

Original Research

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CME Objective

After studying this article, you should be able to:

 Consider a brief behavioral activation intervention (in person or as teletherapy) as an adjunct or alternative to pharmacologic care for depression and anxiety

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Teletherapy Intervention to Treat Depression and Anxiety in Primary Care VitalSign⁶ Program

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ABSTRACT

Objective: Research analyzing behavioral activation (BA) teletherapy outcomes is limited. Among low-income real-world primary care patients receiving a brief BA teletherapy program for depression and anxiety, we analyzed descriptive statistics and changes in depression and anxiety scores throughout treatment.

Methods: One hundred thirty patients completed an intake assessment from June 2015 to August 2016; outcomes included the Patient Health Questionnaire-9 (PHQ-9) and the Generalized Anxiety Disorder-7 (GAD-7). Data from 74 low-income, primary care patients completing at least one therapy session were analyzed to characterize the demographics of therapy patients, to describe their depression and anxiety symptoms throughout treatment, and to examine whether patients who completed 4 or more sessions had statistically lower exit scores than those completing fewer than 4.

Results: Patients were moderately depressed (PHQ-9 score: mean = 14.46) and anxious (GAD-7 score: mean = 11.91) at intake. Patients were predominantly Latino/Latina (68.9%), Spanish-speaking (54.0%), and female (79.7%). The majority of patients who received at least one therapy session achieved and sustained depression remission. Patients who completed \geq 4 therapy sessions demonstrated lower final session depression (PHQ-9: mean = 5.13, SD = 4.75) and anxiety (GAD-7: mean = 4.77, SD = 4.21) scores compared to those completing < 4 sessions (PHQ-9: mean = 8.04, SD = 6.20, P = .029; GAD-7: mean = 8.00, SD = 6.02, P = .011).

Conclusions: Primary care patients demonstrated improvements in depressive and anxious symptoms throughout BA-based teletherapy. BA teletherapy is feasible and associated with improved outcomes as an adjunct or alternative intervention for primary care providers and in lowincome, charity populations.

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inical Points

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- Brief behavioral activation teletherapy was associated with improved depression and anxiety outcomes among patients receiving teletherapy within low-income primary care clinics.
- Symptom reduction was noted especially among patients completing ≥ 4 therapy sessions.
- Primary care providers may consider behavioral activation teletherapy as an adjunct or alternative to measurementbased, pharmacologic care for depression and anxiety.

fficacy of videoconferencing telepsychiatry and teletherapy for treatment of mood and anxiety disorders has been well-established, with outcomes similar to face-toface visits and greater efficacy compared to treatment as usual or placebo.^{1–10} These studies^{1–10} primarily employed videoconferencing with adult outpatients (some in primary care settings) with depressive or anxiety symptoms and disorders, including posttraumatic stress disorder (PTSD). While some common approaches include telephone visits, computer programs, and mobile phone applications,^{11,12} extensive research has focused on live videoconferencing teletherapy, which is most analogous to in-person psychotherapy. Patient and provider satisfaction scores with videoconferencing teletherapy interventions are high.^{6,8,10,13} Videoconferencing teletherapy is cost-effective and improves access to care, especially among rural, elderly, underserved, and minority outpatients.^{2,4,14,15}

Cognitive-behavioral therapy (CBT) has been an effective modality for depression-focused teletherapy interventions,^{16–25} with greater improvement in depressive symptoms compared to supportive psychotherapy^{25,26} or treatment as usual.^{18,23} However, these interventions have primarily involved telephone sessions or online courses rather than videoconference-based therapy. Like CBT, behavioral activation (BA) focuses on exposure to pleasurable, accomplishment-building activities; however, this therapy focuses less on maladaptive cognitions and cognitive restructuring and more on how cognitions relate to task completion or avoidance. Core cognitive components of BA include teaching patients that motivation can come after beginning a task and the importance of following a plan rather than one's mood. Limited research^{3,15,27} on BA in teletherapy has demonstrated its efficacy. A trial¹⁵ utilizing manualized videoconferencing depression-based BA teletherapy with elderly veterans found treatment outcomes for telecounseling were similar to in-person BA at both 3- and 12-month follow-ups. Another videoconferencing study³ used manualized teletherapy and in-person BA and therapeutic exposure (BA-TE) to treat combat veterans with PTSD and major depressive disorder (MDD). The effectiveness of symptom reduction was similar across both in-person and teletherapy interventions posttreatment and at 3- and 12-month follow-ups.³ Additional research²⁷ using the same videoconferencing paradigm found the BA-TE program to be effective for treating PTSD symptoms, but not MDD symptoms, when also controlling for comorbid PTSD

symptoms. In summary, only a small number of studies, conducted in Veterans Affairs (VA) settings, have examined videoconferencing teletherapy-based BA as a depression intervention.

Integrated models of care have incorporated depression treatment into primary care settings. Examples include monthly videoconferencing with psychiatrists²⁸ and collaborative care between primary care providers and psychiatrists.²⁹ A meta-analysis⁷ across different modalities of teletherapy (ie, videoconferencing, guided self-help) determined teletherapy to be more effective than treatment as usual for treating depression within primary care. Of particular interest, however, is that there were no statistically significant differences between low- and high-intensity treatments.

The current study builds on prior work to describe and analyze whether an adapted BA-based, live videoconferencing teletherapy intervention for depression and anxiety implemented as part of routine primary care is associated with improved symptom outcomes. Primary care settings are optimal for depression and anxiety treatment given patients' increased comfort in utilizing them for first-line treatment access, the preponderance of mood symptoms,³⁰ and the comorbidity of depression with chronic physical diseases including hypertension, diabetes, and metabolic syndrome.^{31,32} To offer more extensive treatment as adjunct, or as an alternative to, pharmacologic interventions, we sought to examine adapted BA-based teletherapy offered to patients at selected low-income charity clinics.

METHODS

Study Design and Intervention

As an urban academic medical center, we formed partnerships with primary care clinics to implement electronic depression screening and treatment. The partnerships were part of VitalSign⁶ (VS⁶), a quality improvement project to implement mental health screening and treatment within primary care and enhance the quality and efficacy of clinics already screening for depression. Live videoconferencing teletherapy was offered to a subset of the clinics. The majority of subset clinics were charity clinics that served low-income, uninsured, minority patients, requiring no payment for services, a low copay, or suggested donation in exchange for services. Teletherapy services were provided at no cost to patients.

To enhance services provided through VS⁶, we designed an adapted 8-session BA-based intervention for depression as an adjunct or alternative to antidepressant medication. Depression screening and treatment within primary care through VS⁶, and the teletherapy program itself, have been previously described³³ and follow the principles of measurement-based care for depression.^{34,35} Measurementbased care measures depression and anxiety symptom severity, suicidality, antidepressant medication adherence, and side effects at each visit. A treatment visit schedule is followed, and at these visits, providers use an algorithm to **It is illegal to post this copy** facilitate treatment changes if nonresponse occurs. Prior research³⁴⁻⁵⁵ more fully describes measurement-based care for depression treatment.

We used prior conceptualizations of BA but adapted them to a shorter intervention (45 minutes/8 sessions vs 60–90 minutes/10–20 sessions) that is appropriate for the brevity of primary care. Services were offered in English and Spanish. Sessions 1-5 of the manualized intervention were based on core components of the BA model,⁵⁶ including goal-setting, activity and mood monitoring, and activity scheduling (focusing on small, pleasurable, and accomplishment-building activities). Session 6 briefly reviewed the cognitive model, especially if cognitions were interfering with activity completion. Sessions 7 and 8 discussed relapse prevention and summarized the course of therapy. In addition to the core BA features, the model was further adapted to incorporate several optional modules including diaphragmatic breathing, interpersonal effectiveness and communication training (ie, DEAR-MAN [Describe, Express, Assert, Reinforce, Stay Mindful, Appear Confident, Negotiate] skills from dialectical behavior therapy), problem-solving, and sleep hygiene psychoeducation. Optional modules were introduced when symptom presentation (ie, insomnia, guilt) merited or when the focus of a patient's agenda linked directly to these interventions. These modules were facilitated with handouts created by our group and those created by the Centre for Clinical Interventions (www.cci. health.wa.gov.au/) and TherapistAid (www.therapistaid. com). All materials were translated to Spanish, following a translation/back-translation process by a variety of Spanish speakers from different regions and dialects. All sessions included mood check-in, agenda setting, homework review, behavioral activation or other agenda discussion, homework assignment, and patient feedback.

Therapy sessions typically lasted 30–45 minutes, with intake sessions lasting 45–60 minutes. Therapy was conducted by a licensed clinical psychologist (J.M.T.) and a bilingual licensed master social worker (A.C.S.) supervised by a PhD-prepared, licensed clinical social worker (K.E.S.). The bilingual therapist, a native Spanish speaker, delivered therapy with special attention to cultural sensitivity and under supervision of and in collaboration with her colleague, an expert in delivering cultural adaptations of mental health materials to Spanish-speaking populations.

Therapists were based at an academic medical center, while patients accessed teletherapy either at their primary care clinic office or (as of mid-August 2016) potentially from home through their personal computer if in a confidential location. Primary care providers referred patients based on results of the VS⁶ depression screening and usually after having received a subclinical or clinical mood or anxiety disorder diagnosis. We further required teletherapy patients to receive regular care through their primary care provider or an outside referral source. Our institution's institutional review board reviewed our teletherapy protocol and deemed it internal quality improvement, not human subject **at least an initial teletherapy intake beginning June 2015** through August 2016.

Teletherapy was delivered through standard desktop PCs with integrated, high-definition webcams and wireless, secure internet. Secure hotspots were also used when necessary to boost internet quality. Videoconferencing was integrated through our Health Insurance Portability and Accountability Act-compliant electronic medical record system. Participants connected to sessions by accessing our university's secure MyChart system.

Measures

The Patient Health Questionnaire-9 (PHQ-9)⁵⁷ and the Generalized Anxiety Disorder-7 (GAD-7)⁵⁸ were collected at each session and used to measure patient progress and symptom severity. These measures consist of 9 and 7 items, respectively, each scored on a 0 to 3 scale, that denote the frequency of symptoms within the past 2 weeks. Scores range from 0 to 27 (PHQ-9) and 0–21 (GAD-7), with severity cutpoints of 5 (mild), 10 (moderate), 15 (moderately severe), and 20 (severe) for the PHQ-9 and 5 (mild), 10 (moderate), and 15 (severe) for the GAD-7.

Statistical Analyses

Statistical analyses included descriptive statistics, demographic variables, means and standard deviations of PHQ-9 and GAD-7 scores by session, and scores across a cut-point grouping of completed teletherapy sessions. Due to concerns about normality, a 1-sided Wilcoxon rank sum test was utilized for inferential statistics to test whether more sessions resulted in lower scores within our specific cut-point setting.

RESULTS

Of 232 referred patients, 130 completed at least the intake session within the aforementioned timeframe. Some patients were excluded from subsequent analyses due to various factors, including only attended the intake session (n=43); missing PHQ-9 at intake (n=4); only a shorter, 2-item screener inquiring about the 2 core depressive symptoms (PHQ-2) at intake (n=6); and still active in therapy but had not yet reached 8 sessions (n=3). The final sample consisted of 74 patients who completed at least 1 teletherapy session and were not still actively in treatment. At intake, the majority of patients (n=49/74, 66.2%) reported taking an antidepressant, while 25/74 (33.8%) did not (13 were not prescribed one, while 12 were prescribed an antidepressant that they were not currently taking).

Demographic data for the final sample (N = 74) are found in Table 1. Patients were primarily women, Latina, and Spanish-speaking. Diagnoses (DSM-5 criteria) by primary care providers included major depressive disorder or unspecified depressive disorder, while a comorbid depressive disorder and generalized anxiety occurred for 12 patients. PHQ-9 scores at intake were at the high end of moderate

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Table 1. Descriptive and Demographic Data for Patients Who Completed at Least 1 Teletherapy Session and Were Not in Active Treatment Up to 8 Sessions (N = 74)

	Overall ^a	≥4 Sessions	<4 Sessions
Trait	Mean (n)	Mean (n)	Mean (n)
Measure, score			
Baseline PHQ-9	14.0 (74)	14.0 (46)	15.0 (28)
Baseline GAD-7	13.0 (67)	12.0 (46)	13.0 (28)
Final PHQ-9	5.5 (74)	4.0 (46)	7.0 (28)
Final GAD-7	5.0 (74)	4.0 (46)	7.0 (28)
Age, y, mean	40.0 (73)	40.0 (46)	42.5 (28)
	% (n)	% (n)	% (n)
Sex			
Female	79.7 (59)	76.1 (35)	85.7 (24)
Male	20.3 (15)	23.9 (11)	14.3 (4)
Ethnicity			
Latino/Latina	68.9 (51)	65.2 (30)	75.0 (21)
White	17.6 (13)	19.6 (9)	14.3 (4)
African American	10.8 (8)	13.0 (6)	7.1 (2)
Unknown	1.4 (1)	0 (0)	3.6 (1)
Primary Language			
English	46.0 (34)	56.5 (26) ^b	28.6 (8)
Spanish	54.0 (40)	43.5 (20)	71.4 (20)
Depression			
Major depressive disorder	71.6 (53)	76.1 (35)	64.3 (18)
Unspecified depressive disorder	14.9 (11)	10.9 (5)	21.4 (6)
Adjustment disorder	5.4 (4)	6.5 (3)	3.6 (1)
Persistent depressive disorder (dysthymia)	2.7 (2)	0 (0)	7.1 (2)
Depressive disorder due to another medical condition	1.4 (1)	0 (0)	3.6 (1)
None	4.1 (3)	6.5 (3)	0 (0)
General anxiety	(-)		- (-)
Yes	20.3 (15)	26.1% (12)	10.7 (3)
No	79.7 (59)	73.9% (34)	89.3 (25)
Comorbidity of depressive			
disorder and general anxiety			
Yes	16.2 (12)	19.6 (9)	10.7 (3)
No	83.8 (62)	80.4 (37)	89.3 (25)

^aFor continuous variables, the median is reported.

 ${}^{b}\chi^{2}_{1} = 5.48, P = .019.$

Abbreviations: GAD-7 = Generalized Anxiety Disorder 7-item scale, PHQ-9 = Patient Health Questionnaire-9.

severity (mean [SD] = 14.46 [5.74]), while GAD-7 scores were also at moderate severity (n = 69, mean [SD] = 11.91 [5.59]), following established severity conventions.^{57,58} Demographic and clinical characteristics of the sample were similar to those who had complete PHQ-9 data and had been referred for teletherapy but did not participate beyond attending an intake session.*

Patients engaged in 5.05 therapy sessions (SD = 2.84) following intake. Nearly 40% completed all 8 sessions. Table 2 presents the mean (SD) PHQ-9 and GAD-7 scores at intake and up to 8 teletherapy sessions, while Table 3 presents each patient's final-session PHQ-9 and GAD-7 scores. These results indicate that depression and anxiety severity improved over time, although the largest changes seemed to occur after the first few sessions.

Table 2. Descriptive Statistics for PHQ-9 and GAD-7 Score by Session (N = 74)

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	PHQ-9		GAD-7		
Session	Mean (SD)	n	Mean (SD)	n	
Intake	14.46 (5.74)	74	11.91 (5.59)	69	
1	11.78 (6.50)	72 ^a	10.02 (6.09)	65	
2	8.62 (6.63)	60	7.39 (5.45)	54	
3	7.17 (5.40)	53	6.48 (5.43)	48	
4	6.83 (5.96)	46	5.85 (5.48)	41	
5	6.66 (5.73)	41	6.37 (5.41)	35	
6	6.38 (6.10)	37	6.54 (5.59)	35	
7	6.64 (5.68)	33	6.25 (4.89)	32	
8	5.75 (4.80)	28	5.85 (4.43)	27	
^a PHQ-9 data	was missing at see	ssion 1 fo	or 2 patients.		

Abbreviations: GAD = Generalized Anxiety Disorder 7-item scale, PHQ = Patient Health Questionnaire-9.

Depression remission was defined as a PHQ-9 score <5 at some point during the course of teletherapy; 2 patients were excluded from these analyses because, at intake, PHQ-9 scores already qualified them for remission. The majority of patients not already in remission at intake who completed at least one teletherapy session (n = 72) achieved remission at some point during the course of therapy (n = 38, 52.8%). Furthermore, 34 of 38 (89.5%) patients achieving remission were still in remission at their final session visit.

To better understand the impact of number of completed sessions, we dichotomized this variable using a single cutpoint denoting the halfway point of the full program of sessions: <4 sessions (n=28) and \geq 4 sessions (n=46). Chi-square analyses on all demographic and diagnostic information from Table 1 indicated one statistically significant difference: monolingual Spanish-speaking patients were more likely to be in the <4 grouping compared to English-speaking patients (χ^2_1 =5.48, *P*=.019).

Final-session PHQ-9 scores for individuals completing \geq 4 psychotherapy sessions demonstrated significantly lower median PHQ-9 scores compared to individuals completing 1 to 3 sessions (W = 1220.5, Z = 1.90, P = .029). Mean PHQ-9 scores were 8.04 (SD = 6.20) in the group completing < 4 sessions versus the group completing ≥ 4 sessions (mean = 5.13, SD = 4.75). Among GAD-7 scores, patients with a final GAD-7 score administered at session 4 or later demonstrated statistically significant lower median final session-administered GAD-7 scores than those having a final GAD-7 score administered at sessions 1 to 3 (W=1330.5, Z=2.27, P=.011). Mean GAD-7 scores were 8.00 (SD = 6.02) in the group with a final GAD-7 administered between sessions 1 and 3 versus the group with a final GAD-7 administered at session 4 or later (mean = 4.77, SD = 4.21). Figure 1 enumerates how these 2 session cut-points were associated with lowest PHQ-9 and GAD-7 scores throughout teletherapy.

DISCUSSION

For the first time, this project provides evidence that a short-term BA program delivered via teletherapy is associated with improved depressive and anxious symptoms among

^{*}For the sample of all patients with full PHQ-9 scores at intake who were not currently in treatment (n = 115), descriptive statistics for PHQ-9 are mean (SD) = 14.03 (6.35) and for GAD-7 are mean (SD) = 11.61 (5.81), n = 101.

nost this ahted Table 3. Final Session Scores and Number of Sessions Administered for PHQ-9 and

GAD-7, by Patient ID (N = 74)

Patient ID	Final Score on PHQ-9	Final Score on GAD-7	No. of PHQ-9 Sessions	No. of GAD-7 Sessions
1	8	7	8	8
3 4	6 17	4	8	8
14	7	4	1	0
22	0	0	2	2
24	17	10	8	8
26	0	0	4	4
27 28	0	5	8	2
30	Ő	1	7	7
31	6	5	5	5
34	0	0	8	8
35	18	13	2	2
43	8	6	8	8
45	4	5	4	4
47	7	0	5	4
48	15	12	7	7
51	0	0	4	4
59	7	12	1	1
62	0	2	6	6
67	0	1	2	2
69 72	18	19	1	1
73 74	/	6	87	8 7
75	1	4	6	6
77	3	2	8	8
79	4	10	4	1
84	3	4	8	8
85	12	14	8	8
90	2	4	3	3
91	6	2	8	8
93	6	9	8	8
94	0	2	8	8
95	3	2	6	6
98	12	12	8	8
102	7	13	3	0
104	3	3	6	6
106	2	10	1	0
112	16	9	7	7
118	4 17	2 17	2 8	5 8
136	11	9	8	8
137	7	7	8	8
142	6	5	1	1
144	14	2	1	0
146	∠ 0	0	o 8	o 8
147	ĩ	1	1	1
149	3	2	2	2
152	2	10	3	1
154	16	17 2	2	1
160	0 3	२	5 8	3
174	11	9	8	8
182	6	5	8	8
183	2	2	8	8
184	2	1	6	6
194 195	ŏ 19	۱۵ 11	1	1
200	2	2	8	8
205	1	0	2	2
206	12	8	1	1
211	5	1	7	7
212	9	/	2	2
219 274	4 10	י 12	4 2	4
227	2	5	2	2
229	2	6	8	8
231	14	14	1	1
232	2	1	3	3

on any website, low-income, underserved sample of patients in primary care settings. Descriptive analyses on patients referred from primary care clinics for an adapted BA teletherapy program indicated that enrollees were mostly women, Latina, and Spanish-speaking. Despite the fact that just under onethird of all patients completing the intake did not attend any additional sessions, close to 40% of those who did complete at least 1 session finished all 8. Furthermore, although the full sample started at a moderate level of depressive and anxious symptoms, the majority of patients (52.8%) receiving at least 1 psychotherapy session achieved depression remission at some point during psychotherapy, with all but 4 maintaining remission at their final treatment visit. Finally, patients completing ≥ 4 sessions had mean final session PHQ-9 scores that demonstrated significant symptom improvement compared to the group of patients who completed <4 therapy sessions, suggesting a dose-response association between number of sessions and depression and anxiety outcomes (or that those who failed to respond early on did not continue with their treatment).

These results add to a growing body of evidence demonstrating how primarily live videoconferencing mental health interventions reduce symptoms of mood and anxiety disorders.^{2,5,7} The results also add to a very limited body of research specifically evaluating BA teletherapy^{3,27} and extend that prior work beyond VA settings and into lowincome primary care clinics. Although our sample did not compare the efficacy of BA teletherapy against another intervention or treatment as usual, our findings suggest an opportunity to improve patient outcomes through depression-focused adapted BA delivered remotely as an adjunct or alternative to pharmacologic treatment for depression or anxiety within primary care.

Additionally, unlike previously studied BA teletherapy programs, we offered teletherapy services in both English and Spanish, dramatically increasing access to care for a

Abbreviations: GAD = Generalized Anxiety Disorder 7-item scale, PHQ = Patient Health Questionnaire-9.

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It is illegal to post this copyric Figure 1. Number (%) of Patients With Lowest Teletherapy Session Value on PHQ-9 and GAD-7

A. PHQ-9 Severity



B. GAD-7 Severity



Abbreviations: GAD-7=Generalized Anxiety Disorder 7-item scale, PHQ-9=Patient Health Questionnaire-9.

population that experiences significant cultural and linguistic barriers to treatment. The majority of the patients in our sample were monolingual Spanish speakers (who were more likely to discontinue treatment earlier than their English-speaking counterparts). Hispanics, in particular, often seek treatment for depression in primary care, most likely due to lack of access to specialists, issues related to cost, and general fear and stigma with regard to taking antidepressant medication.⁵⁹ Hispanic patients tend to discontinue antidepressant treatment without consulting their provider,⁶⁰ suggesting a particular benefit of adjunct teletherapy in the primary care setting for keeping patients engaged in treatment.

That just under one-third of patients attended only the intake session and that the mean number of postintake therapy sessions attended was just over 5 supports prior research^{61,62} showing a high rate of "no shows" and difficulty engaging patients in a full course of psychotherapy. One study⁶¹ at an academic medical center's ambulatory psychiatric clinic determined a 31% no-show rate, while another study⁶² found that only 44% of scheduled patients attended at least 1 teletherapy session, with only 8% of recruited primary care

copyrighted PDF on any website. Our attendance rates exceeded those of previous research.^{61,62} Several strategies to improve patient engagement in care have been suggested, including reminder phone calls and letters; small incentives like toys, food, or busfare⁶³; and offering walk-in appointments.⁶⁴ Our teletherapy program routinely makes use of reminder telephone calls. In August 2016, to further reduce barriers (ie, transportation, childcare, costs), we began offering teletherapy services that patients could access from their homes provided they had the necessary equipment and were in a private location. As at-home teletherapy was offered relatively late within this sample's timeframe, we did not analyze data comparing outcomes for patients receiving teletherapy at home versus in the primary care physician's office; however, this will be possible in our future research.

Study strengths included the use of a robust teletherapy intervention, supported by prior research evidence, to target depression and anxiety specifically. The inclusion of additional modules allowed for therapist flexibility in targeting specific areas that might interfere with BA (ie, using optional modules to problem-solve BA). Measurement-based care, including baseline assessment of symptoms with the PHQ-9 and GAD-7, and therapists' review of scores to focus on specific symptoms allowed the therapist to prioritize BA interventions and to apply additional, optional modules, as we have discussed previously when describing our teletherapy program.³³

Limitations of the current study include the lack of a control group or random assignment to treatment groups, the occasional gaps in treatment between session visits (ie, not all follow-up visits were completed weekly or biweekly), and the occasional omission of PHQ-9 and GAD-7 assessments due to application failure or time demands. Also, the majority of patients at intake reported being on an antidepressant, making it difficult to isolate reduction in depression symptoms to the teletherapy intervention in these patients.

In conclusion, these results demonstrate that an adapted BA teletherapy intervention for depression and anxiety was associated with improved outcomes within low-income primary care clinics in a large urban setting. Pending replication, primary care and family medicine physicians and providers may consider teletherapy as an adjunct or alternative to pharmacologic measurement-based care for depression and anxiety within their practices, and frequent consultation between providers and therapists may further enhance the quality of care. There are clear barriers to mental health care access and engagement among low-income, primary care patients, and our therapy program has made modifications (such as offering teletherapy from

It is illegal to post this copy home) to reduce these barriers. Subsequent research should G. Hubley S, Lynch SB, Schneck C, et al. Review of key telepsychiatry

focus on how to engage men in care, as our sample was predominantly female, beyond even the sex differences in depression.⁶⁵ Future analyses will seek to replicate and expand on these findings with a greater sample size and analyze data from patients receiving booster sessions. Additional research will use multilevel modeling to examine within-person changes in depression and anxiety symptoms over time, consider predictors and moderators of treatment outcomes, and incorporate patient satisfaction data to evaluate further the quality of services delivered.

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- What demographic grouping described a majority of the teletherapy patients, as described in the article?
 - a. Men who primarily spoke English
 - b. Men who primarily spoke Spanish
 - c. Women who primarily spoke English
 - d. Women who primarily spoke Spanish
- 2. Ms A is a 40-year-old woman originally from Panama who moved to the United States 5 years ago. She reported substantial sadness and crying over the past month, along with a disinterest in activities she used to enjoy, such as knitting or spending time with her son. Ms A also reports that her memory and focus have started to decline, that she hardly eats at all during the day, and that she has no energy for daily activities. Based on the article, if Ms A is diagnosed with major depressive disorder, which of the following statements about her treatment is *true*?
 - a. Teletherapy precludes the use of measurement-based care because patients must complete rating scales in person
 - b. To be effective, behavioral activation therapy sessions must last 90 minutes, and at least 10 sessions are needed
 - c. Behavioral activation teletherapy cannot be used if Ms A has comorbid generalized anxiety disorder
 - d. Behavioral activation teletherapy can be used as an adjunct to antidepressant treatment
- 3. According to the article, patients who attended at least 4 behavioral activation– based teletherapy sessions had significantly lower scores on measures of ____ than those who attended less than 4 sessions.
 - a. Depression (but not anxiety)
 - b. Depression and anxiety
 - c. Anxiety (but not depression)
 - d. Neither depression nor anxiety scores were different based on number of sessions.