challenges as well as concerns around access, equity, and safety.²⁻⁴

However, also in March of 2020, the Center for Medicare and Medicaid Services (CMS) implemented waivers relaxing restrictions for the use of telehealth for Medicare beneficiaries, which, combined with older adults' reluctance to leave home, resulted in a dramatic increase in the use of telehealth to serve older adults. For example, before the PHE, about 13,000 Medicare fee-for-service beneficiaries received telehealth visits each week; by late April 2020, however, this number reached nearly 1.7 million, with telehealth accounting for nearly half of all primary care visits (43.5%) for Medicare beneficiaries.^{5,6}

By late 2021, many older adults were vaccinated against COVID-19, reducing the risks associated with seeking care. Clinics were also incrementally reopening their doors to see patients in-person as vaccinations increased and clinics became more facile at managing social distancing and other requirements. Medicare claims analyses show that telehealth utilization was lower in late 2021 than it was during the height of the pandemic, indicating that once the risks associated with COVID were reduced, clinicians and older adults relied less heavily on telehealth than they had in the previous year.

Despite telehealth utilization rates decreasing below the levels seen early in the pandemic, 2-year trends of telehealth among Medicare beneficiaries continue to be higher than pre-pandemic levels.⁷

What is driving this continued use of telehealth to serve older adults despite reduced concerns over COVID exposure? One possibility is that clinicians' views on telehealth became more positive as their experiences with it grew. Clinicians are often the "gatekeepers" of telehealth in that their decisions about whether to use telehealth are one of the greatest factors driving its use. Therefore, the continued use of telehealth to serve older adults may be directly related to clinicians' more positive views on doing so.^{8,9}

Research supports this hypothesis by showing that clinicians' views on telehealth, including their perceptions of its advantages and disadvantages, are directly associated with rate of telehealth use.^{8,10,11} A recent clinician-focused survey shows a direct association between clinicians' attitudes toward telehealth and their utilization of telehealth in terms of both modality used and rate of use.¹⁰⁻¹²

Another possibility for the continued use of telehealth with older adults at relatively high rates could be related to providers' beliefs about older adults' views on telehealth, with the logic being that clinicians' beliefs about older adults' views on

telehealth may impact their willingness to offer telehealth services to older adults. If clinicians believe that older adults are unable or unwilling to use telehealth, clinicians may be less likely to offer it to older adults.

If clinicians believe older adults are able and willing to use telehealth, they may be more likely to offer it. Finally, another (not mutually exclusive) possibility is that the existence of CMS' telehealth waivers continues to drive utilization and that their expiration may greatly reduce the use of telehealth to care for older adults.

We administered a survey to clinicians with six objectives, aiming at understanding (1) where and how often clinicians are using telehealth to care for older adults; (2) the challenges of providing telehealth care to older adults; (3) the perceived benefits of doing so; (4) clinicians' beliefs about older adults' views on telehealth; (5) the rate at which delivery of telehealth to older adults follows age-friendly principles; and (6) how clinicians would respond to the expiration of CMS' telehealth waivers.

Methods

STUDY POPULATION

We conducted an online survey designed to assess telehealth utilization, telehealth practices, and clinicians' views on the advantages and challenges of using telehealth to care for older adults (≥ 65 years old). "Telehealth" refers to synchronous virtual medical visits, such as consultations via video (plus audio), phone (audio only), or chat/SMS.

Eligibility requirements included self-designation as a physician, nurse practitioner, nursing professional, physician assistant, mental/behavioral health provider, or occupational or physical therapist; self-attestation as having a patient population $\geq 10\%$ older adults; and an active clinical practice in the United States (U.S.). A \$15 Amazon gift card was offered to respondents after completing the survey. Receiving the gift card required inputting an email address. Gift card administration was fulfilled by a third-party vendor. Respondents' email addresses were not shared with the research team. No other identifying information was gathered.

SURVEY DESIGN

The survey included 29 questions, as listed in Supplementary Appendix S1. Questions were closed-ended and included multiple-choice, agreement scale, dichotomous true/false, and rating scaled questions. Respondents were asked to indicate their individual opinions on a series of statements as true or false. Statements presented potential challenges of using telehealth to serve older adults such as creating relationships, high medical complexity, physical and cognitive impairment, and fragmentation of care.

Response rates were analyzed by specialty grouping of clinicians who exclusively work with older adults (geriatrics subspecialty clinicians), clinicians who work with adult patients of any age (primary care clinicians), and clinicians in other specialties; as well as by role designating physician, nurse practitioner or physician assistant, and mental/behavioral health providers. From a list of seven items, respondents were asked to choose their top three ways telehealth could improve health care for older adults. From a list of six items, respondents were asked to select the top three reasons why they felt older adults may choose to opt out of using telehealth.

Respondents were to select how often they believed their telehealth program accomplishes each of the following eight age-friendly practices: “accounting for ‘what matters’ to the older adult,” “supporting continuity of care,” “accounting for physical and cognitive differences,” and “ensuring clinicians’ have access to medical histories.” Finally, respondents were asked how they would respond if the CMS waivers were to expire.

SURVEY ADMINISTRATION

Respondents accessed the online survey through a link using the Alchemer Survey Software. The survey was active from March 1, 2022 through March 10, 2022. The survey was distributed via email to existing mailing lists and through clinician and membership organizations, including the National Consortium of Telehealth Resource Centers, the American Geriatrics Society, and The Society for Post-Acute and Long-Term Care Medicine. Respondents were encouraged to share the survey link with their professional networks. Approximately 13,300 surveys were distributed through these professional networks.

ETHICAL CONSIDERATIONS

Survey participation was voluntary. Completion of the survey was considered consent to participate. The study was reviewed and determined to be exempt by the WCG’s IRB Affairs Department.

Results

RESPONDENT DEMOGRAPHICS

Of the ~13,300 surveys distributed, 7,246 (55%) eligible clinicians completed this survey. *Table 1* shows the detailed distribution of respondent demographic and clinical practice information. Over half (56%) of the respondents were licensed independent practitioners with either an MD, NP, or PA degree; whereas 44% of respondents practiced as a nursing professional, mental or behavioral health provider, or occupational or physical therapist.

Table 1. Demographic and Clinical Characteristics of the Study Population (n=7,246 Responses)

	NUMBER OF RESPONSES (%)
Ethnicity	
White/Caucasian	4,085 (56)
Black/African American	1,412 (20)
Latino/Hispanic	593 (8)
Native American	451 (6)
Asian	260 (4)
Middle Eastern	237 (3)
Pacific Islander	205 (3)
Other	3 (0.0)
Role	
Nurse practitioner or physician assistant	2,035 (28)
Physician	1,991 (28)
Nursing professional	1,384 (19)
Mental/behavioral health provider	998 (14)
Occupational or physical therapist	837 (11)
Specialty	
Medical specialty	6,250 (86%)
Geriatric medicine	1,621 (22)
Primary care	701 (10)
Emergency care	577 (8)
Critical care	430 (6)
Psychiatry/psychology	417 (6)
Gastroenterology	411 (6)
Endocrinology	365 (5)
Internal medicine	318 (4)
Cardiology	241 (3)
Hematology	239 (3)
Gynecology	228 (3)
Dermatology	227 (3)
Neurology	200 (3)
Infectious disease	178 (3)
Oncology	161 (2)
Nephrology	149 (2)
Palliative care	128 (2)
Rheumatology	86 (1)

continued →

Table 1. Demographic and Clinical Characteristics of the Study Population (n=7,246 Responses) continued

	NUMBER OF RESPONSES (%)
Pulmonology	60 (<1)
Surgical specialty	
Orthopedics	127 (2)
Otolaryngology	108 (2)
General surgery, radiology, anesthesiology, urology, or other	268 (≤5)
Site of care	
Hospital/inpatient facility	3,815 (53)
LTCF/skilled nursing facility	3,394 (47)
Outpatient clinic	3,380 (47)
Home-based community care	2,414 (33)
Independent/assisted living facility	1,020 (14)
LTCF, Long-term care facility.	

PRACTICE CHARACTERISTICS

Twenty-two percent of respondents practiced geriatric medicine, and 10% practiced primary care medicine. Each of the other specialties reported by respondents was <10% and is listed in detail in *Table 1*. Respondents reported using telehealth to serve older adults in hospital/inpatient facility (53%); long-term care/skilled nursing facility (47%); outpatient clinic (47%); home-based community care (33%); and/or independent/assisted living facility (14%).

TYPES OF TELEHEALTH SERVICES UTILIZED

Respondents reported using telehealth in the care of older adults for the purposes of primary care (29%), mental/behavioral health treatment (27%); health care coordination (26%); medication management (25%); and critical or emergent care (22%). *Table 2* shows the types of uses and the proportion of practice time using telehealth by respondents who reported using telehealth for majority (≥50%) of patient visits. These respondents reported the highest use of telehealth in mental or behavioral health care. Additional types of services provided via telehealth are shown in detail in *Table 2*.

RESPONDENT PERSPECTIVES ON POTENTIAL ADVANTAGES OF USE OF TELEHEALTH WITH OLDER ADULTS

From the seven items listed as potential ways telehealth could improve health care for older adults, over half of the respondents (55%) selected “telehealth improves healthcare

Table 2. Types of Clinical Services Provided via Telehealth for Respondents with Majority Telehealth Use in Clinical Practice (≥50% of All Clinical Visits)

TYPE OF TELEHEALTH SERVICE	NUMBER OF RESPONDENTS (%)
Mental or behavioral health care (n=1,965)	790 (40)
Skipped	69 (4)
Primary care (n=2,093)	820 (39)
Skipped	50 (2)
Health care coordination (n=1,901)	692 (36)
Skipped	33 (2)
Occupational or physical therapy (n=1,731)	622 (36)
Skipped	52 (3)
Annual wellness visits (n=1,626)	584 (36)
Skipped	38 (2)
Peri-procedural care (n=1,374)	490 (36)
Skipped	31 (2)
Urgent care (n=1,424)	504 (35)
Skipped	32 (2)
Post-acute/long-term facility-based care (n=1,540)	538 (35)
Skipped	54 (4)
Community-based home care (n=1,725)	596 (35)
Skipped	33 (2)
Medication management (n=1,854)	631 (34)
Skipped	33 (2)
Critical/emergency care (n=1,608)	537 (33)
Skipped	98 (6)
Specialist visits, non-urgent (n=1,490)	457 (31)
Skipped	98 (7)

for older adults by enhancing engagement between stakeholders” as a top advantage. No other item was selected by over half of the respondents. The following items were assessed as top advantages toward improvement of care: telehealth “supports more proactive care and/or longitudinal monitoring in-between in-person visits” (47%); “improves older adults’ adherence to treatments” (46%); “increases access to mental and behavioral health services” (44%); “improves transitions of care” (40%); “improves management of acute situations and exacerbations of illness” (30%); and “allows for “treatment of older adults in different states/regions” (14%).

Survey results regarding respondents’ perspective of top priority for use of telehealth for older adults were as follows: “allows older adults to receive care while aging in place” (46%); “eliminates the need for older adults to travel to and from appointments” (41%); “reduces potentially harmful exposures” (40%); “affords more connection between provider, patient, and family” (39%); “reduces the stress on family/caregivers” (37%), “enables easier/faster access to providers” (36%); and “reduces costs for patients” (35%).

RESPONDENT PERSPECTIVES ON POTENTIAL DISADVANTAGES OF USE OF TELEHEALTH WITH OLDER ADULTS

Respondents who practiced in primary care showed lower rates of concern for potential challenges in the use of telehealth for older adults, as compared with respondents who practiced geriatric or other specialty care. However, respondents who practiced geriatric medicine more often reported that they have appropriate staffing support to provide medical care for older adults with telehealth. See *Table 3* for detailed results.

Mental/behavioral health respondents reported the lowest rates of concern for potential challenges, particularly challenges with building relationships, fragmentation of care, physical or cognitive impairment, and lack of system support. See *Table 4* for details.

RESPONDENT PERSPECTIVES ON OLDER ADULTS’ VIEWS OF TELEHEALTH

Response rates for reasons respondents felt older adults may opt out of use of telehealth services differed by ≤8% across the most often and least often selected options. The most often selected response was that the technology that clinicians use may not align with older adults’ preferences and abilities (49%), followed by older adults’ physical and cognitive challenges (48%), older adults’ preferences to be seen in person (47%), lack of access to technology and/or connectivity (45%), family/caregivers’ preferences to not use telehealth (42%), and older adults’ privacy concerns (40%).

OLDER-ADULT FRIENDLY TELEHEALTH PRACTICE

Over half of the respondents (65%) reported that their telehealth program utilized at least one age-friendly practice. Approximately 40% selected this practice was done often and 25% selected that this practice was always done. Approximately 5% of respondents reported their telehealth program never utilized age-friendly practices. See *Table 5* for details.

PERSPECTIVES ON THE USE OF TELEHEALTH IF CMS WAIVERS EXPIRED

Nearly one-quarter (24%) of respondents noted that the implementation of waivers and Medicare reimbursement were critical to their program and that telehealth services for older

Table 3. Respondent Perspective of Agreement on Potential Disadvantages of Use of Telehealth with Older Adults, by Specialty

	NUMBER OF RESPONSES (%)		
	GERIATRIC- ONLY CLINICIANS (n= 1,621)	PRIMARY CARE CLINICIANS (n= 701)	CLINICIANS FROM OTHER SPECIALTIES (n= 4,924)
People over a certain age cannot be well cared for using telehealth	958 (59)	397 (57)	2,991 (61)
Older adults’ significant physical or cognitive challenges make telehealth unrealistic	988 (61)	401 (57)	2,895 (59)
Providing telehealth is dangerous to older adults because their care needs are so medically complex	929 (57)	369 (53)	2,929 (60)
Relationship building via telehealth is more difficult than in person	999 (62)	358 (51)	2,987 (61)
I have concerns about the impact of telehealth on fragmentation of care for older adults	994 (61)	384 (55)	2,996 (61)
There is a lack of support from my health system leadership or support staff to make telehealth for my older adults an effective alternative	992 (61)	362 (52)	2,923 (60)
I do not have enough staff or the right staff to offer telehealth to seniors	1,008 (62)	328 (47)	2,728 (60)
The older adults I serve do not always have access to the resources needed to make a telehealth visit effective	999 (62)	377 (54)	3,013 (61)

Table 4. Respondent Perspectives of Agreement on Potential Disadvantages of Use of Telehealth with Older Adults, by Role

	NUMBER OF RESPONSES (%)		
	PHYSICIAN (n= 1,991)	NP OR PA (n= 2,035)	MENTAL/BEHAVIORAL HEALTH CLINICIAN (n= 998)
People over a certain age cannot be well cared for using telehealth	1,207 (61)	1,201 (59)	600 (60)
Providing telehealth is dangerous to older adults because their care needs are so medically complex	1,135 (57)	1,191 (59)	604 (61)
Relationship building via telehealth is more difficult than in person	1,193 (60)	1,184 (58)	645 (65)
I have concerns about the impact of telehealth on fragmentation of care for older adults	1,200 (60)	1,197 (59)	651 (65)
There is a lack of support from my health system leadership or support staff to make telehealth for my older adults an effective alternative	1,127 (57)	1,210 (60)	617 (62)
Older adults' significant physical or cognitive challenges make telehealth unrealistic	1,107 (56)	1,197 (59)	632 (63)
The older adults I serve do not always have access to the resources needed to make a telehealth visit effective	1,212 (61)	1,184 (58)	639 (64)
I do not have enough staff or the right staff to offer telehealth to seniors	1,115 (56)	1,137 (60)	550 (55)

adults would be eliminated if the waivers expired. Over 3,000 respondents (43%) reported that even though telehealth now serves core parts of their service for older adults, they would have to reduce some of the telehealth services if the waivers expired. Approximately a third (32%) of respondents reported that they would not reduce telehealth services to older adults if the waivers expired but that they would need to secure financial mechanisms to offset the associated costs (Figure 1).

Discussion

From the 7,246 responses to our survey on the use of telehealth with older adults, we can see that clinicians are utilizing telehealth in many types of care and in many clinical environments. Our survey respondents worked in a variety of roles, mostly in medical and non-surgical fields. When compared with respondents who reported working in primary care practices (47%), geriatricians (62%) and

Table 5. Age-Friendly Telehealth Practices

SELECT HOW OFTEN YOUR TELEHEALTH PROGRAM ACCOMPLISHES THE FOLLOWING	NUMBER OF RESPONSES (%)			
	NEVER	SOMETIMES	OFTEN	ALWAYS
Accounts for older adults' health care goals, care preferences, and "what matters"	313 (4)	2,232 (31)	3,016 (42)	1,663 (23)
Supports coordination and continuity of care	307 (4)	2,249 (31)	2,989 (41)	1,682 (23)
Ensures that older adults and their caregivers are prepared and understand what to expect from a telehealth encounter	369 (5)	1,966 (27)	3,024 (42)	1,873 (26)
Promotes opportunities to use telehealth to increase access to care while reducing avoidable costs	283 (4)	2,188 (30)	2,936 (41)	1,822 (25)
Accounts for older adults' physical and cognitive differences	385 (5)	2,329 (32)	2,909 (40)	1,599 (22)
Ensures that staff and providers engage in on-going education on best practices for using telehealth with older adults	304 (4)	2,110 (29)	3,014 (42)	1,804 (25)
Facilitates providers have access to older adults' health history	310 (4)	2,287 (32)	2,874 (40)	1,754 (24)
Supports staff working within their full scope of practice to drive efficiency	357 (5)	2,312 (32)	2,898 (40)	1,665 (23)

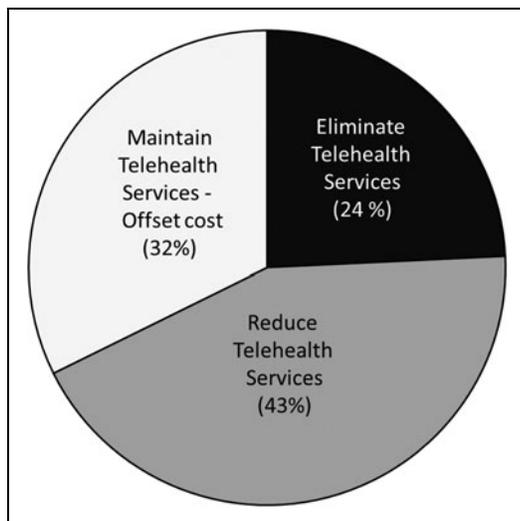


Fig. 1. How would the elimination of CMS's (Centers for Medicare and Medicaid Services) PHE-related telehealth waivers impact your utilization of telehealth with older adults? CMS, Center for Medicare and Medicaid Services; PHE, public health emergency.

respondents from other clinical specialties (60%) reported higher concern about having appropriate staffing to assist with telehealth for older adults. Respondents from all three groups, responded at similar rates of concern about the use of telehealth with older adults and limitations due to physical or cognitive impairment, access to technological resources, and potential for fragmentation of care.

Results from this survey also highlight a potential disconnect between clinicians and their older adult patients regarding the level of concern for the use of telehealth. Although nearly half (49%) of older adults surveyed in the Healthy Aging poll noted privacy concerns as a reason to avoid telehealth pre-pandemic, this proportion fell to 24% noting this concern in June 2020.^{13,14}

However, 40% of our survey respondent clinicians felt that privacy would be a major barrier and reason their older adult patients would not participate in telehealth. These contrasting views suggest that the perspective of older adult patients has shifted during the pandemic and clinicians should be aware of this overall shift.

Our study has limitations. The survey format asked respondents to rank their top three beliefs rather than agree or disagree with individual statements. This format limits the ability to assess in more detail the level of agreement with each statement. In addition, results from the survey as structured did not allow for assessing associations between respondents' views and practices. Finally, we also do not have information on years in practice for respondents, which may impact their views on the incorporation of telehealth in their practice.

The need for alternative clinical management caused by COVID-19 and the CMS Telehealth waivers allowed for a significant increase in the utilization of telehealth in the United States. With the last 2 years of experience using telehealth, we have seen that telehealth can provide multiple advantages in the appropriate clinical setting. The use of telehealth can have the following benefits: lower health system costs; increased access to care; decreased time for specialty care or scheduled visits¹⁵; reduced clinic cancellation and no-show rates^{16,17}; fewer hospitalizations^{15,18}; increased patient satisfaction, decreased emergency department use,¹⁹⁻²¹ and improved social connectedness.²²⁻²⁴

The continuing use of telehealth with older adults is an important piece of the health care system.²⁵⁻²⁸ To this end, 43% of our responding clinicians reported that, even though telehealth now serves as a core part of their care model, if the CMS waiver and Medicare reimbursements expired, they would have to reduce its use. Given the documented benefits of telehealth in the care of older adults, it continues to provide a valuable clinical service. A loss of these waivers and reimbursement would, ultimately, lead to a reversal of the benefits we have seen from telehealth over the past few years.

Conclusion

Results of this survey show that many practicing U.S. clinicians use telehealth with older adults at high rates and across a variety of roles, sites of care, and for a variety of clinical purposes. These results suggest that the advantages of telehealth that respondents perceive outweigh the challenges of using it and that there is an opportunity to create guidance and resources toward the delivery of age-friendly telehealth.

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Supplementary Material

Supplementary Appendix S1

REFERENCES

1. Brotman JJ, Kotloff RM. Providing outpatient telehealth services in the United States: Before and during coronavirus disease 2019. *Chest* 2021;159(4):1548–1558.
2. Moore MA, Coffman M, Jetty A, et al. Only 15% of FPs report using telehealth; training and lack of reimbursement are top barriers. *Am Fam Physician* 2016; 93(2):101.
3. Adler-Milstein J, Kvedar J, Bates DW. Telehealth among US hospitals: Several factors, including state reimbursement and licensure policies, influence adoption. *Health Affairs* 2014;33(2):207–215.
4. Quinn W, O'Brien E, Springan G. Using telehealth to improve home-based care for older adults and family caregivers. AARP Public Policy Institute. 2018. Available from: <https://mainehospicecouncil.org/images/PDFs/using-telehealth-to-improve-home-based-care-for-older-adults-and-family-caregivers.pdf> [Last accessed: September 16, 2022].
5. Bosworth A, Ruhter J, Samson LW, et al. Medicare beneficiary use of telehealth visits: Early data from the start of COVID-19 pandemic. Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. 2020. Available from: https://aspe.hhs.gov/sites/default/files/migrated_legacy_files/198331/hp-issue-brief-medicare-telehealth.pdf [Last accessed: September 16, 2022].
6. Verma S. Early impact of CMS expansion of Medicare telehealth during COVID-19. *Health Affairs Blog*. 2020. Available from: <https://www.healthaffairs.org/doi/10.1377/forefront.20200715.454789/> [Last accessed: September 16, 2022].
7. Centers for Medicare and Medicaid Services. Medicare Telemedicine Snapshot. 2021. Available from: <https://www.cms.gov/files/document/medicare-telemedicine-snapshot.pdf> [Last accessed: September 16, 2022].
8. Cowan KE, McKean AJ, Gentry MT, et al. Barriers to use of telepsychiatry: Clinicians as gatekeepers. *Mayo Clin Proc* 2019;94(12):2510–2523.
9. Whitten PS, Mackert MS. Addressing telehealth's foremost barrier: Provider as initial gatekeeper. *Int J Technol Assess Health Care* 2005;21(4):517–521.
10. Marangunic N, Granic A. Technology acceptance model: A literature review from 1986 to 2013. *Univ Access Inf Soc* 2015;14(1):81–95.
11. Connolly SL, Miller CJ, Lindsay JA, et al. A systematic review of providers' attitudes toward telemental health via videoconferencing. *Clin Psychol Sci Pract* 2020;27(2):e12311.
12. Connolly SL, Miller CJ, Gifford AL, et al. Perceptions and use of telehealth among mental health, primary, and specialty care clinicians during the COVID-19 pandemic. *JAMA Netw Open* 2022;5(6):e2216401.
13. Samson LW, Tarazi W, Turrini G, et al. Medicare beneficiaries' use of telehealth in 2020: Trends by beneficiary characteristics and location. Assistant Secretary for Planning and Evaluation Office of Health Policy. 2021. Available from: <https://aspe.hhs.gov/sites/default/files/documents/a1d5d810fe3433e18b192be42dbf2351/medicare-telehealth-report.pdf> [Last accessed: September 16, 2022].
14. Malani P, Kullgren J, Solway E, et al. Telehealth use among older adults before and during COVID-19. University of Michigan Institute for Healthcare Policy and Innovation National Poll on Healthy Aging. 2020. Available from: https://deepblue.lib.umich.edu/bitstream/handle/2027.42/156253/0212_NPHA-telehealth-report-FINAL-08142020-v6-handle.pdf?sequence=4&isAllowed=y [Last accessed: September 16, 2022].
15. Lillcrap L, Hunter C, Goldswain P. Improving geriatric care and reducing hospitalisations in regional and remote areas: The benefits of telehealth. *J Telemed Telecare* 2021;27(7):397–408.
16. Azad N, Amos S, Milne K, et al. Telemedicine in a rural memory disorder clinic—remote management of patients with dementia. *Can Geriatr J* 2012;15(4):96–100.
17. Powers BB, Homer MC, Morone N, et al. Creation of an interprofessional teledementia clinic for rural veterans: Preliminary data. *J Am Geriatr Soc* 2017; 65:1092–1099.
18. Catic AG, Mattison MLP, Bakaev I, et al. ECHO-AGE: An innovative model of geriatric care for long-term care residents with dementia and behavioral issues. *J Am Med Dir Assoc* 2014;15(12):938–942.

19. Gillespie SM, Wasserman EB, Wood NE, et al. High intensity telemedicine reduces emergency department use by older adults with dementia in senior living communities. *J Am Med Dir Assoc* 2019;20(8): 942-946.
20. Gellis ZD, Kenaley B, McGinty J, et al. Outcomes of a telehealth intervention for homebound older adults with heart or chronic respiratory failure: A randomized controlled trial. *Gerontologist* 2012;52(4):541-552.
21. Shah MN, Wasserman EB, Gillespie SM, et al. High-intensity telemedicine decreases emergency department use for ambulatory care sensitive conditions by older adult senior living community residents. *J Am Med Dir Assoc* 2015; 16(12):1077-1081.
22. Choi NG, Pepin R, Marti CN, et al. Improving social connectedness for homebound older adults: Randomized controlled trial of tele-delivered behavioral activation versus tele-delivered friendly visits. *Am J Geriatr Psychiatry* 2020;28(7):698-708.
23. Chen K. Use of gerontechnology to assist older adults to cope with the COVID-19 pandemic. *J Am Med Dir Assoc* 2020;21:983-984.
24. Chatterjee P, Yatnatti SK. Intergenerational digital engagement: A way to prevent social isolation during the COVID-19 crisis. *Am J Geriatr Psychiatry* 2020;68(7):1394-395.
25. Verma S. Early impact of CMS expansion of Medicare telehealth during COVID-19. *Health Affairs*. Available from: <https://www.healthaffairs.org/doi/10.1377/forefront.20200715.454789> [Last accessed: September 16, 2022].
26. Fulmer T, Mate KS, Berman A. The age-friendly health system imperative. *J Am Geriatr Soc* 2018;66(1):22-24.
27. Ritchie C, Leff B. Home-based care reimagined: A full-fledged health care delivery ecosystem without walls. *Health Affairs* 2022;41(5):689-695.
28. American College of Emergency Physicians; American Geriatrics Society; Emergency Nurses Association; Society for Academic Emergency Medicine; Geriatric Emergency Department Guidelines Task Force. Geriatric emergency department guidelines. *Ann Emerg Med* 2014;63(5): e7-e25.

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