A Single Integrated Behavioral Health Appointment Improves Patients' Perceptions of Behavioral Health Treatment

Jennifer M. Wray, PhD[a,b,c,*]; Sandra Coulon, PhD[a,b]; Nina Wong, PhD[a,b]; Derek Szafranski, PhD[a,b]; and Daniel F. Gros, PhD[a,b]

ABSTRACT

Objective: To determine if a single behavioral health appointment in primary care would result in improvements in participants' perceptions of mental health treatment.

Methods: Survey data from 32 patients seen in a Veterans Affairs medical center primary care clinic were collected (May 2017 to December 2017) before and after a brief appointment with a behavioral health provider. The primary outcome measure was change in pre- to post-session response to 6 items measuring perceptions of treatment taken from the Perceptions About Services Scale-Revised.

Results: The single behavioral health appointment resulted in improved perceptions of behavioral health treatment. Pre- to post-session ratings on 5 of 6 measured variables improved, including the perception that patients would have fewer bothersome symptoms as a result of attending a behavioral health appointment, feeling treatment would be valuable and beneficial, feeling they would have time to spend in treatment, and feeling that behavioral health specialists are understanding (Ps < .05). Patients were highly satisfied with the single integrated behavioral health session. Further, more than two-thirds of patients for whom further treatment was recommended attended a second behavioral health appointment.

Conclusions: This study adds to the growing body of literature on the benefits associated with integrated behavioral health and investigates the potential mechanisms associated with the success of the single appointment.

Prim Care Companion CNS Disord 2019;21(1):18m02378

To cite: Wray JM, Coulon S, Wong N, et al. A single integrated behavioral health appointment improves patients' perceptions of behavioral health treatment. *Prim Care Companion CNS Disord.* 2019;21(1):18m02378.

To share: https://doi.org/10.4088/PCC.18m02378

[a]Mental Health Service, Ralph H. Johnson VA Medical Center, Charleston, South Carolina

[b]Department of Psychiatry, Military Science Division, Medical University of South Carolina, Charleston, South Carolina

[c]VA Center for Integrated Healthcare, VA Western New York Healthcare System, Buffalo, New York

**Corresponding author:* Jennifer M. Wray, PhD, Mental Health Service 116, Ralph H. Johnson VA Medical Center, 109 Bee St, Charleston, SC 29401 (Jennifer.Wray@va.gov).

Behavioral health providers work as an integral part of the primary care team to assist with patients' behavioral and mental health concerns in integrated primary care settings.[1] There is mounting evidence to support the integration of mental health services in primary care settings. This type of service delivery structure decreases stigma associated with seeking help for mental health concerns,[2] improves the recognition of mental health concerns in the primary care setting,[3] improves access to mental health services,[4] and increases the number of primary care patients seen for behavioral health concerns.[5]

Patients seen in integrated primary care–behavioral health settings report mental health symptom improvement, including reduction of posttraumatic stress disorder, anxiety, and depression symptoms[6–8]; reduction of suicidal ideation[9]; sleep improvement[10]; and overall improvement of general mental health symptoms.[11] In addition, patients seen in integrated primary care settings report improvement in daily functioning.[12] Importantly, patients seen by an integrated behavioral health provider report high satisfaction with these services and interest in subsequent appointments.[13–15]

A single appointment with an integrated behavioral health provider has been shown to improve rates of engagement in subsequent mental health appointments.[16] This engagement is critical, as most patients directly referred by their primary care provider either decline a referral or never attend an initial mental health appointment.[17,18] In an integrated clinic, patients are often seen via "warm handoff"—a process by which the primary care provider brings patients who need a behavioral health visit directly to the integrated behavioral health provider immediately following the primary care appointment.[19] Patients are then seen by the behavioral health provider for a brief appointment (< 30 minutes) focused on an assessment of current needs, delivery of brief intervention, and subsequent treatment planning.[20]

Although there is ample evidence on various models of integrated primary care, there are significant gaps in this emerging area of study and application for research coming out of real-world clinical settings.[21] While prior work[16] has reported that a single behavioral health appointment in an integrated setting increases engagement in subsequent mental health treatment, we do not yet understand the dynamics contributing to this improvement. Some factors that have been hypothesized include decreasing stigma associated with mental health care and challenging expectations about treatment.[16] The current study aims to understand how patients' perceptions of behavioral health treatment change as a function of a same-day behavioral health appointment after their primary care visit. We hypothesized that a single same-day access appointment would result in pre- to post-appointment improvements in patients' perceptions of their mental health

Clinical Points

- A single behavioral health appointment immediately following a primary care appointment resulted in improved perceptions of behavioral health treatment.
- More than two-thirds of patients referred to subsequent behavioral health treatment attended the visit.
- Patients were highly satisfied with the integrated behavioral health session that immediately followed their primary care appointment.

treatment needs as well as improved understanding of behavioral health treatment options.

METHODS

Participants

Thirty-six participants from a primary care mental health integration (PCMHI) program at a large Veterans Affairs (VA) medical center in the southeastern United States were surveyed. Patients in the study were seen by a behavioral health provider in the collocated collaborative care part of the PCMHI program (ie, behavioral health providers were embedded in the primary care clinic). Upon identification of mental health symptomatology by their primary care provider, participants were referred for a same-day access appointment with a behavioral health provider. Study inclusion criteria included (1) completing a primary care visit on the same day as the PCMHI referral, (2) being at least 18 years of age, and (3) being able to participate in the PCMHI appointment. Data from 2 participants who did not complete the post-appointment questionnaire and 2 participants who were not recommended for follow-up behavioral health treatment were excluded.

Procedures

The procedures and measures used in this study were approved by the local institutional review board and incorporated standard practices in the clinic (May 2017 to December 2017). Warm handoff appointments focused on assessing the presenting concern, providing advice about treatment options, agreeing on an action plan, assisting the patient to begin a behavior change plan, and arranging follow-up plans. Participants who had a brief wait between their meeting with the primary care provider and the behavioral health provider completed a brief packet of self-report measures in the waiting room prior to beginning the appointment. The pre-appointment measures included the 7-item Generalized Anxiety Disorder scale (GAD-7),[22] 9-item Patient Health Questionnaire (PHQ-9),[23] and 6 items from the Perceptions About Services Scale-Revised (PASS-R).[24] A second packet of measures was administered at the completion of the appointment. The post-appointment measures included a second administration of the select PASS-R items, select items from the Charleston Psychiatric Outpatient Satisfaction Scale (CPOSS),[25] and a demographic questionnaire. Patients were told they would complete and then submit the post-session survey to front desk staff to minimize response bias. They were also informed that completion of the surveys would assist with assessment and treatment planning (eg, PHQ-9 and GAD-7) and would be used to improve procedures in the clinic. A chart review was conducted at least 60 days after the appointment to determine if the patient had attended an initial mental health visit within 60 days in cases in which referral for subsequent services was part of the follow-up plan.

Measures

PASS-R. The PASS-R assesses beliefs about behavioral health treatment and stigma.[26] Responses are rated on a 7-point Likert-type scale (eg, 1 = strongly disagree to 7 = strongly agree, 1 = unlikely to 7 = likely). As appointment length in PCMHI is brief, and this study was completed in a real-world clinic, we elected to keep assessments brief. As such, we selected the 6 items of the PASS-R measure that focused on patients' perceptions of treatment (item 8: "By attending a behavioral health care session, I will have fewer bothersome symptoms"; item 9: "Behavioral health care specialists are understanding"; item 15: "Some of my experiences would be too difficult to talk about in behavioral health care"; item 18: "I have time to spend in behavioral health care"; item 19a: "Overall, I think going to behavioral health care for treatment is worthless/valuable"; and item 19b: "Overall, I think going to behavioral health care for treatment is harmful/beneficial"). The PASS-R has adequate test-retest reliability and high internal consistency.[24] The internal consistency in the present study was 0.79 and 0.70 at pre- and post-appointment, respectfully.

CPOSS. The CPOSS is a 16-item measure designed to assess patient treatment satisfaction in psychiatric outpatient settings.[25,27] For the purposes of the present study, item 5 ("Respect shown for opinions about treatment"), item 6 ("Matching of treatment plan to your individual needs"), and item 7 ("Helpfulness of services received") were used. All items were rated on a 5-point Likert scale, ranging from 5 = excellent to 1 = poor. The CPOSS has demonstrated excellent psychometric properties in the literature.[27] The internal consistency of the CPOSS items in the present study was 0.97.

GAD-7. The GAD-7 is a 7-item measure developed to screen for and assess the severity of generalized anxiety disorder in clinical settings.[22] All items were rated on a 4-point Likert scale, ranging from 0 = not at all to 3 = nearly every day. The GAD-7 has demonstrated good reliability as well as criterion and construct validity.[22] The internal consistency of the GAD-7 in the present study was 0.90.

PHQ-9. The PHQ-9 is a 9-item depression scale derived from the PHQ to assess the symptoms and diagnosis of depression.[23] All items were rated on a 5-point Likert scale, ranging from 0 = not at all to 4 = nearly every day. The PHQ-9 has been shown to have good reliability and validity in clinical samples.[23] In addition, the PHQ-9 has been incorporated into standard screenings at the VA. The internal consistency in the present study was 0.82.

Table 1. Pre- to Post-Appointment Changes in Perceptions About Services[a]

Scale	Pre-Appointment	Post-Appointment	*t*	*P*	*d*
PASS-R item 8: Fewer bothersome symptoms	3.7 (1.9)	4.6 (1.5)	2.8	.009	0.53
PASS-R item 9: Specialists are understanding	4.9 (1.8)	5.4 (1.5)	2.0	.051	0.30
PASS-R item 15: Too difficult to talk about	3.4 (2.0)	3.2 (1.9)	0.6	.553	0.10
PASS-R item 18: Have time to spend in treatment	3.7 (2.0)	4.4 (1.7)	3.4	.002	0.38
PASS-R item 19a: Treatment is worthless/valuable	5.1 (1.5)	5.5 (1.5)	2.5	.017	0.27
PASS-R item 19b: Treatment is harmful/beneficial	5.3 (1.6)	5.8 (1.2)	2.0	.057	0.35

[a]Pre- and post-appointment columns reported as mean (standard deviation). Cohen *d* was used for effect size.
Abbreviation: PASS-R = Perceptions About Services Scale-Revised.

Table 2. Correlations of the Post-Treatment PASS-R and CPOSS Items

Measure	1	2	3	4	5	6	7	8
1. PASS-R item 8: Fewer bothersome symptoms								
2. PASS-R item 9: Specialists are understanding	0.66**							
3. PASS-R item 15: Too difficult to talk about	–0.24	0.07						
4. PASS-R item 18: Have time to spend in treatment	0.57**	0.43*	–0.01					
5. PASS-R item 19a: Treatment is worthless/valuable	0.64**	0.63**	–0.17	0.59**				
6. PASS-R item 19b: Treatment is harmful/beneficial	0.39*	0.30	–0.32	0.40*	0.76**			
7. CPOSS item 5: Respect shown for opinions	–0.30	–0.23	0.28	–0.12	–0.11	–0.26		
8. CPOSS item 6: Matching of treatment plan	–0.32	–0.28	0.37*	–0.08	–0.11	–0.28	0.91**	
9. CPOSS item 7: Helpfulness of services received	–0.31	–0.29	0.36*	–0.10	–0.17	–0.29	0.95**	0.90**

*$P < .05$.
**$P < .01$.
Abbreviations: CPOSS = Charleston Psychiatric Outpatient Satisfaction Scale, PASS-R = Perceptions About Services Scale-Revised.

Data Analysis

Data from the measures administered to all participants (demographic and self-report) were inspected for missing values. No participants were excluded from the analyses for significant missing data (> 10% of items on any scale). However, 2 participants did not complete the post-appointment packet and were excluded from all analyses. Paired-sample *t* tests were conducted to compare pre- and post-appointment PASS-R scores. Correlations were calculated between the post-appointment PASS-R and CPOSS items.

RESULTS

Demographics and Symptomatology

All participants (N = 32) were adult veterans (mean ± SD age = 47.9 ± 16.1 years). Participants were mostly male (n = 24, 75.0%) and self-identified as black (n = 15, 46.9%), white (n = 14, 43.8%), Hispanic/Latino (n = 2, 6.3%), and Asian American (n = 1, 3.1%). Approximately 40% (n = 13) were married, 28% (n = 9) were single, and 31% (n = 10) were divorced, separated, or widowed. Over half were employed full-time (n = 18, 56.3%), and most received at least a high school level of education (n = 11 [34.4%] completed high school, n = 12 [37.5%] completed some college, and n = 6 [18.8%] completed college). Almost 60% (n = 19) of participants served in the US Army, with an equal split serving in (n = 16, 50%) and out (n = 16, 50%) of combat zones. Nearly half of the participants received behavioral health treatment in the past (n = 15, 47%). On average, participants reported elevated scores on the GAD-7 (mean = 13.8, SD = 5.0) and PHQ-9 (mean = 12.7, SD = 5.4) prior to the warm handoff visit. Warm handoff appointments averaged a mean of 24.2 minutes (SD = 6.1).

Findings

Pre- to post-appointment findings for the PASS-R items are presented in Table 1. Positive changes were observed for 5 of 6 PASS-R items ($ts > 1.9$, $Ps < .06$), with small-to-moderate effect sizes (ds ranged from 0.27 to 0.53). Patients reported high satisfaction with the behavioral health appointment, with high scores (1 = excellent, 5 = poor) for "Respect shown for opinions about treatment" (mean = 1.63, SD = 0.94), "Matching of treatment plan to your individual needs" (mean = 1.72, SD = 0.89), and "Helpfulness of services received" (mean = 1.60, SD = 0.95). Bivariate correlations between the PASS-R and CPOSS (Table 2) demonstrated statistically reliable relationships between PASS-R item 15 ("Some of my experiences would be too difficult to talk about in behavioral health care") and CPOSS item 6 ("Matching of treatment plan to your individual needs") and CPOSS item 7 ("Helpfulness of services received") ($rs > 0.35$, $Ps < .05$).

After the appointment, 68.8% (n = 22) of participants were dispositioned to return to the integrated behavioral health program for a follow-up visit and 31.3% (n = 10) were dispositioned to more intensive mental health services (eg, general mental health, mental health research, posttraumatic stress disorder clinical team, or substance treatment and recovery program). The follow-up chart review revealed that 68.8% (n = 22) of participants attended their follow-up appointment within 60 days of their original integrated behavioral health appointment. There was no reliable relation between the disposition of the follow-up appointment (integrated behavioral health vs mental health) and the participants' attendance rate ($\chi^2 = 0.5$, $P = .472$). Similarly, patient self-reported symptoms of depression and anxiety were not related to the participants' attendance rate of their follow-up appointments ($F < 0.3$, $Ps > .63$).

DISCUSSION

The present study investigated the influence of a single behavioral health appointment in an integrated primary care setting on patient perceptions about services. The findings demonstrated that the single appointment resulted in improvements in patient perceptions in most assessed domains, including how bothersome symptoms were, how understanding providers are, availability to participate in services, and value and benefit of available treatments. The single item that did not improve (difficult to talk about problems) may be related to a floor effect in that patients already endorsed disagreeing (mean = 3.4 on a 7-point scale) at the pre-appointment assessment. Interestingly, that same item (difficult to talk about problems) demonstrated the strongest statistical relation to the items assessing patient satisfaction. Patient satisfaction with the behavioral health appointment was high, evidenced by high ratings when asked after the appointment about respect shown for opinions about treatment, matching of treatment plan to individual needs, and helpfulness of services received. In collaboration with their provider, most patients elected to return to integrated behavioral health for a follow-up visit. Over two-thirds of patients successfully attended the second appointment within 60 days—a vast improvement beyond what is typically reported in the literature when patients are referred to mental health specialists outside of the primary care setting.[18,28–30] Together, these findings demonstrate the beneficial influence of a single integrated behavioral health appointment on patient perceptions of treatment, patient satisfaction with these services, and frequent participation in recommended follow-up services.

The present findings add to the growing literature on the benefits associated with integrated behavioral health care within primary care settings.[6,7,9–12,16,19] However, the uniqueness of this present study relates to the investigation of potential mechanisms associated with the success of a single appointment. More specifically, the present study demonstrated pre- to post-appointment improvements in several domains associated with patient perceptions of receiving behavioral health services. Although beyond the scope of the present study and requiring further investigation, it is possible that these factors and improvements are especially critical in treatment engagement. This may be especially true in that these appointments occurred as warm handoffs from primary care. As such, the patient may not have anticipated participating in behavioral health services prior to the primary care appointment, suggesting that this appointment may have been the only opportunity for providers to successfully convey the need for and benefits of behavioral health services.

This study had several limitations that should be addressed in future investigations. The study was completed within standard practices in the clinical setting, limiting the measures administered (eg, unable to administer the full PASS-R due to time restrictions) as well as procedural manipulations (eg, lack of control group). In addition, the incorporation of no-treatment and attention/control groups could provide a greater understanding of the influence of the specific factors associated with the single behavioral health appointment. Other limitations include the sample size (N = 32) and sample characteristics (only veterans and mostly men). As the VA is a closed system, patients may have been more likely to attend recommended follow-up mental health services due to those services being integrated into the system where they already receive care.

CONCLUSIONS

The present study investigated the benefits associated with a single integrated behavioral health appointment delivered via a warm handoff from a primary care provider. Improvements in patient perceptions of behavioral health services were evidenced at the completion of the appointment, patient satisfaction with the warm handoff appointment was high, and there was impressive participation in attendance at recommended follow-up. These findings contribute to the growing literature on integrated primary care–behavioral health settings, reinforcing the significance of these initiatives within the US Department of Veterans Affairs[31] and elsewhere.

Submitted: August 28, 2018; accepted November 14, 2018.

Published online: February 14, 2019.

Potential conflicts of interest: None.

Funding/support: Dr Gros's effort on this study was partially supported by Department of Veteran Affairs Clinical Sciences Research and Development Career Development Award CX000845.

Role of the sponsor: The sponsor had no role in the design and conduct of the study; collection, management, analysis, and interpretation of data; or preparation, review, or approval of the manuscript.

Disclaimer: The views expressed in this article are those of the authors and do not necessarily reflect the position or policy of the US Department of Veterans Affairs or the United States government.

REFERENCES

1. Gunn WB Jr, Blount A. Primary care mental health: a new frontier for psychology. *J Clin Psychol*. 2009;65(3):235–252.
2. Shim R, Rust G. Primary care, behavioral health, and public health: partners in reducing mental health stigma. *Am J Public Health*. 2013;103(5):774–776.
3. Zivin K, Pfeiffer PN, Szymanski BR, et al. Initiation of primary care-mental health integration programs in the VA health system: associations with psychiatric diagnoses in primary care. *Med Care*. 2010;48(9):843–851.
4. Post EP, Metzger M, Dumas P, et al. Integrating mental health into primary care within the Veterans Health Administration. *Fam Syst Health*. 2010;28(2):83–90.
5. Brawer PA, Martielli R, Pye PL, et al. St Louis Initiative for Integrated Care Excellence (SLI(2) CE): integrated-collaborative care on a large scale model. *Fam Syst Health*. 2010;28(2):175–187.
6. Cigrang JA, Rauch SAM, Mintz J, et al; STRONG STAR Consortium. Treatment of active duty military with PTSD in primary care: a follow-up report. *J Anxiety Disord*. 2015;36:110–114.
7. McFeature B, Pierce TW. Primary care behavioral health consultation reduces depression levels among mood-disordered patients. *J Health Dispar Res Pract*. 2012;5:36–44.
8. Sadock E, Auerbach SM, Rybarczyk B, et al. Evaluation of integrated psychological services in a university-based primary care clinic. *J Clin Psychol Med Settings*. 2014;21(1):19–32.
9. Bryan CJ, Corso KA, Corso ML, et al. Therapeutic alliance and change in suicidal ideation during treatment in integrated primary care settings. *Arch Suicide Res*.

2012;16(4):316–323.
10. Goodie JL, Isler WC, Hunter C, et al. Using behavioral health consultants to treat insomnia in primary care: a clinical case series. *J Clin Psychol*. 2009;65(3):294–304.
11. Corso KA, Bryan CJ, Corso ML, et al. Therapeutic alliance and treatment outcome in the primary care behavioral health model. *Fam Syst Health*. 2012;30(2):87–100.
12. Reiter JT, Dobmeyer AC, Hunter CL. The primary care behavioral health (PCBH) model: an overview and operational definition. *J Clin Psychol Med Settings*. 2018;25(2):109–126.
13. Angantyr K, Rimner A, Norden T. Primary care behavioral health model: perspectives of outcome, client satisfaction, and gender. *Soc Behav Personal*. 2015;43(2):287–302.
14. Funderburk JS, Fielder RL, DeMartini KS, et al. Integrating behavioral health services into a university health center: patient and provider satisfaction. *Fam Syst Health*. 2012;30(2):130–140.
15. Funderburk JS, Sugarman DE, Maisto SA, et al. The description and evaluation of the implementation of an integrated healthcare model. *Fam Syst Health*. 2010;28(2):146–160.
16. Wray LO, Szymanski BR, Kearney LK, et al. Implementation of primary care-mental health integration services in the Veterans Health Administration: program activity and associations with engagement in specialty mental health services. *J Clin Psychol Med Settings*. 2012;19(1):105–116.
17. Oslin DW, Ross J, Sayers S, et al; The Behavioral Health Laboratory. Screening, assessment, and management of depression in VA primary care clinics. *J Gen Intern Med*. 2006;21(1):46–50.
18. Zanjani F, Miller B, Turiano N, et al. Effectiveness of telephone-based referral care management, a brief intervention to improve psychiatric treatment engagement. *Psychiatr Serv*. 2008;59(7):776–781.
19. Pomerantz AS, Kearney LK, Wray LO, et al. Mental health services in the medical home in the Department of Veterans Affairs: factors for successful integration. *Psychol Serv*. 2014;11(3):243–253.
20. Hunter CL, Goodie JL, Oordt MS, et al. *Integrated Behavioral Health in Primary Care: Step-by-Step Guidance for Assessment and Intervention*. 1st ed. Washington, DC: American Psychological Association; 2009.
21. Hunter CL, Funderburk JS, Polaha J, et al. Primary care behavioral health (PCBH) model research: current state of the science and a call to action. *J Clin Psychol Med Settings*. 2018;25(2):127–156.
22. Spitzer RL, Kroenke K, Williams JBW, et al. A brief measure for assessing generalized anxiety disorder: the GAD-7. *Arch Intern Med*. 2006;166(10):1092–1097.
23. Kroenke K, Spitzer RL. The PHQ-9: a new depression diagnostic and severity measure. *Psychiatr Ann*. 2002;32(9):509–515.
24. Stecker T, Fortney J, Hamilton F, et al. Engagement in mental health treatment among veterans returning from Iraq. *Patient Prefer Adherence*. 2010;4:45–49.
25. Frueh BC, Pellegrin KL, Elhai JD, et al. Patient satisfaction among combat veterans receiving specialty PTSD treatment. *J Psychiatr Pract*. 2002;8(5):326–332.
26. Stecker T, Fortney JC, Hamilton F, et al. An assessment of beliefs about mental health care among veterans who served in Iraq. *Psychiatr Serv*. 2007;58(10):1358–1361.
27. Gros DF, Gros KS, Acierno R, et al. Relation between treatment satisfaction and treatment outcome in veterans with posttraumatic stress disorder. *J Psychopathol Behav Assess*. 2013;35(4):522–530.
28. Bartels SJ, Coakley EH, Zubritsky C, et al; PRISM-E Investigators. Improving access to geriatric mental health services: a randomized trial comparing treatment engagement with integrated versus enhanced referral care for depression, anxiety, and at-risk alcohol use. *Am J Psychiatry*. 2004;161(8):1455–1462.
29. Dobscha SK, Delucchi K, Young ML. Adherence with referrals for outpatient follow-up from a VA psychiatric emergency room. *Community Ment Health J*. 1999;35(5):451–458.
30. Kessler R. Mental health care treatment initiation when mental health services are incorporated into primary care practice. *J Am Board Fam Med*. 2012;25(2):255–259.
31. Zeiss AM, Karlin BE. Integrating mental health and primary care services in the Department of Veterans Affairs health care system. *J Clin Psychol Med Settings*. 2008;15(1):73–78.