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Attitudes and acceptability of the stepped-care model of depression treatment in primary care patients and providers

Krista L. Herbert
Rowan University

ATTITUDES AND ACCEPTABILITY OF THE STEPPED-CARE MODEL OF DEPRESSION TREATMENT IN PRIMARY CARE PATIENTS AND PROVIDERS

by

Krista L. Herbert

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Dedications

I would like to dedicate this manuscript to my husband, Jacob Whittaker, my mother, Cheri Herbert, my father James Herbert, and my sister Jessica Herbert.

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Abstract

Krista L. Herbert
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Primary care has become the first and only point of contact for a majority of individuals experiencing depressive symptoms. One alternative model of care that has been adopted in international primary care settings as an alternative to standard care is the stepped-care model. Emerging evidence suggests that the stepped-care model is at least as effective as standard care for depression; however, little is known about attitudes of patients and providers regarding this model, especially within the US. The current study utilized a cross-sectional survey to inquire about general attitudes towards the stepped-care model, the individual steps, and the treatments offered within each step. We also examined the step that participants would prefer if prescribing or seeking help and the strength of those preferences. Descriptive and inferential statistics indicated that participants view the stepped-care model as an acceptable form of treatment for depression and it is an improvement upon standard care. Results also indicated that our patient sample generally preferred self-help interventions over other treatment options, while most of our provider sample would prefer to treat patients in a manner consistent with the stepped-care model. These results highlight the importance of collaboration and assessing preferences for treatment choices.

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Chapter 1

Introduction

Depression continues to be one of the most debilitating and prevalent psychological disorders, affecting over 16 million U.S. adults in a given year (U.S. Department of Health and Human Services, National Institute of Mental Health [NIMH], 2015). Approximately 8.7 million people receive some form of treatment for depression, and it has been estimated that 40 to 60% will seek those services in primary care settings (Kessler & Stafford, 2008; Marcus & Olfson, 2010; Reeves et al., 2011). Many patients believe primary care is the first and only option for psychological treatments for a multitude of reasons, including accessibility, comorbid somatic complaints, convenience, and lack of education about psychological services (Beacham, Herbst, Streitwieser, Scheu, & Sieber, 2012; Kessler & Stafford, 2008).

Current clinical guidelines recommend the use of psychotherapy, antidepressant medication, or a combination of the two as first-line treatments for depression (Trangle et al., 2016; Nieuwsma et al., 2011; NIMH, 2015; U.S. Department of Health and Human Services, Substance Abuse and Mental Health Service Administration [SAMHSA], 2017). However, a number of complications arise when attempting to implement these guidelines within a primary care setting. For example, there is an absence of mental health professionals in traditional primary care settings. When physicians identify patients who may be appropriate for psychotherapy, they often have to resort to referring patients to outside mental health clinics. Unfortunately, two-thirds of primary care physicians cannot find outpatient mental health care for their patients due to shortages of mental health providers and insurance barriers (Cunningham, 2009). Even when referrals

are made, research has shown that 50 to 90% of patients do not continue with mental health care (Kessler & Stafford, 2008).

As a result, primary care providers cover approximately 70% of mental health services within primary care (Kessler et al., 2005; Wang et al., 2005), which could explain why a majority of primary care patients are treated through the use of antidepressant medication (Kessler & Stafford, 2008; Robinson et al., 2004; Seekles et al., 2009). Although skepticism regarding the efficacy of antidepressant medication exists (Kirsch et al., 2008; Kirsch, 2011), it has been demonstrated that treatment adherence for medication in primary care is generally low, with approximately 50% of patients prematurely discontinuing antidepressants (Sansone & Sansone, 2012).

Additionally, while it may appear that primary care providers are in an optimal position to assess, diagnose, and treat depression, it has been argued that primary care is not set up to adequately do so (Bishop et al., 2016; O'Donohue & Draper, 2011). Even with recent efforts to increase detection of depressive symptoms through the use of screening instruments (Siu, 2016), depression continues to remain undetected approximately 30 to 50% of the time (Bijl et al., 2003; Cepoiu et al., 2008; Mitchell, Vaze, Rao, 2009; Wang et al., 2007). Furthermore, it has been estimated that only 1 to 4.2% of the primary care population in the U.S. receive depression screenings, with rates being lower for certain populations, such as African Americans, older adults, and males (Akincigil & Matthews, 2017; Stockdale et al., 2008). When depressive symptoms are detected, primary care providers are less able to provide care that is consistent with clinical guidelines for a number of reasons (Mitchell et al., 2009; Van Voorhees et al., 2003), including a shortage of resources (O'Donohue & Draper, 2011), lack of interest in

treating mental health problems, and the concern that treating depression is out of the scope of their competence (Meredith et al., 1999).

Given the problems associated with the current standard of care for treating depression by primary care physicians, alternative models of care have been proposed to increase efficiency, access to, and effectiveness of mental health services. Stepped-Care is one such model. In the stepped-care model, the severity of depressive symptoms are assessed and an intervention is prescribed that matches the severity of symptoms (Franx et al., 2012; van Straten et al., 2015). Thus, the stepped-care model offers a variety of steps and levels of treatment that range from low to high intensity (Broten et al., 2011; National Institute for Health and Clinical Excellence [NICE], 2009). More specifically, the first step of this model recommends watchful waiting, attributing remission of depressive symptoms to time (Broten et al., 2011). The second step of this model includes psychoeducation, bibliotherapy (e.g. guided self-help), or internet-based interventions (e.g. computer-based self-help programs based on cognitive behavioral principles). The third step includes psychotherapy, antidepressant medication, or a combination of the two. Finally, the fourth and most intensive step recommends intensive outpatient, partial day programs, or inpatient care (Broten et al., 2011).

In addition to the structure of this model, stepped-care has two key principles that are critical to consider when treatment planning and implementing interventions. The first is that treatment progress is continually monitored and patients can step up or down in levels of treatment depending upon their clinical response to an intervention (Firth, Barkahm, & Kellet, 2015). The second principle is that the cost and intensity of an intervention are not related to its effectiveness (Broten et al., 2011). For example, self-

help interventions, such as bibliotherapy or internet-based interventions, are more cost effective and less intense than traditional treatments, and there is evidence to support their efficacy in treating depression (Andersson, Cuijipers, Carlbring, Riper, and Hedman, 2014; Clarke et al., 2009; Cuijipers, Donker, van Straten, & Andersson, 2010; National Institute for Health and Clinical Excellence [NICE], 2009).

Emerging evidence about the effectiveness of the stepped-care model suggests that stepped-care is at least as effective as usual care for depression (Firth et al., 2015; Katon et al. 1999; van Straten et al. 2015), in addition to being cost-effective (Veer-Tazelaar, 2010). Further, implementation of a stepped-care model may decrease patient drop out because care can be more tailored to the patient's treatment preferences (Firth et al., 2015). Previous literature indicates that incorporating the patient's treatment preference throughout treatment improves clinical outcome (Firth et al., 2015; Lin et al., 2005; Swift & Callahan, 2009), adherence (Kwan, Dimidjian, and Rizvi, 2010) and reduces rates of attrition (Swift & Greenberg, 2015). Additionally, two studies to date have reported that patients with depression and comorbid diabetes or acute coronary syndrome who were randomized to a stepped-care treatment approach reported greater satisfaction with care and reduction of depressive symptoms when compared to the standard care group (Davidson et al., 2010; Ell et al. 2011).

Despite evidence suggesting the possible value of the stepped-care model for treating depression, there are gaps within the current literature. First, little is known about the attitudes of patients and physicians regarding this model, especially within the United States. Due to the potential costs of untreated or inadequately treated depression in primary care settings, it is necessary to explore collaborative care models that might

improve patient and physician satisfaction and access to an effective treatment modality in primary care settings (Cuijpers, 2007; Druss, Rosenheck, & Sledge, 2000; Greenberg et al., 2015; Rouchell, 2000).

Second, although numerous studies suggest patients within primary care settings prefer psychotherapy over pharmacotherapy when seeking treatment for depression (Dwight-Johnson et al., 2000; Lin et al. 2005; McHugh et al. 2013; van Schaik et al., 2004; y Garcia et al., 2011), these studies do not expand upon patient preferences regarding the evidence-based psychotherapies for depression (e.g. cognitive behavioral therapy, mindfulness, interpersonal psychotherapy) or alternative forms of treatment (e.g. bibliotherapy, self-help, internet-based interventions). Exploring patient preference for individual treatments within each step might help clinicians understand factors that moderate the outcome of treatment. More specifically, Broten et al. (2011) suggests that understanding preferences for treatments offered within each step may help clinicians in determining the optimal sequence of steps for each client.

Therefore, the primary purpose of this current study was to assess the attitudes and acceptability of the stepped-care model for depression treatment in primary care providers and patients. To accomplish this, we developed a questionnaire that assessed general attitudes towards the model, the individual steps, and the treatments offered within each step. In addition, we also examined the step that patients would prefer to begin with if seeking help for depressive symptoms, and the strength of such preferences. For providers, we examined the step they would prefer to recommend to a patient seeking help for depressive symptoms and the step they most frequently recommend.

Chapter 2

Method

Setting and Procedure

Participants were recruited through four primary care practices affiliated with a school of Osteopathic Medicine in Southern New Jersey. Potential patient participants were approached in the examination rooms while they waited for their physician. All patients were recruited regardless of the reason for their visit. Informed consent and survey administration was procured via an electronic tablet. Licensed physicians and residents (heretofore referred to as providers) were contacted via email and asked to participate in the study. If providers agreed to participate, they clicked on a link that was provided in the email. After obtaining informed consent, participants then completed the Treatment Preference Inventory and a demographic questionnaire. Participation in the study was voluntary and all data was recorded anonymously. This study was approved by the University's Institutional Review Board.

Participants

The study sample consists of two samples of participants (N=161):

Provider sample. All of the providers at the four primary care settings were emailed and invited to participate (n=40). Of those invited, 32 of the 40 providers completed the survey (56% females, 53% Caucasian; see Table 1 for full demographics), resulting in an 80% response rate. The age of providers ranged from 26 to 72, with a mean age of 35.03 years (SD=11.44). Of these providers, 66% were licensed residents and 34% were physicians.

Table 1

Demographic Characteristics of Providers

Characteristic	*n*	%
Gender		
Female	18	56.3%
Male	14	43.8%
Race		
White	17	53.1%
Asian	9	28.1%
Black or African American	3	9.4%
Native American or Pacific Islander	1	3.1%
Prefer not to answer	1	3.1%
Other	1	3.1%
Ethnicity		
NonHispanic/Latino(a)	28	87.5%
Prefer not to answer	3	9.4%
Hispanic/Latino(a)	1	3.1%
Type of Provider		
Resident	21	65.6%
Full-time PCP	8	25%
Part-time PCP	3	9.4%
Years of Experience		
0-2 years	22	68.8%
3-6 years	3	9.4%
7-10 years	1	3.1%
10+ years	6	18.8%

Patient sample. Of the 170 patients approached, 131 patients completed the survey (65% female, 70% Caucasian, see Table 2 for full demographics), resulting in a 77% response rate. The age of patients ranged from 18 to 81, with a mean age of 48.01 years (*SD*=15.87).

Table 2

Demographic Characteristics of Patients

Characteristic	*n*	%
Gender		
Female	85	64.9%
Male	44	33.6%
Other	1	.8
Prefer not to answer	1	.8%
Race		
White	92	70.2%
Black or African American	24	18.3%
Prefer not to answer	7	5.3%
Other	4	3.1%
Asian	2	1.5%
Native American or Pacific Islander	2	1.5%
Ethnicity		
Non-Hispanic/Latino(a)	113	86.3%

Table 2 (continued)

Characteristic	n	%
Prefer not to answer	10	7.6%
Hispanic/Latino(a)	8	6.1%
Previous experience with mental health treatment		
No	74	56.5%
Yes	57	43.5%
Type of services received		
Combination of Psychotherapy & Pharmacotherapy	38	66.7%
Pharmacotherapy	15	26.3%
Psychotherapy	3	5.3%
Other	1	1.7%

Measure

Treatment Preference Inventory (TPI). The TPI is a three-part, self-report measure that was created by the authors that assesses for acceptability and preferences of the stepped-care model and the treatments offered within each step. Two versions of the TPI were created: Provider and Patient (see Appendix A for Patient Version and Appendix B for Provider Version). The TPI Patient version is between 25 and 37 items depending on individual responses and skip logic, while the Provider version has 32 items.

The first section of the TPI is similar for both patients and providers. It includes a brief description of the stepped-care model and the treatments offered within each step.

The description outlines what could be expected at that step (e.g. rationale for the specific treatment, time involved, and contact with health care professional). Following the description, participants are asked to rate each step's acceptability on a 5-point Likert scale ranging from 1 (*not acceptable*) to 5 (*very acceptable)*. The inventory begins with step one: watchful waiting. An example of a description and question assessing the acceptability of watchful waiting is, "*The first 'step' in this model is also known as watchful waiting or no treatment. While watchful waiting is not an active treatment, this option attributes reduction of symptoms to time. Do you find watchful waiting to be an acceptable form of treatment for (a patient with) depression*?" The next question asks participants about step two, which includes psychoeducation, bibliotherapy, internet-based interventions, and mobile applications. On the provider version of the TPI, participants are asked to rate their familiarity with the self-help interventions previously mentioned, in addition to naming the specific self-help interventions and outside resources they may present to patients as part of their routine practice. Within the patient version of the TPI, participants are asked to indicate their preference for guided or unguided self-help, the specific self-help intervention they would prefer to use, and to rate how strongly they prefer the self-help intervention they chose.

The next question asks participants to rate the acceptability of step three, which includes psychotherapy, antidepressant medication, and a combined approach. Patients are also asked to indicate a preference among cognitive therapy, behavioral activation, problem-solving therapy, interpersonal psychotherapy, and mindfulness after being provided with a brief explanation of each treatment. The next question asks participants to rate the acceptability of step four, which includes intensive outpatient, partial day

program or inpatient program. Section one concludes with participants indicating the level of acceptability of the stepped-care model and whether they believe the stepped-care model is an improvement upon standard care (e.g., medication, psychotherapy, or a combination of the two).

The second section of the TPI includes a vignette that asks patients to "imagine if" they were experiencing symptoms of depression. Following the vignette, patients are asked to indicate the specific step they would prefer to start with if seeking treatment for depressive symptoms. In the provider version, providers are given the same "imagine if" vignette as patients but are asked to indicate the specific step they might recommend to this patient and rank the steps in order of preference.

The third section of the TPI asks participants to indicate their gender, age, ethnicity and race. Following that, providers were asked to endorse how frequently they interact with other health care providers (i.e. social workers, psychologists), the length of time they have been working with the agency, and length of time practicing as a licensed physician/resident. In contrast, patients were asked about previous experience with mental health treatment, type of services received, and length of time since their last treatment.

Data Analyses

Data analyses were conducted using SPSS 24. Descriptive data for patients and providers regarding the acceptability of the stepped-care model and treatments offered within each step, and treatment preferences are presented. To examine differences between patients and providers regarding the acceptability ratings of the stepped-care model and individual treatments offered within each step, comparisons were made using

independent samples *t*-tests for normally distributed variables and Mann-Whitney U tests for skewed data. Since one of our goals was to examine the step patients would prefer to begin with if seeking help for depressive symptoms, we conducted a chi-square goodness-of-fit analysis to determine whether the four steps of the stepped-care model were equally preferred. We also examined whether the acceptability of the treatments offered within each step and treatment preferences varied by participant characteristics. More specifically, we examined whether the acceptability of treatments differed among patients by their race, gender, and depression treatment history and among providers by their gender, years of experience, and provider type (e.g., resident or physician). Given the limited sample of patients who endorsed racial and ethnic identities other than Caucasian and African American, group comparisons were only examined between patients who identified as Caucasian and African American.

Chapter 3

Results

Acceptability of the Stepped-Care Model

Eighty-four percent of providers (*n*=27) and 71% of patients (*n*=93) view the stepped-care model as an acceptable form of treatment for depression. No significant differences were found between patients and providers regarding their acceptability rating of the stepped-care model. Additionally, 72% of providers (*n*=23) and 66% of patients (*n*=86) view the model to be an improvement upon standard care.

Means and standard deviations for the acceptability ratings of the individual steps are presented in Table 3.

Table 3

Mean Acceptability Ratings of the Steps of the Stepped-Care Model in Patients and Providers

	Patients		Providers		*U* *t* value
Step of the SC Model	*M*	*SD*	*M*	*SD*	
Step 1	2.96	1.35	3.22	1.24	-1.03
Step 2	3.60	0.93	3.75	0.92	-.90
Step 3	3.88	0.93	4.70	0.53	955.50***
Step 4	3.42	1.09	4.30	0.90	-4.93***

Note. Ratings were measured on a 5-point Likert Scale ranging from (1) Not Acceptable to (5) Very Acceptable. *p<.05, **p<.01, ***p<.001

Results from the patient sample indicate that step three was rated the most acceptable step (e.g. psychotherapy, medication, or a combination of the two), followed by step two (e.g., psychoeducation/self-help), step four (e.g., intensive outpatient/inpatient programs), and lastly, step one (e.g., watchful waiting, see table 3). Within the provider sample, step three was rated most acceptable, followed by step four, step two, and step one (see table 3).

Results indicate that the acceptability rating for step three ($p<.001$) and step four ($p<.001$, see table 3) were higher among providers than patients; no significant differences were found between the acceptability ratings of step one and two.

Treatments Offered Within Each Step

Means and standard deviations for the acceptability ratings of the individual treatments offered within each step are presented in Table 4.

Table 4

Mean Acceptability Ratings of the Treatments Offered Within Each Step Among Patients and Providers

	Total		Patients		Providers		*U* *t* value
Treatments	*M*	*SD*	*M*	*SD*	*M*	*SD*	
Watchful Waiting	3.01	1.33	2.96	1.35	3.22	1.24	-1.03
Psychoeducation	3.64	1.10	3.66	1.10	3.59	1.10	.30
Self-help	3.60	1.15	3.53	1.18	3.91	0.96	-1.91
Medication	3.75	1.23	3.58	1.26	4.47	0.76	1247.50***
Psychotherapy	4.20	0.98	4.08	1.02	4.72	0.58	1335.00***

Table 4 (continued)

	Total		Patients		Providers		*U* *t* value
Treatments	*M*	*SD*	*M*	*SD*	*M*	*SD*	
Combination	4.15	1.13	3.98	1.18	4.84	0.45	1181.00***
IOP/Partial Day	3.64	1.22	3.44	1.23	4.44	0.72	1106.00***
Inpatient	3.55	1.32	3.40	1.33	4.16	1.10	-3.46***

Note. Ratings were measured on a 5-point Likert Scale ranging from (1) Not Acceptable to (5) Very Acceptable. IOP=Intensive Outpatient. *p<.05, **p<.01, ***p<.001.

Step one. Thirty-two percent of patients (n=42) and 38% of providers (n=12) view watchful waiting as an acceptable treatment for depression. No significant differences between patients and providers were found in regards to the acceptability of watchful waiting (see table 4).

Step two. The treatments offered within step two include psychoeducation and/or self-help interventions (e.g., bibliotherapy, internet-based interventions, and mobile applications).

Psychoeducation. Fifty-two percent patients (n=68) and of 50% of providers (n=16) view psychoeducation to be an acceptable form of treatment for depression. No significant differences were found between patients and providers regarding their attitudes towards psychoeducation (see table 4). There were no significant differences between acceptability ratings of psychoeducation and patient and provider characteristics.

Self-help. Fifty-one percent of patients (n=67) and 69% of providers (n=22) consider self-help interventions to be an acceptable form of treatment for depression.

Among the two groups, the acceptability rating for self-help was higher among providers than patients ($p<.05$, see table 4). No significant differences were found between the acceptability rating of self-help and patient and provider characteristics.

Patients who viewed self-help interventions as acceptable treatments for depression were asked to indicate their preference for guided or unguided self-help and preferred delivery method for self-help interventions. Ninety percent of patients ($n=60$) indicated a preference for engaging in a guided self-help intervention versus unguided (10%, $n=7$). Approximately thirty-one percent of patients ($n=21$) reported that their preferred delivery method is a mobile application, followed by internet-based programs (34%, $n=23$) and books (34%, $n=23$). No significant differences were found between patient characteristics and their preferred delivery method for self-help interventions.

Providers were asked to rate their familiarity with self-help interventions and to provide the name of a specific book, mobile application, or internet-based program they would recommend to a patient experiencing depressive symptoms. Thirty-one percent 31% ($n=10$) reported being familiar with self-help books, while 19% ($n=6$) reported familiarity with internet-based programs and 13% ($n=4$) reported familiarity with mobile applications for depression. Additionally, no provider could name a specific self-help book, mobile application, or internet-based program they would recommend to patients.

Step three. The treatments offered within step three include medication, psychotherapy, or a combination of the two.

Medication. Fifty-one percent of patients ($n=67$) and 91% of providers ($n=29$) view medication as an acceptable form of treatment for depression. Results reveal the acceptability rating for medication was higher among providers than patients ($p<.001$, see

table 4). Examination of patient characteristics reveal the acceptability rating for medication was higher among Caucasians patients than African American patients (U=645.50, $p<.001$). Additionally, the acceptability rating for medication was higher among patients with a history of depression treatment than individuals who have never received treatment for depressive symptoms (U=1536.50, $p<.01$). No significant differences were found between the acceptability rating of medication and provider characteristics.

Psychotherapy. Seventy-two percent of patients (n=94) and 94% of providers (n=30) rated psychotherapy as an acceptable form of treatment. Results indicate the acceptability rating for psychotherapy was higher among providers than patients ($p<.001$, see table 4). No significant differences were found between the acceptability rating of psychotherapy and patient and provider characteristics.

Patients who found psychotherapy to be acceptable were then asked to indicate their preference for individual or group therapy and the type of psychotherapy they would prefer to receive (e.g., cognitive therapy, behavioral activation, problem-solving therapy, interpersonal psychotherapy, and mindfulness). Eighty-three percent indicated they would prefer individual (n=78) over group therapy (17%, n=16). Additionally, 28% of patients indicated a preference for cognitive therapy (n=26), followed by problem solving therapy (25%, n=24), mindfulness (18%, n=17), behavioral activation (17%, n=16) and interpersonal psychotherapy (12%, n=11). The type of psychotherapy preferred by patients did not vary based on patient characteristics.

Combination of medication and psychotherapy. Sixty-eight percent of patients (n=89) and 97% of providers (n=31) found a combination of medication and

psychotherapy to be an acceptable form of treatment for depression. Results reveal the acceptability rating for a combination of medication and psychotherapy was higher among providers than patients (p<.001, see table 4).

Examination of patient characteristics reveal that the acceptability rating for a combination of medication and psychotherapy was higher among Caucasian patients than African American patients (U=650.50, p<.001). Additionally, the acceptability rating for a combination of medication and psychotherapy was higher among patients with a history of depression treatment than individuals who have never received treatment for depressive symptoms (U=1700.50, p<.05). There were no differences found between provider characteristics and the acceptability rating of a combination of medication and psychotherapy.

Step four. The treatments offered within step four include intensive outpatient, partial day programs, or inpatient programs.

Intensive outpatient/partial day programs. Fifty percent of patients (n=66) and 88% of providers (n=28) rated intensive outpatient/partial day programs as acceptable. Results indicate the acceptability rating for intensive outpatient and partial day programs was higher among providers than patients (p<.001). No significant differences were found between patient and provider characteristics and acceptability of intensive outpatient/partial day programs.

Inpatient programs. Forty-eight percent of patients (n=63) and 78% of providers (n=25) rated inpatient programs as acceptable. Results indicate the acceptability rating for inpatient programs was higher among providers than patients (p<.001). No significant

differences were found between patients and provider characteristics and acceptability of inpatient programs.

Treatment Preferences

Patients were asked to indicate what step they would prefer to begin with if they were to seek treatment for depressive symptoms. Patients most frequently endorsed a preference for step two (44%, *n*=57) and three (36%, *n*=47). There are statistically significant differences in treatment preferences for patients ($\chi^2(3) = 49.37$, $p<.001$), with less people preferring step one (*n*=20) and step four (*n*=7), compared to either step two (*n*=57) and step three (*n*=47).

For those who preferred step two, 79% of patients (*n*=45) would prefer to begin with a combination psychoeducation and self-help versus either of those alone. Of the patients who preferred step three, 79% (*n*=37) would prefer to begin with a combination of psychotherapy and medication versus either of those treatments alone. Patients were then asked to indicate their strength of preference for the treatment they chose. Results indicate that 70% of patients (*n*=92) expressed a strong to very strong preference for the treatment they chose (*M*=4.05, *SD*=.90).

Providers were asked to rank the steps in the stepped-care model as they would prefer to begin with when treating a patient with depression. Results indicate that most providers would prefer to prescribe the steps consistent with how they are laid out within the stepped-care model (see table 5).

Table 5

Provider Preference for Starting Step of the Stepped-Care Model with Depressed Patients

Treatments	1	2	3	4	5	6	7	8	Total
Watchful Waiting	54% *n*=14	11% *n*=3	--	8% *n*=2	4% *n*=1	4% *n*=1	4% *n*=1	15% *n*=4	26
Psychoeducation	15% *n*=4	38% *n*=10	23% *n*=6	8% *n*=2	8% *n*=2	8% *n*=2	--	--	26
Self-Help	8% *n*=2	19% *n*=5	50% *n*=13	4% *n*=1	4% *n*=1	15% *n*=4	--	--	26
Psychotherapy	8% *n*=2	8% *n*=2	11% *n*=3	58% *n*=15	15% *n*=4	--	--	--	26
Medication	8% *n*=2	23% *n*=6	8% *n*=2	8% *n*=2	46% *n*=12	8% *n*=2	--	--	26
Combination	4% *n*=1	--	8% *n*=2	11% *n*=3	19% *n*=5	54% *n*=14	4% *n*=1	--	26
IOP/Partial Day	4% *n*=1	--	--	4% *n*=1	4% *n*=1	11% *n*=3	77% *n*=20	--	26
Inpatient	--	--	--	--	--	--	15% *n*=4	85% *n*=22	26

Note. IOP=Intensive Outpatient.

Providers were then asked to indicate the treatment they most frequently recommend to patients experiencing symptoms of depression. Thirty-four percent of providers (*n*=11) indicated that they recommend psychotherapy and medication most often, followed by psychotherapy (22%, *n*=7), medication (19%, *n*=6), psychoeducation

(13%, *n*=4), self-help (9%, *n*=3), and intensive outpatient or partial day programs (3%, *n*=1).

Chapter 4

Discussion

The purpose of the current study was to assess the attitudes and acceptability of the stepped-care model of depression treatment among primary care patients and providers. Results indicate that both patients and providers view the stepped-care model as an acceptable approach for treating depression. Additionally, a majority of providers and patients indicate that the stepped-care model is an improvement upon standard care (i.e. psychotherapy and/or medication alone). These findings are consistent with the qualitative data from studies that have attempted to implement the stepped-care model and have found it to be positively received by physicians and patients (Davidson et al., 2010; Ell et al. 2011; Franx, Oud, de Lange, Wensing, & Grol, 2012). One possible explanation for these findings are that most primary care providers do not have adequate training in mental health. Thus, the favorable views of the stepped-care model may be due to providers believing that stepped-care may reduce the pressure and burden of treating depression. Additionally, patients may view the stepped-care model as an acceptable approach because their treatment preferences are taken into consideration prior to initiating a treatment. Thus, patients may feel more in control of the care they are receiving. Previous literature found that when patients are involved in the treatment decision making processing, they report greater satisfaction with care and overall clinical outcomes (Clever et al., 2006). However, future research is needed to further examine these hypotheses.

Upon examination of the acceptability ratings of the individual steps, some trends within the data emerged. First, the greatest difference in acceptability ratings between

patients and providers were found within the standard forms of care (e.g., step three and step four), with providers rating them as more acceptable. It is possible that this difference in acceptability rating reflects providers comfort level with standard care rather than finding these treatments as more acceptable than step one or two. Therefore, providers may have rated steps three and four as more acceptable because they are more familiar with these steps and the empirical support behind them. Furthermore, this difference in acceptability ratings may also reflect primary care patients' dissatisfaction with the current standard of care. Van Vorhees et al. (2003) found that patients who received depression treatment from primary care providers reported significantly lower acceptability ratings for antidepressants and psychotherapy when compared to patients who were treated for depression by a mental health specialist. Given that previous research has shown that primary care patients prefer psychotherapy over medication, coupled with the fact that psychotherapy is often not offered within primary care, it is possible that these results reflect primary care patients' frustration with the standard of care they receive within primary care.

Second, the greatest difference in acceptability ratings between patients was found within step three. More specifically, we found that the acceptability rating for medication was higher among Caucasians and patients with a history of depression treatment than African American patients and patients without a history of treatment, which is consistent with previous findings (Cooper et al., 2003; Dwight-Johnson et al., 2000; Givens et al., 2007; Lang, 2005). Third, both patients and providers found step two to be an acceptable form of treatment for depression and the two samples did not differ in their acceptability rating of this step. Despite the widespread acceptability of step two

among providers, they were unable to name any self-help programs designed to ameliorate symptoms of depression. This finding is important as it demonstrates that patients and providers find these non-traditional treatments to be acceptable; however, providers may not have the time, training, or knowledge of how to evaluate and implement these interventions into routine clinical practice.

Lastly, the least acceptable step among both samples was step one, or watchful waiting. This finding suggests that providers and patients are ambivalent towards watchful waiting and may not be aware of its potential benefits. It is possible that when patients are seeking help for depressive symptoms, they want to receive an active treatment and providers may want to be more involved in the care. This finding is consistent with previous studies which found that individuals experiencing depressive symptoms in primary care prefer an active treatment over watchful waiting (Lin et al., 2005; Jaycox et al., 2006). Our results highlight the need to educate patients and providers on the benefits of watchful waiting. Additionally, when providers recommend this treatment, it is vital that make sure patients understand the rationale behind the recommendation and they are in agreement with the recommendation.

With regards to the specific step patients would prefer if seeking help for depressive symptoms, 44% of our patient sample reported they would prefer to begin treatment at step two. Results also indicated that a majority of patients demonstrate a strong to very strong preference for the treatment they selected. While previous studies have found that primary care patients generally prefer psychotherapy over other treatment modalities (Backenstrass et al., 2006; Churchill et al., 2000; Cooper et al., 2003; Dwight-Johnson et al., 2000; Givens et al., 2007; Hodges et al., 2008; McHugh et al. 2013; van

Schaik et al., 2004; y Garcia et al., 2011), these studies only assessed preferences for medication, psychotherapy, or a combination of the two. Our results highlight that patients not only find these additional alternative forms of treatment to be acceptable, but many patients strongly prefer them over standard of care. Perhaps self-help interventions are more appealing to patients because they decrease the many barriers to accessing psychological care, including geographical location, treatment costs, time constraints, cultural beliefs, and stigmas associated with mental health treatment (Boschen, 2009).

Additionally, we found that of the 47 patients who preferred step three, 80% (*n*=37) preferred a combination of psychotherapy and medication versus either of those treatments alone. This finding is not consistent with a majority of the literature that has found psychotherapy to be the preferred choice among primary care patients (Backenstrass et al., 2006; Churchill et al., 2000; Dwight-Johnson et al., 2000; Hodges et al., 2008; Cooper et al., 2003; Givens et al., 2007; McHugh et al. 2013; van Schaik et al., 2004; y Garcia et al., 2011). However, there are two possible explanations for this finding. The first is that these differences are a result of the different number of treatment options presented to patients. Second, it should be noted that 19 of those individuals who expressed a preference for a combination of psychotherapy and medication had previous experience with this treatment modality, which may have influenced their preference.

We also assessed patient preferences towards specific types of psychotherapy. Results indicated that patients preferred cognitive therapy more frequently, followed by problem-solving therapy, behavioral activation, mindfulness, and interpersonal psychotherapy. Additionally, preferences did not vary based on patient characteristics. This suggests that patients have specific preferences for the different theoretical

orientations. Therefore, it may be important to assess preference for the different types of psychotherapy. This finding may have important clinical implications, specifically when thinking about the implementation of step two. While it may not be feasible to provide patients with their choice of psychotherapy within routine clinical practice, step two allows for greater flexibility and inclusion of patient preference given the vast amount of self-help materials that have been developed based on the different theoretical orientations. Thus, depending upon patient preferences and severity of symptoms, a provider could recommend a self-help intervention that aligns with the patient's preferred theoretical orientation.

Regarding provider preferences, we found that while most providers would prefer to treat patients consistent with the stepped-care model, they most often recommend a combination of psychotherapy and medication. This discrepancy highlights the need to increase access to psychological services within traditional primary care settings.

Overall, the results of our study suggest that patients and providers have specific attitudes towards and preferences regarding the treatment of depression. Perhaps offering patients multiple treatment options and matching them with their preferred treatment would improve treatment adherence, satisfaction and outcomes. Several studies suggest that incorporating patient treatment preferences throughout treatment improves clinical outcome (Firth et al., 2015; Lin et al., 2005; Swift & Callahan, 2009), adherence (Kwan, Dimidjian, and Rizvi, 2010) and reduces rates of attrition (Swift & Greenberg, 2015).

Although the results of the current study are encouraging, there are a number of limitations that should be considered. First, the current sample was relatively homogeneous and came from the same geographic region. Thus, generalizations beyond

this particular population should be made tentatively. Second, the sample was not assessed for the presence of depressive symptoms. It is possible that individuals who are currently experiencing depressive symptoms may have different treatment preferences than those without depressive symptoms. There is some evidence to support the notion that the presence of depressive symptoms does not influence treatment preferences, with one recent meta-analysis finding that across all subsamples (e.g., treatment seeking vs. non-treatment seeking, clinical vs. non-clinical) patients overwhelmingly preferring psychotherapy over medication (McHugh et al., 2013). However, further exploration into the possible effect of depressive symptoms and severity of symptoms on treatment preferences is warranted.

Third, information about the benefits and risks of each treatment were not presented to patients, which might influence treatment preferences. Future research might include assessing these variables. Fourth, while it is clear that patients and provides have specific treatment preferences, we do not know why those preferences exist. Lastly, we were unable to examine differences among our samples based on factors such as socioeconomic status, education, culture, race and ethnicity. Research has shown that difficult cultural beliefs may mediate preferences for depression treatment, and racial and ethnic minorities tend to hold different attitudes towards depression treatment when compared to Caucasian participants (Cooper et al., 2003; Dwight-Johnson et al., 2013; Givens et al., 2007). Given that this study is the first of its kind to assess attitudes towards the stepped-care model, it is important to understand factors that may impact patients views towards various models of care.

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Appendix A

Treatment Preference Inventory Patient Version

The purpose of a Stepped-Care Model of treatment for depression is to match a patient with a level of treatment that is consistent with the level of symptoms they are experiencing and their preferred type of treatment. This matching of patient to their preferred step is often done collaboratively with their treating physician or other medical professional. A patient may begin at any one of the four "steps," and some steps have different options within them. This ideal goal of the model is to begin with the lowest and least intensive form of treatment that is available for treating depressive symptoms. As steps increase, so does the intensity of treatment. Treatments range from no treatment at all (e.g. the least intensive) to inpatient hospitalization (e.g. the most intensive).

In the survey that follows, you will read a brief description of the treatments offered within each step of the Stepped-Care Model. Each description outlines what one could expect at that step. Following each description are two questions on how acceptable you perceive the treatment to be. Please read each description and indicate the number that best corresponds to your personal views.

STEP ONE

Watchful Waiting: At this step, no actual treatment is provided. Instead, depressive symptoms are simply monitored over time to see if they go away or decrease significantly over time.

1. Do you find watchful waiting to be an acceptable form of treatment?

o Not Acceptable	o 2	o Moderately Acceptable	o 4	o Very Acceptable

STEP TWO: This step consists of options that can be achieved on one's own or with minimal contact with a mental health professional. This step consists of two options.

Psychoeducation: This treatment includes learning information about depression as a disorder. This may be done by providing a patient with relevant reading material, websites, or other informational material. Topics that might be addressed include: the

signs and symptoms of depression; what one can expect when experiencing a depressive episode; and/or different ways one might be able to cope with depressive symptoms.

2. Do you find psychoeducation to be an acceptable form of treatment?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

Self-Help: Self-Help is defined as a self-directed activity aimed at decreasing depressive symptoms. Specific goals of self-help might include learning problem-solving skills, gaining insight and awareness, managing difficulties you may be experiencing, improving relationships, and/or reaching your goals. Self-help might be delivered by having patients read a book(s), using a treatment delivered via an internet site, and/or using a depression specific mobile app.

3. Do you find self-help to be an acceptable form of treatment?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

Skip Logic: If "Not Acceptable" or "2" is selected, then skip to question 10.

Self-Help can be guided or unguided. Guided self-help consists of having a mental health professional provide weekly instructions and feedback about one's progress, while answering any possible questions. Unguided does not include any assistance from a mental health professional and can be completed fully on one's own.

4. If you were to use self-help materials, would you prefer guided or unguided?

- ○ Guided
- ○ Unguided

5. How strong is this preference?

○ Not Strong	○ 2	○ Moderately Strong	○ 4	○ Very Strong

6. If you were to use self-help materials, what delivery method would you prefer?

- ○ Books
- ○ Mobile Applications
- ○ Internet-Based Programs

7. How strong is your preference for the type of self-help material you selected in the previous question?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

8. Do you find mobile applications to be an acceptable form of treatment for depression?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

9. Have you ever used a mobile application to help manage symptoms of depression?

- ○ Yes
- ○ No

STEP THREE

Medication: Treatment consists of meeting with your doctor or another medical professional and taking medication on a regular/daily basis. Antidepressant medications work to balance some of the natural chemicals in our brains which affect mood and other symptoms of depression.

10. Do you find medication to be an acceptable form of treatment?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

Psychotherapy: Treatment consists of engaging in weekly talk-therapy sessions in order to develop skills to cope with and manage your depressive symptoms.

11. Do you find psychotherapy to be an acceptable form of treatment?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

Skip Logic: If "Not Acceptable" or "2" is selected, then skip to question 16.

Psychotherapy can be delivered individually or through a group setting. Individual psychotherapy consists of a therapeutic relationship between a mental health professional and a client. Group psychotherapy typically consists of 6-10 members. Group psychotherapy allows members to develop and follow treatment plans while also engaging in a social dynamic to learn different interpersonal skills.

12. If you were to seek out psychotherapeutic services, would you prefer it to be individual or group?

- Individual
- Group

13. How strong is this preference?

- Not Strong
- 2
- Moderately Strong
- 4
- Very Strong

Different psychotherapies utilize a variety of theories and techniques. Below is a list of brief descriptions for different types of empirically supported psychotherapies for one who might be experiencing depression. For the following questions, please indicate the choice and number that best corresponds to your views.

Cognitive Therapy (CT): for depression is based on the belief that depression is caused by negative thinking and distorted beliefs. Patients are taught to monitor and record their negative thoughts. This way they can identify the relationship between their thoughts, feelings, physical symptoms and behaviors.

Behavioral Activation (BA): Therapy is based on the belief that when people get depressed, they withdraw from their environment, engage in escape behaviors, and stop following their routines. Over time, this avoidance worsens mood. The goal is to help patients create opportunities to find pleasure in activities they once enjoyed.

Interpersonal Therapy (IPT): stresses the understanding and treating of depression by addressing interpersonal issues. IPT puts emphasis on the way symptoms are related to a person's relationships. This includes both family and peers.

Problem-Solving Therapy (PST): is based on the idea that depression can often be understood as the negative consequences of ineffective coping and problem solving. When one can't cope with a situation or solve a problem, it stresses them out and worsens their depression. PST is aimed at helping the patient to improve their ability to cope with stressful life experiences and better solve their problems.

Mindfulness: is based on the concept that when one is depressed, they repeatedly think about everything that they believe to be wrong in their life. Mindfulness aims to help the patient by having them purposely focus on what is occurring in the present moment, without judgment in order prevent negative assumptions.

14. Out of the above stated psychotherapies, which would you most prefer to receive if you were seeking psychotherapeutic services?

- o Cognitive Therapy (CT)
- o Behavioral Activation (BA)
- o Interpersonal Therapy (IPT)
- o Problem Solving (PST)
- o Mindfulness

15. How strong is this preference?

o Not Strong o 2 o Moderately Strong o 4 o Very Strong

16. Do you find a combined psychotherapy and medication approach to be an acceptable form of treatment?

o Not Acceptable	o 2	o Moderately Acceptable	o 4	o Very Acceptable

STEP FOUR:

Intensive Outpatient or Partial Day Program: This treatment method includes actively attending a day program 3-5 times a week that can last anywhere from 3-6 hours each day. During this time, the member participates in group activities and group sessions that focus on various topics that surround depression as a mental illness.

17. Do you find intensive outpatient and/or partial day programs to be an acceptable form of treatment?

o Not Acceptable	o 2	o Moderately Acceptable	o 4	o Very Acceptable

Inpatient Program: This treatment method includes hospitalization for 24 hours a day. During this time, mental health professionals will work to get you stabilized within a 72-hour period in order to refer you to a lower level of care.

18. Do you find inpatient programs to be an acceptable form of treatment?

o Not Acceptable	o 2	o Moderately Acceptable	o 4	o Very Acceptable

19. Do you find the Stepped-Care Model, as a whole, to be an acceptable approach to treatment for depression?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

20. Do you view the Stepped-Care Model as an improvement upon standard care for the treatment of depression?

○ Definitely Not	○ 2	○ Might or Might Not	○ 4	○ Definitely Yes

For the following questions, imagine that you have been experiencing symptoms of depression (i.e. depressed mood, loss of pleasure/interest in activities, feelings of guilt/worthlessness, difficulty concentrating, changes in weight/appetite while not dieting) and that you have decided to seek help for these depressive symptoms. For the following questions, please indicate which step you would prefer to start with given the level of depressive symptoms you might be experiencing or imagine to be experiencing.

21. At which step of the Stepped-Care Model would you prefer to start?

- ○ Step One (e.g., Watchful Waiting)
- ○ Step Two (e.g., Psychoeducation and/or Self-Help)
- ○ Step Three (e.g., Psychotherapy and/or Medication)
- ○ Step Four (e.g., Intensive Outpatient, Partial Day Program, Inpatient Program)

Display This Question if: At which step of the Stepped-Care Model would you prefer to start? = Step Two (e.g., Psychoeducation and/or Self-Help)

22a. Which treatment option would you prefer?

- ○ Psychoeducation
- ○ Self-Help
- ○ Psychoeducation and Self-Help

Display This Question if: At which step of the Stepped-Care Model would you prefer to start? = Step Three (e.g., Psychotherapy and/or Medication)

22b. Which treatment option would you prefer?

- ○ Psychotherapy
- ○ Medication
- ○ Psychotherapy and Medication

Display This Question if: At which step of the Stepped-Care Model would you prefer to start? = Step Four (e.g., Intensive Outpatient, Partial Day Program, Inpatient Program)

22c. Which treatment option would you prefer?

- ○ Intensive Outpatient
- ○ Partial Day Program
- ○ Inpatient Program

23. How strong is this preference?

○ Not Strong ○ 2 ○ Moderately Strong ○ 4 ○ Very Strong

24. When making decisions regarding my treatment, I think it is important to collaborate with my physician.

○ Strongly Disagree	○ 2	○ Neither Agree nor Disagree	○ 4	○ Strongly Agree

Below are some alternative types of care that might also be effective for individuals experiencing depression. For the following question, please indicate the number that best corresponds to your views. Alternative forms of treatment might include any of the following: Physical Activity Programs (i.e. exercise/nutrition-based classes to promote wellness), Yoga, Meditation, Group-Based Support Programs (i.e. groups that are not led by a mental health professional).

25. Do you find ANY of the alternative forms of treatment to be acceptable for treating depressive symptoms?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

Skip Logic: If "Not Acceptable" or "2" is selected, then skip to question 28.

26. Among the alternative forms of treatment, which would you MOST prefer to engage in?

- Physical Activity Programs
- Yoga
- Meditation
- Group-Based Peer Support Programs

27. How strong is this preference?

○ Not Strong ○ 2 ○ Moderately Strong ○ 4 ○ Very Strong

28. Have you ever been treated for mental health symptoms? (i.e. depression)

- Yes
- No

Skip Logic: If "No" is selected, then skip to question 34.

29. What were those services?

- Talk-Therapy (i.e. counseling/therapy)
- Drug Treatment (i.e. medication)
- Combination of medication and talk-therapy
- Other (Please Specify)

_____

30. When did you receive treatment for mental health symptoms?

- Within 0-3 Months (1)
- Within 3-6 Months (2)
- Within 6-12 Months (3)
- More than 1 year ago (4)

31. How satisfied were you with the treatment you received?

○ Extremely dissatisfied	○ 2	○ Neither satisfied nor dissatisfied	○ 4	○ Extremely satisfied

32. Do you believe the treatment you received was helpful?

○ Strongly Disagree	○ 2	○ Neither Agree nor Disagree	○ 4	○ Strongly Agree

33. Have you ever experienced symptoms of depression but did not seek help?

- ○ Yes
- ○ No

34. Please indicate your race:

- ○ Asian
- ○ American Indian or Alaska Native
- ○ Native American or Pacific Islander
- ○ Black or African American
- ○ White or Caucasian
- ○ Other (Please Specify)

_____

- ○ Prefer not to answer

35. Please indicate your ethnicity:

- ○ Hispanic/Latino
- ○ Non-Hispanic/Latino
- ○ Prefer not to answer

36. Please indicate your gender:

- Male
- Female
- Other (Please Specify)

_____

- Prefer not to answer

37. What is your current age?

_____

Appendix B

Treatment Preference Inventory Provider Version

In the survey that follows, you will be asked to read a brief description of the treatments offered at each step of the Stepped-Care Model. Each description outlines what one could expect at that step. Following the descriptions are questions assessing how you generally feel about each step. Please read each description and indicate the number that best corresponds to your personal views.

1. How familiar are you with the Stepped-Care Model of treatment for depression?

o Not familiar at all	o 2	o Moderately familiar	o 4	o Very familiar

Below is a brief description of the Stepped-Care Model for those who many not be familiar with it. If you think you are already familiar with the model, you may proceed to the next page in the survey.

The purpose of a Stepped-Care Model of treatment for depression is to match a patient with a level of treatment that is consistent with the level of symptoms they are experiencing and their preferred type of treatment. This matching of patient to their preferred step is often done collaboratively with their treating physician or other medical professional. A patient may begin at any one of the four "steps," and some steps have different options within them. The ideal goal of the model is to begin with the lowest and least intensive form of treatment that is available for treating depressive symptoms. As steps increase, so does the intensity of treatment. Treatments range from no treatment at all (e.g. the least intensive) to inpatient hospitalization (e.g. the most intensive).

The first "step" in this model is also known as watchful waiting or no treatment. While watchful waiting is not an active treatment, this option attributes reduction of symptoms to time.

2. Do you find watchful waiting to be an acceptable form of treatment for a patient with depression?

o Not Acceptable	o 2	o Moderately Acceptable	o 4	o Very Acceptable

The second "step" consists of options that can be achieved on one's own or with minimal contact with a mental health professional. This step consists of two options.

The first option is Psychoeducation. This treatment includes learning information about depression as a disorder. Topics might include signs, symptoms, what one can expect when experiencing a depressive episode and different ways one might be able to cope with depressive symptoms.

3. Do you find psychoeducation to be an acceptable form of treatment for a patient with depression?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

The second option is Self-Help. Self-Help is defined as a self-directed activity aimed at improving one's life. Specific goals of self-help might include learning problem-solving skills, gaining insight and awareness, managing difficulties you may be experiencing, improving relationships, and/or reaching goals. Individuals can find resources through books, Internet sites, and/or mobile applications.

4. Do you find self-help to be an acceptable form of treatment for a patient with depression?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

5. There are a variety of self-help materials that currently exist. How familiar are you with the following forms of self-help?

	Not at all Familiar	2	Somewhat Familiar	4	Extremely Familiar
Books	○	○	○	○	○
Internet Based Programs	○	○	○	○	○
Mobile Applications (e.g. m-Health)	○	○	○	○	○

6. Is there a specific self-help book that you would recommend to a patient to help them manage their depression? (If you are not familiar with any, simply reply "none").

_____

7. How likely would you be to recommend a mobile application to a patient with depression?

○ Extremely unlikely ○ 2 ○ Neither likely nor unlikely ○ 4 ○ Extremely likely

8. Is there a specific mobile application that you would recommend to a patient to help them manage their depression? (If you are not familiar with any, simply reply "none").

_____

9. What outside resources do you present to patients with depressive symptoms?

- ☐ Psychoeducation materials about treatment options
- ☐ Self-help materials
- ☐ Psychoeducation materials about depression signs and symptoms
- ☐ Other (Please specify)

_____

The third "step" consists of weekly or monthly contact with a mental health professional or licensed physician. Within this step, patients have the option to engage in psychotherapy, take a prescribed medication, or use a combined approach (i.e., medication and psychotherapy).

10. Do you find medication to be an acceptable form of treatment for a patient with depression?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

11. Do you find psychotherapy to be an acceptable form of treatment for a patient with depression?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

12. Do you find a combined psychotherapy AND medication approach to be an acceptable form of treatment for a patient with depression?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

The fourth "step" consists of more intensive contact with mental health professionals. This may involve a referral to an intensive outpatient care program, a partial day program, or an inpatient program.

13. Do you find intensive outpatient or partial day programs to be an acceptable form of treatment for a patient with depression?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

14. Do you find inpatient programs to be an acceptable form of treatment for a patient with depression?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

15. Do you find the Stepped-Care Model, as a whole, to be an acceptable approach to treatment for depression?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

16. Do you view the Stepped-Care Model as an improvement upon standard care for the treatment of depression?

○ Definitely not	○ 2	○ Might or might not	○ 4	○ Definitely yes

For the following questions, imagine a patient presents to you with depressed mood or anhedonia nearly every day for about a month with associated change in appetite and sleep, fatigue, decreased concentration, feelings of worthlessness, no suicidal thoughts, and moderate functional impairment at home and/or work. Read each of the questions below and respond specifically to how you might work with this patient within the stepped care model.

17. How likely would you be to recommend the following treatments to this patient:

	Very Unlikely	2	Neither Likely nor Unlikely	4	Very Likely
Watchful Waiting	○	○	○	○	○
Psychoeducation	○	○	○	○	○
Self-Help	○	○	○	○	○
Psychotherapy	○	○	○	○	○
Medication	○	○	○	○	○
Psychotherapy AND Medication	○	○	○	○	○
Intensive Outpatient Program	○	○	○	○	○
Partial Day Program	○	○	○	○	○
Inpatient Program	○	○	○	○	○

18. How competent do you feel providing the following services to this patient:

	Very Incompetent	2	Neither competent nor incompetent	4	Very Competent
Psychoeducation	○	○	○	○	○
Medication Services	○	○	○	○	○

For the following set of questions, please indicate the response that best corresponds to your personal views.

19. Please rank the steps in the stepped-care model as you would prefer to start with when treating a patient with depression:

_____ Step One: Watchful Waiting
_____ Step Two: Psychoeducation
_____ Step Two: Self-Help
_____ Step Three: Psychotherapy
_____ Step Three: Medication
_____ Step Three: Psychotherapy AND Medication
_____ Step Four: Intensive Outpatient or Partial Day Program
_____ Step Four: Inpatient Program

20. Which step do you recommend most often?

- Step One: Watchful Waiting
- Step Two: Psychoeducation
- Step Two: Self-Help
- Step Three: Psychotherapy
- Step Three: Medication
- Step Three: Psychotherapy AND Medication
- Step Four: Intensive Outpatient or Partial Day Program
- Step Four: Inpatient Program

21. When making decisions regarding treatment, I think it is important to collaborate with patients.

○ Strongly disagree	○ 2	○ Neither agree nor disagree	○ 4	○ Strong agree

Below are some alternative types of care that might also be effective for individuals experiencing depression. For the following question, please indicate the number that best corresponds to your views. Alternative forms of treatment might include any of the following: Physical Activity Programs (i.e. exercise/nutrition-based classes to promote wellness), Yoga, Meditation, Group-Based Support Programs (i.e. groups that are not led by a mental health professional).

22. Do you find <u>any</u> of the alternative forms of treatment to be acceptable for treating depressive symptoms?

○ Not Acceptable	○ 2	○ Moderately Acceptable	○ 4	○ Very Acceptable

<u>Skip Logic: If "Not Acceptable" or "2" is selected, then skip to question 24.</u>

23. Among the alternative forms of treatment, which do <u>you recommend</u> most often?

- ○ Physical Activity Programs
- ○ Yoga
- ○ Meditation
- ○ Group-Based Peer Support Programs

24. Please indicate your race:

- ○ Asian
- ○ American Indian or Alaska Native
- ○ Native American or Pacific Islander
- ○ Black or African American
- ○ White or Caucasian
- ○ Other (Please Specify)

_____

- ○ I prefer not to answer

25. Please indicate your ethnicity:

- Hispanic/Latino
- Non-Hispanic/Latino
- I prefer not to answer

26. Please indicate your gender:

- Male
- Female
- Other (Please Specify)

_____

- I prefer not to answer

27. What is your current age?

- _____
- I prefer not to answer

28. Please indicate which type of provider you most identify with:

- Full-time primary care physician
- Part-time primary care physician
- Physician (Other Specialty)
- Resident
- Mid-Level Provider (e.g. Nurse Practitioner, Physician's Assistant)
- I prefer not to answer

29. Please indicate your specialty:

_____

30. How long have you worked at your current position?

- 0-2 Years
- 3-6 Years
- 7-10 Years
- 10+ Years
- I prefer not to answer

31. How many years of experience do you have practicing as a licensed physician?

- 0-2 Years
- 3-6 Years
- 7-10 Years
- 10+ Years
- I prefer not to answer

32. How often do you collaborate with other health professionals (i.e. social worker, psychologist, psychiatrist)?

- 0-3 times/week
- 4-6 times/week
- 6+ times/week
- Never
- I prefer not to answer