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TELEHEALTH IN THE CONTEXT OF COVID-19: AN ANALYSIS OF MEN'S USAGE AND PERCEPTIONS IN COMPARISON TO IN-PERSON HEALTHCARE

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Abstract

Introduction: The rise in telehealth adoption due to the emergence of COVID-19 may have had implications for men who experience barriers to accessing traditional forms of healthcare. This study sought to explore how a sample of older men interacted with telehealth during the pandemic.

Method: Data sourced from a cross-sectional, population-based questionnaire (completed from October 2020 to March 2021) were used to analyze the characteristics of older men's (a) use of telehealth services, and (b) perceptions of telehealth in comparison to in-person healthcare using Andersen's Behavioral Model of Health Services Use.

Results: Of the 731 participants (mean age = 69 years; SD = 9.6), 241 (32.9%) had used telehealth services during pandemic restrictions. Most of them who had used telehealth (63.1%; 152/241) thought it was "just as good" as in-person, 4.1% (10/241) believed it was "better," and 25.7% (62/241) thought it was "worse." Men with more chronic conditions were more likely to (a) have used telehealth (odds ratio [OR], 1.44 [95% CI, 1.21–1.71]) and (b) perceived telehealth as "better" or "just as good" as in-person healthcare (OR, 1.63 [95% CI, 1.17–2.29]). Men with clinically significant depressive symptoms were more likely to view telehealth as worse than in-person care (OR, 0.32 [95% CI, 0.12–0.88]).

Conclusion: While telehealth is acceptable to the majority of middle-aged and older men who have used it during the pandemic, attitudes may vary according to their current health issues. Men with more chronic conditions are more likely to feel positive about telehealth, while those with clinically significant depression symptoms are more likely to view it negatively. Healthcare providers should consider men's needs and preferences when offering telehealth services.

Keywords: Telehealth; primary care; men; males; mental health; COVID-19

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INTRODUCTION

In many countries, men experience poorer health outcomes than women on important metrics such as premature mortality and death by suicide.¹ While explanations linking these discrepancies with service underutilization often frame men as healthcare avoiders and reluctant,² the majority of men in countries such as the United States³ and Australia do access healthcare services.⁴ However, men report facing significant barriers to healthcare access such as social stigmas related to help-seeking, inaccessibility due to inconvenient clinic opening hours, locations, and costs, and ill-suited “feminine” clinic environments.⁴⁻⁶

Because the SARS-CoV-2 (COVID-19) virus was declared a pandemic in March 2020, telehealth has undergone a rapid rise in adoption in many countries.⁷ Though studies have typically lacked theoretical underpinning, mixed-gender research prior to the pandemic showed that telehealth could lead to a variety of positive physical and mental health outcomes in patients.⁸ While emergent studies during the pandemic have reported high levels of patient satisfaction⁹ with telehealth comparable to in-person appointments, males reported poorer experiences with telehealth than females.¹⁰ Though some healthcare professionals have expressed concerns about misdiagnosing without in-person contact,¹¹ patients cite improved outcomes, increased accessibility, convenience, and decreased costs as reasons for their satisfaction with telehealth services.^{12,13} Given these, telehealth may have the potential to engage men by reducing or addressing many of the aforementioned barriers men experience when accessing in-person health services. Telehealth services can often be discreetly accessed from any location without the need for travel, wait times, or interaction with clinic environments. While men have already reported finding other health-related technologies including health helplines and internet health information to be accessible and acceptable,¹⁴ little is known about their use and opinions of telehealth. Given increased demand for telehealth services due to COVID¹⁵ and its potential for reducing

barriers to male healthcare access, it is important to understand men’s interactions with telehealth.

Accordingly, this study examines (a) middle-aged and older men’s use and perceptions of telehealth during the pandemic, and (b) predictors of their telehealth use and perceptions of telehealth compared to in-person care. Australia was the context for examination, with government expansion of telehealth consult rebates in late March 2020 seeing telephone consultations increase from 0 to 34% of all general practitioner appointments.¹⁶

METHODS

Study design

This study used a cross-sectional design which drew data from the most recent wave of the longitudinal Men Androgen Inflammation Lifestyle Environment and Stress (MAILES) study of men’s health and wellbeing, which harmonized data from Florey Adelaide Male Ageing Study (FAMAS) participants and eligible male participants from the North West Adelaide Health Study (NWAHS).¹⁷ The results were reported in accordance with the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist.¹⁸

Participants

The MAILES cohort consists of a randomly sampled population of metropolitan community-dwelling men from Northern and Western suburbs of Adelaide, South Australia. Individuals were invited to participate if they were male, aged 35–80 years during recruitment at baseline (between 2002 and 2006), were the last male in the household who fit these criteria to have had a birthday, and were willing to consent to participation. Participants were excluded if they were not able to understand the study requirements or attend clinics, were non-English speaking, resided outside the catchment area, or were housed in an institutional setting. The baseline MAILES cohort was generally representative of men from the Northern and Western Adelaide Statistical Local Areas (SLAs) according to key

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demographic indicators from the ABS 2008 Estimated Resident Population.¹⁷ Of the 2563 participants who were included in the study at baseline, 746 remained at Wave 4 (2020), and 731 completed responses to telehealth questions and were therefore eligible for this study.

Procedures

In October 2020, MAILES cohort members were invited by the MAILES investigators to participate in a further study wave. Those with a recorded email address were contacted via email and asked to complete an online survey, and those without were mailed a paper questionnaire with reply-paid envelope. All participants provided written informed consent. No incentives were provided. Further details regarding the MAILES methodology are available in the cohort profile.¹⁷

Theoretical model

Previous telehealth research has lacked underpinning from an established theoretical framework.¹⁹ We employed the widely used Andersen Behavioral Model (ABM),²⁰ intended to explain people’s use of healthcare services. The ABM has been previously applied to understand the utilization of health services generally,²¹ specifically for telehealth,²² and in the context of the COVID-19 pandemic.²³ The ABM examines the influence of predisposing characteristics, enabling resources, and perceived need for care on health behaviors and outcomes (Figure 1 for model with position of each examined variable).

Measures

Use of telehealth services was assessed by asking participants if they had used any telehealth services from the start of COVID-19 restrictions in March 2020 (“Yes” or “No”), where telehealth was defined to participants as “an appointment with a health care provider by video or phone.” Participants who reported using telehealth were asked about their perception on the telehealth consultation(s) compared to in-person consultations (“Worse,” “Just as good,” “Better,” “Don’t know”), and their likelihood of recommending telehealth to others measured on a four-point Likert scale (“Definitely will not” to “Definitely will”). Five-point Likert scales were also used to investigate whether participants believed telehealth would be useful post-pandemic (“Not at all” to “Extremely”). Respondents also reported any chronic conditions they had ever been diagnosed with from a list of 20 conditions. Recent anxiety symptoms were assessed using the validated General Anxiety Disorder-7 (GAD-7).²⁴ Recent depressive symptoms were assessed using the Beck Depression Inventory (BDI) in FAMAS participants and the Center for Epidemiological Studies Depression Scale (CES-D) in NWAHS participants. Established cutoffs ≥ 10 for the BDI and ≥ 16 for the CES-D were used to combine the data for analyses, with both scores being indicative of mild depression.²⁵ Date of birth was recorded at study enrollment and was used to calculate the current age. Highest education level, household income, and marital status were obtained by self-report using validated items.¹⁷

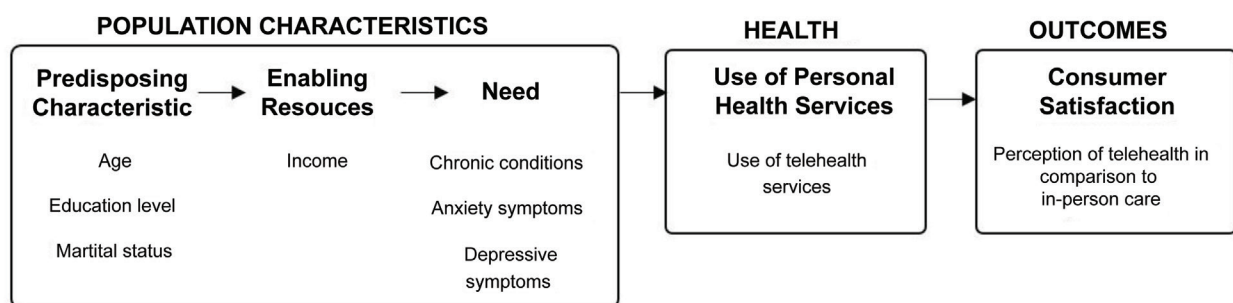


FIGURE 1. Andersen’s Behavioral Model with variables labeled.²⁰

Statistical analysis

Data were analyzed using R (Version 4.0.2).²⁶ Missing outcome data were examined, with variables having $\leq 5\%$ missing undergoing case-wise deletion. Following this guideline, missing telehealth use data (2%) underwent case-wise deletion, while missing telehealth comparison data (0%) required no action. All predictor variables except age had $> 5\%$ missing data and underwent multiple imputation using the MICE package, which models missing data using regression based on other variables in the data according to its distribution while accounting for random error.²⁷

Following imputation, descriptive statistics were calculated overall and by telehealth usage. Independent samples t-tests and chi-squared tests were performed to explore associations between predictor variables and participant telehealth usage, reporting either Cohen's d (interpreted as 0.2, 0.5, and 0.8 representing small, medium, and large, respectively),²⁸ or Cramer's V .²⁹

Hierarchical binary and ordinal logistic regressions were conducted to examine predictors of men's (a) telehealth use (versus non-use) and (b) perceptions of telehealth versus in-person care ("Worse" versus "Just as good" or "Better"). Data were first checked for multicollinearity ($r \geq 0.80$) using correlation matrices, and deviations from normality and outliers were assessed by inspecting Q-Q plots. Assumptions were met. In each regression, predictors were entered in three blocks as per the ABM: predisposing characteristics, enabling resources, then need factors. Age, number of chronic conditions, and anxiety symptoms were entered as continuous variables, while highest level of education, marital status, income, and depression were analyzed as categorical variables. The model with the lowest Akaike information criterion and highest Nagelkerke's pseudo R^2 was interpreted as the best fit for the data.³⁰ Values of $P < 0.05$ or odds ratios with a 95% confidence interval (CI) that did not cross one were considered statistically significant.

RESULTS

Population characteristics

Table 1 presents participant characteristics for the total sample and by telehealth users and non-users. The average participant was a man aged 69 years (ranging from 50–94) who was born in Australia, partnered, had an AUD \$20,000–\$60,000 income, and at least one comorbid chronic condition. Telehealth users reported significantly more chronic conditions and symptoms of anxiety than nonusers, though effect sizes were small ($d = 0.26$ and 0.22, respectively).

Men's telehealth use and perception

One-third (33%; Table 1) of the men had used telehealth during the pandemic, with almost all of these services via telephone (96%; Table 2). The majority of men who had used telehealth during this time believed it was either as good as or better than in-person care (67%). Sixty-seven percent said that they probably or definitely would recommend telehealth (67%), and 61% believed that telehealth would be at least moderately useful after the pandemic (Table 2).

Predictors of men's telehealth use

Results of the model predicting men's telehealth use are presented in Table 3. Model 3, which included all predictor variables, provided the best fit. The only significant predictor within this model was the number of chronic conditions, suggesting that for every additional chronic condition, men were approximately 44% more likely to have used telehealth services, holding all other variables constant.

Predictors of men's perception of telehealth versus in-person care

Results of the model predicting men's perception on telehealth versus in-person care can be seen in Table 4. Model 3, which included all predictor variables, provided the best fit. Total number of chronic conditions and clinically significant

TABLE 1. Characteristics of Participants by Telehealth Usage and Independent Samples T-tests/Chi-squared Test results

Participant variables	Total sample (N = 731)		Accessed telehealth (n = 241)		Did not access telehealth (n = 490)		t/X ²	P	Cohen's d/ Cramer's V
	M/n	SD/%	M/n	SD/%	M/n	SD/%			
Age	69.5	9.6	68.6	8.7	69.9	10.0	1.76	0.08	0.13
50–59 years	125	17.1	41	17.0	84	17.1	–	–	–
60–69 years	244	33.4	85	35.3	159	32.4	–	–	–
70–79 years	248	33.9	87	36.1	161	32.9	–	–	–
80–89 years	114	15.6	28	11.6	86	17.6	–	–	–
Highest educational level	–	–	–	–	–	–	7.47	0.06	0.10
Primary school	195	26.7	59	24.5	136	27.8	–	–	–
High school	87	11.9	31	12.9	56	11.4	–	–	–
TAFE/Apprenticeship/trade	314	43.0	94	39.0	220	44.9	–	–	–
Bachelor's degree or higher	135	18.5	57	23.7	78	15.9	–	–	–
Relationship status	–	–	–	–	–	–	0.09	0.76	0.01
Partnered	557	76.2	182	75.5	375	76.5	–	–	–
Not partnered	174	23.8	59	24.5	115	23.5	–	–	–
Income	–	–	–	–	–	–	–1.31	0.19	0.10
≤\$12,000	13	1.8	3	1.2	10	2.0	–	–	–
\$12,001–\$20,000	51	7.0	17	7.1	34	6.9	–	–	–
\$20,001–\$40,000	183	25.0	56	23.2	127	25.9	–	–	–
\$40,001–\$60,000	169	23.1	51	21.2	118	24.1	–	–	–
\$60,001–\$80,000	93	12.7	37	15.4	56	11.4	–	–	–
\$80,001–\$100,000	73	10.0	23	9.5	50	10.2	–	–	–
\$100,001–\$150,000	97	13.3	34	14.1	63	12.9	–	–	–
\$150,001–\$200,000	35	4.8	13	5.4	22	4.5	–	–	–
≥\$200,001	17	2.3	7	2.9	10	2.0	–	–	–
Total no. of chronic conditions	2.8	2.1	3.1	2.1	2.6	1.9	–3.46	0.001	0.26
0	86	11.8	22	9.1	64	13.1	–	–	–
1	126	17.2	39	16.2	87	17.8	–	–	–
≥2	519	71.0	180	74.7	339	69.2	–	–	–
Anxiety symptoms (GAD-7)	9.4	4.1	10.0	4.7	9.1	3.7	–2.59	0.010	0.22
Depression symptoms (BDI/ CES-D)	–	–	–	–	–	–	3.21	0.073	0.07
Not clinically significant	611	83.6	193	80.1	418	85.3	–	–	–
Clinically significant	120	16.4	48	19.9	72	14.7	–	–	–

TABLE 2. Characteristics of Telehealth Use.

Variable	n	%
Telehealth modality used		
Telephone	231	95.9
Video	3	1.2
Both	7	2.9
Perception of telehealth in comparison to in-person care		
Better	10	4.1
Just as good	152	63.1
Worse	62	25.7
Don't know	17	7.1
Likelihood of recommending telehealth		
Definitely will not	13	5.4
Probably will not	56	23.2
Probably will	116	48.1
Definitely will	45	18.7
Don't know	11	4.6
Usefulness of telehealth after pandemic		
Not at all	38	15.8
Slightly	56	23.2
Moderately	88	36.5
Very	44	18.3
Extremely	15	6.2

depression symptoms were the only significant predictors. For every additional chronic condition, men were 63% more likely to view telehealth as being just as good or better than in-person health-care. Conversely, men with clinically significant depression symptoms were 68% more likely to view telehealth as being worse than in-person care.

DISCUSSION

This study is the first to explore middle-aged and older men's telehealth use during the COVID-19 pandemic, a group that is consistently underrepresented in the literature.³¹ Guided by the established ABM, our main findings were: (a) In one-third of men who used telehealth, most of them found their consultation to be just as good as or better than

in-person services, (b) men with more anxiety symptoms or a greater number of chronic conditions were more likely to have used telehealth during the pandemic, though only a greater number of chronic conditions were significantly predictive of telehealth use once accounting for other variables, and (c) men with more chronic conditions were more likely to view telehealth positively in comparison to in-person services, while those with clinically significant depression symptoms were more likely to perceive their experience negatively. Telehealth has the potential to address barriers to male help-seeking, and our findings suggest that most men had positive experiences with using telehealth for primary care appointments in the context of the pandemic, though this may have depended on their reason for treatment.

The proportion of men (33%) who had used telehealth services in this sample was in line with other emerging literature on telehealth usage in Australia during the pandemic.¹⁰ The vast majority (96%) of telehealth consultations in this sample were conducted via telephone, which is consistent with the over 90% of telehealth consultations conducted via phone in Australia since March 2020.¹⁶ These trends differ from rates in the United States in which video consults accounted for almost half of all telehealth consultations.^{32,33} Compared to telephone consultations, videoconferencing has been linked with fewer medication errors, and greater diagnostic and decision-making accuracy.³⁴ However, it is important to investigate the most appropriate consultation format for specific issues, as phone consults may appeal to some patients for reasons of familiarity and ease-of-use.

Aligning with other Australian¹⁰ and international³⁵ data, men with more chronic conditions in this sample were more likely to have utilized telehealth services. Telehealth may have facilitated continuity of care for these men who may always require more frequent appointments to manage their conditions.³⁶ Emerging studies from during the pandemic have reported that patients with chronic conditions are satisfied with telehealth due to its ease of use and accessibility, particularly for prescription renewals, chronic

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TABLE 3. Hierarchical Binary Logistic Regression Predicting Participants' Usage of Telehealth.

Predictor	Model 1		Model 2		Model 3	
	<i>b</i> (SE)	OR (95% CI)	<i>b</i> (SE)	OR (95% CI)	<i>b</i> (SE)	OR (95% CI)
Predisposing characteristics						
Age	-0.11 (0.08)	0.89 (0.76, 1.05)	-0.10 (0.09)	0.90 (0.76, 1.08)	-0.17 (0.10)	0.84 (0.69, 1.01)
Educational level	0.09 (0.08)	1.10 (0.94, 1.27)	0.08 (0.08)	1.09 (0.93, 1.27)	0.09 (0.08)	1.10 (0.94, 1.29)
Marital status	-0.07 (0.18)	0.94 (0.65, 1.35)	-0.08 (0.19)	0.92 (0.64, 1.35)	-0.07 (0.20)	0.94 (0.64, 1.39)
Enabling resources						
Income	(-)	(-)	0.00 (0.00)	1.00 (1.00, 1.00)	0.00 (0.00)	1.00 (1.00, 1.01)
Need factors						
Chronic conditions	(-)	(-)	(-)	(-)	0.36 (0.09)	1.44* (1.21, 1.71)
Anxiety	(-)	(-)	(-)	(-)	0.20 (0.10)	1.22 (1.00, 1.48)
Depression	(-)	(-)	(-)	(-)	-0.08 (0.28)	0.92 (0.52, 1.60)
Model summary	$R^2 = 0.01$ R^2 change = 0.01 AIC = 930.46		$R^2 = 0.01$ R^2 change = 0.00 AIC = 932.37		$R^2 = 0.05$ R^2 change = 0.04 AIC = 914.14	

AIC, Akaike information criteria; 95% CI, 95% confidence interval; R^2 , Nagelkerke's Pseudo R^2 . * $P < 0.01$.

TABLE 4. Hierarchical Ordinal Logistic Regression Predicting Participants' Assessment of Telehealth Compared to In-Person Healthcare.

Predictor	Model 1		Model 2		Model 3	
	<i>b</i> (SE)	OR (95% CI)	<i>b</i> (SE)	OR (95% CI)	<i>b</i> (SE)	OR (95% CI)
Predisposing characteristics						
Age	-0.11 (0.16)	0.90 (0.65, 1.23)	-0.10 (0.09)	0.91 (0.63, 1.30)	-0.18 (0.19)	0.84 (0.57, 1.22)
Educational level	-0.23 (0.13)	0.79 (0.60, 1.03)	-0.24 (0.08)	0.79 (0.59, 1.04)	-0.26 (0.15)	0.77 (0.58, 1.02)
Marital status	0.07 (0.33)	1.07 (0.55, 2.05)	0.06 (0.19)	1.06 (0.53, 2.07)	-0.01 (0.35)	0.99 (0.49, 1.97)
Enabling resources						
Income	(-)	(-)	0.00 (0.00)	1.00 (0.99, 1.01)	0.00 (0.00)	1.00 (0.99, 1.01)
Need factors						
Chronic conditions	(-)	(-)	(-)	(-)	0.49 (0.17)	1.63* (1.17, 2.29)
Anxiety	(-)	(-)	(-)	(-)	0.23 (0.18)	1.26 (0.89, 1.82)
Depression	(-)	(-)	(-)	(-)	-1.13 (0.51)	0.32** (0.12, 0.88)
Model summary	$R^2 = 0.02$ R^2 change = 0.02 AIC = 346.00		$R^2 = 0.02$ R^2 change = 0.00 AIC = 347.98		$R^2 = 0.08$ R^2 change = 0.06 AIC = 342.46	

AIC, Akaike information criteria; 95% CI, 95% confidence interval; R^2 , Nagelkerke's Pseudo R^2 . * $P < 0.01$; ** $P < 0.05$.

condition checkups, and discussions with their general practitioner.⁹ Our results suggest that this also holds true when considering males alone. However, telehealth consultations may be less practical where physical examination is needed and diagnostics cannot be performed remotely.^{37,38} Concerns have also been raised about a “digital divide” between patients with the requisite technological literacy and equipment needed to engage constructively in telehealth consultations and those without.³⁹

In this sample, men who utilized telehealth reported significantly more symptoms of anxiety than those who did not use telehealth. Although patients presenting with mental health symptoms have reported delaying care due to pandemic restrictions, they also have a high degree of willingness to resolve these delays through telehealth services.³⁵ Similar to previous studies in which men found mental health-related technologies acceptable,¹⁴ telehealth may have partially alleviated male barriers to healthcare usage for men with anxiety symptoms in this sample. The higher likelihood of telehealth utilization among men with anxiety compared to depression has been previously observed in other populations and may be due to the passivity and low self-esteem that characterize depression.⁴⁰

Like the findings from mixed-gender research during the pandemic,¹⁰ men with depression in this sample were more likely to view telehealth poorly in comparison to traditional in-person healthcare. While face-to-face support is crucial in reducing the stigma of receiving therapy for men,⁴¹ COVID-19 restrictions have impeded both these connections and social interactions which are important for mental wellbeing. While these results may reflect a perception of telephone consultations as more impersonal in our sample, they may also indicate that telehealth struggled to overcome the barriers to healthcare experienced by men with depression. Although some men with depression did not find telehealth consultations with their general practitioner as a sufficient replacement for face-to-face consultations, telehealth may provide temporary support for men during times of restriction. This view is supported by a systematic

review of mixed-gender telemental health services conducted during the pandemic, which found that online psychological counseling reduced the burden of mental health conditions and helped patients manage the pandemic.⁴²

Prior to COVID-19, healthcare providers were often hesitant to endorse telehealth for older patients due to concerns surrounding suitability.⁴³ Despite this, we found age was not a predictor of men’s telehealth use or their perception of the consultation. Other studies conducted during the pandemic^{10,35} also found that age had no impact on patients’ telehealth use or satisfaction. These emerging results suggest that the pandemic may have served as a tipping point for the acceptance and uptake of telehealth services in older patients.

Strengths, limitations, and future research

Research into men’s healthcare has often neglected the role of service providers in delivering accessible and effective healthcare in favor of a focus on changing men’s behavior.⁴⁴ Our focus on men’s use and perceptions of telehealth provides insights into its acceptability for males, and may assist practitioners when making decisions about the most appropriate modality for men’s healthcare consultations. While we utilized a large sample, it comprised mainly older men with comorbid chronic conditions and accordingly, the results may not be representative of the experiences and preferences of other male populations. In particular, further research into telehealth during the pandemic among younger men, migrants, and indigenous populations would assist in tailoring services to other male populations. Qualitative research exploring the experiences, needs, barriers, and contexts (e.g., primary versus secondary care) of both men and healthcare providers related to different activities that might be part of a telehealth consult (e.g., mental health counselling, preventive activities, prescriptions, requiring physical assessment) could guide refinement of these services for men. Understanding that many men likely engaged with telehealth for the first time during the pandemic, addressing these issues is crucial to their

continued use of these services. Given previous studies have found differences across telehealth formats (e.g., video versus phone³⁴) and genders (e.g., males tend to have poorer experiences with telehealth than females during the pandemic^{10,45,46}), further research might also investigate acceptability and satisfaction in these domains. Similarly, while we found men with chronic conditions report greater use and satisfaction with telehealth, future research may also consider the influence of specific conditions and their severity on telehealth use and satisfaction. Longitudinal research would also be beneficial in understanding men's opinions on telehealth following pandemic restrictions.

Clinical implications

Our findings have implications for the provision of telehealth services to men during the COVID-19 pandemic and potentially as a method for addressing barriers to men's help-seeking. Firstly, telehealth appears to be an acceptable method of healthcare delivery for men with chronic conditions. Healthcare providers may wish to offer chronic condition management via telehealth but recommend in-person consultations when a physical examination is required.⁴⁷

Secondly, although men who use telehealth reported more significant anxiety symptoms than those without significant anxiety symptoms, healthcare practitioners should also be aware that men with depression may not find these services as acceptable as in-person care. Telehealth consultations may provide men suffering from depression with an alternative to deferring or forgoing care, but the lack of a therapeutic connection between patient and practitioner via telehealth may result in an inferior experience.

Finally, the rapid adoption of telehealth triggered by the pandemic may have altered the practices of general practitioners who were traditionally hesitant to engage older patients in telehealth consultations.⁴³ Healthcare providers should also be cognizant of evolving attitudes toward telehealth and may wish to continue to offer these services to older patients after

the pandemic if acceptability remains steady. Although many of the restrictions that promoted the rise in telehealth adoption during the pandemic have now been lifted, the advantages associated with these consultations (e.g., accessibility and convenience) may continue to facilitate treatment and satisfy patients where telehealth consultations are practical and appropriate. Telehealth may also provide practitioners with an opportunity to overcome common barriers to engaging men in healthcare through increased service accessibility.³⁷

CONCLUSION

We used the ABM to examine the characteristics of middle-aged to older men who used telehealth services during the pandemic and their perceptions of telehealth compared to in-person healthcare. Key findings suggest that men with more chronic conditions and anxiety symptoms were more likely to have accessed telehealth services. Men with more chronic conditions were more likely to perceive telehealth as just as good as or better than in-person care, while men with depression were less likely to do so. Telehealth may have reduced barriers to healthcare access for men managing their chronic conditions but may not fulfil the therapeutic needs of men with depression. Age was not associated with men's telehealth usage or perceptions compared to in-person care, suggesting a possible shift in the acceptability of telehealth services for middle-aged to older men since the beginning of the pandemic.

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CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest to disclose.

ETHICS STATEMENT

The study approval was granted by the University of Adelaide Human Research Ethics Committee (H-2020-109).

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