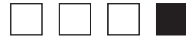
BRIEF
REPORTS



Assessing Family Medicine Physicians' Perceptions of Integrated Behavioral Health in a Primary Care Residency

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BACKGROUND AND OBJECTIVES: Physicians are increasingly confronted with patients' interrelated psychosocial and physiological issues. To assist physicians in managing the psychosocial needs of patients, integrated behavioral health (IBH) has become increasingly common. This study was completed in a large, Midwestern family medicine residency program where the authors sought to (1) identify physicians' perceptions of IBH implementation and areas of needed IBH improvement, and (2) recognize educational needs to be addressed when providing behavioral health training to resident physicians.

METHODS: The authors utilized a pre/post design to measure physician perception of access and quality of an integrated behavioral health program. For quantitative data, we performed standard descriptive statistics, likelihood ratio χ^2 tests, independent sample *t* test, and linear mixed-model analysis. For qualitative data, we completed phenomenological analysis, derived from a focus group.

RESULTS: Physician satisfaction with access and quality of behavioral health services significantly improved after the implementation of the IBH ($P<.01$). Perception of behavioral health management also improved, including the commitment of the residency program to mental health well-being, benefit from consultations with BHPs, and physician ownership of managing patients' mental health needs. Themes from the focus group indicated a desire for increased communication with BHPs, as well as additional assessment and intervention skills to manage psychiatric disorders.

CONCLUSIONS: Family physicians value IBH in supporting patients' behavioral health treatment, and resident physicians hone behavioral health management skills through collaborating with BHPs and completing behavioral health training. Residencies should increase focus on teaching essential skills in behavioral health management.

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Physicians are increasingly confronted with patients' interrelated psychosocial and physiological health issues.[1,2] Unfortunately, many physicians feel inadequately trained to meet the behavioral health needs of their patients.[1] Integrated behavioral health (IBH), an approach that allows for behavioral health providers (BHPs) and physicians to collaborate in providing biopsychosocial treatment to patients in primary care residency settings, has arisen as a way to provide the resources and skills to better manage these needs.[3,4]

Prior studies have shown that IBH is associated with positive patient outcomes, increased treatment effectiveness, reduced costs, and improved physician satisfaction.[5-11] IBH improves patients' attendance rates to follow-up behavioral health appointments.[6] Additionally, physicians report that having IBH increases their skills and confidence in managing behavioral health needs, particularly among resident physicians.[12] However, literature is just beginning to identify the impact of IBH on resident physician education,[13] as well as training competencies for resident physicians to function effectively as a part of IBH.[14-16]

The aims of this study were to (1) identify physicians' perceptions of IBH implementation and areas of needed IBH improvement, and (2) recognize educational needs to be addressed when providing behavioral health training to resident physicians. This study was completed within a large Midwestern family medicine residency program.

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Methods

In spring 2017, a director of behavioral health initiated a year-long, reoccurring integrated behavioral health internship for two marriage and family therapy master's degree students from a local university. At the beginning of each internship year, prior to interacting with patients, a 2-week orientation was provided in which the BHPs received training on brief therapeutic models of intervention (ie, solution-focused therapy, motivational interviewing, and cognitive behavioral therapy); specific assessment and intervention skills relevant to providing trauma-informed care; an overview of evidenced-based screening tools utilized in primary care; resources on IBH and primary care nomenclature; guidelines for responding to suicidal ideation as well as homicidal ideation; and an overview of psychotropics was provided by a hospital-based pharmacist. Lastly, the BHPs observed and received observation on integrated care and were provided training on documentation within the electronic medical record. Following training, each BHP spent 12 hours per week on integrated care, receiving warm handoffs from physicians. The other 12 hours were spent providing follow-up psychotherapy to primary care patients in 40-minute increments. The director of behavioral health completed 4 hours of integrated care, and 4 hours of follow-up psychotherapy per week. With this implementation, the integrated behavioral health program was transitioning to a fully integrated system.[17]

Resident physicians worked collaboratively with BHPs in addressing the psychosocial needs of patients. Curbside consultations, warm handoffs, and shared documentation within the electronic medical recorded afforded consistent communication and learning opportunities relevant to behavioral health assessment and intervention. Resident physicians also completed a 2-week behavioral health rotation and attended monthly behavioral health didactic presentations.

To assess the quality, access, and impact of IBH within the residency, both resident physicians and faculty physicians completed a modified Provider Survey.[18] This survey included 22 Likert-scale questions and one open-ended question, and was provided in fall 2016 and in fall 2018. We collected preintegration data in fall 2016. We collected the postintegration data in fall 2018. All surveys were anonymous and voluntary. Resident physicians also participated in one of three focus group interviews in fall 2018. Each focus group was comprised of one interviewer and up to 12 resident physicians, for a total of approximately 36 participants. The University of Kansas Medical Center Institutional Review Board approved this study.

We used a multimethod (quantitative and focus group) approach to collect, analyze, and interpret the data.[19-21] We analyzed the content of the focus group responses by researcher (RN) using phenomenological analysis.[22] Patterns of commonality provided rich description of the phenomenon. We developed final themes by consensus of all study participants. See Appendix for interview structure.

For the quantitative data, we performed standard descriptive statistics, likelihood ratio χ^2 tests, independent sample t test, and linear mixed model analysis to estimate the effect of the IBH expansion. All analysis were 2-sided with α of 0.05.

Results

Quantitative Results

A total of 36 and 51 physicians completed the Phase 1 and Phase 2 surveys, respectively (Table 1). Likelihood ratio χ^2 tests showed no significant relationship between participant sex (male vs female), job title, and clinic location.

As shown in Table 2, participants' satisfaction with access and quality of behavioral health services was significantly higher after the implementation of IBH ($P<.01$). Table 3 summarizes participants' perceptions of behavioral health management. Overall, the participants' perception of behavioral health management was significantly higher after IBH, t (85)=3.35, $P<.01$; 95% CI, 1.59 - 6.23), including commitment of the residency program to behavioral health, benefit from consultations with BHPs, and physician ownership of managing their patients' behavioral health needs.

Table 1: Participants Characteristics

Characteristics	Phase 1 (N=36)[a]	Phase 2 (N=51)	*P* Value[b]
Sex, n (%)			**0.36**
Male	23 (63.9)	29 (56.9)	
Female	11 (30.6)	22 (43.1)	
Missing*	2 (536)	-	
Job Title, n (%)			**0.86**
Faculty	10 (27.8)	15 (29.4)	
Residents	26 (72.2)	36 (70.6)	
Clinic, n (%)			**0.38**
St Francis	20 (55.6)	26 (51.0)	
St Joseph	13 (36.1)	25 (49.0)	
Missing*	3 (8.3)	-	

[a] Some of the participants did not respond to the preintegration survey, and that is why the postintegration sample size is larger.

[b] Likelihood ratio χ^2 tests.

* The number of participants who completed the survey but did not provide an answer to this specific question.

Table 2: Outcome Scores of Access and Quality at Phase 1 and Phase 2

Scale (Possible Range)	Time Point[a]		*P* Value[b]	Mean Difference (95 CI)
	Phase 1 (N=36)	Phase 2 (= 51)		
Access[c] (1-5)	2.7 (2.4-2.9)	3.9 (3.6-4.1)	<.001	1.19 (0.82 to 1.57)
Quality[d] (1-5)	3.4 (3.1-3.7)	4.1 (3.9-4.3)	<.001	0.69 (0.36 to 1.02)

[a] Values shown are mean score (95% CI).

[b] *P* values were calculated with the linear mixed effects models and denote the significance of β coefficients.

[c] Higher scores indicate greater satisfaction with access to behavioral health services provided.

[d] Higher scores indicate greater satisfaction with quality of the behavioral health services provided.

Table 3: Responding Physicians' Perception of Behavioral Expansion

	Phase 1	Phase 2	t	*P* Value	Mean Difference (95% CI)
Items (Possible Range)a	Mean (SD)	Mean (SD)			
Mental health problems are as important to identify and treat as general health problems (1-5).	4.4 (0.7)	4.7 (0.5)	1.55	.15	0.20 (-0.06 to .46)
This residency program has a strong commitment to mental health well-being.	3.4 (0.6)	4.2 (0.7)	5.79	<.001	0.82 (0.54 to 1.10)
I have good assessment skills in the area of mental health.	3.4 (0.6)	3.6 (0.7)	1.54	.14	0.21 (-.06 to 0.48)
I have been satisfied with the amount of contact I have with behavioral health providers regarding the care of my patients.	3.4 (0.9)	4.1 (0.9)	3.96	<.001	0.76 (0.37 to 1.14)
Behavioral health providers can be especially useful in helping a patient change a health behavior (eg, improve diet, decrease smoking, increase treatment adherence).	4.1 (0.8)	4.2 (0.8)	0.31	.75	0.06 (-.31 to 0.42)
This residency setting has a strong commitment to using patients' family members as a resource in patient care.	3.0 (0.6)	3.5 (0.9)	3.05	<.01	0.50 (0.17 to 0.83)
I understand the effects of family relationships on health and the effects of illness on family relationships.	3.6 (0.8)	4.1 (0.6)	2.85	<.01	0.44 (0.13 to 0.75)
I have benefitted from consultations with behavioral health providers (1-5).	3.8 (0.9)	4.3 (0.7)	3.05	<.01	0.51 (0.18 to 0.85)
Incorporating services of behavioral health experts in a patients' care is often vital.	4.1 (0.7)	4.3 (0.7)	1.29	.21	0.20 (-.11 to 0.50)
Part of the role of a primary care physician (PCP) is to identify and treat behavioral health problems.	4.2 (0.8)	4.6 (0.5)	2.56	<.05	0.36 (0.08 to 0.64)
Part of the role of a PCP is to involve behavioral health providers in treating mental or general health problems	4.4 (0.7)	4.4 (0.6)	0.53	.59	0.08 (-.22 to 0.38)
Overall Score (11-55)	**41.6 (4.3)**	**45.5 (6.0)**	**3.35**	**<.01**	**3.91 (1.59 to 6.23)**

[a]Scores range from 1 to 5 (1=strongly disagree, 5=strongly agree).

Narrative Feedback

Table 4 provides themes and exemplar quotes that emerged from the focus group interview. The first category of themes related to resident physicians' perceptions of IBH. Within this category, findings indicated that resident physicians found IBH to be beneficial in providing patients with accessible behavioral health treatment. They also noted that collaborating with BHPs in completing patient consults provided valuable opportunities to hone motivational interviewing and effective communication skills. Further, resident physicians identified specific educational benefit when BHPs were able to share their patient assessment and intervention strategies. Resident physicians did highlight a desire for increased communication with BHPs regarding assessment and intervention strategies, and a need to increase the total number of BHPs within the clinic settings.

The second category identified resident physicians' perceptions of the required 2-week behavioral health rotation. Resident physicians

Table 4: Themes From Focus Group Interviews

Themes	Exemplar Quotes
Integration of Behavioral Health	
Resident physicians noted that behavioral health providers (BHPs) take time to discuss patient assessments and interventions with them and are also attentive to forwarding treatment plans and progress notes. This ongoing transfer of information is beneficial to residents as they learn more about BHPs' roles, as well as how to develop patient centered treatment plans.	"I learn things [from BHPs] that I didn't even know about my patients…I'm humbled and thankful."
Resident physicians indicated that it would be beneficial for BHPs to increase their attentiveness in communicating with them about assessment and intervention strategies that occur within brief behavioral health consultations. This would assist residents in implementing similar skills.	"If we do talk after a brief behavioral health encounter, I don't always feel like I learn how to do what they do."
Resident physicians highlighted that the integration of BHPs has increased access to mental health expertise as BHPs make themselves available for brief consultations.	"It's very easy for me now to just walk up and be like, 'hey, I have a patient for you to see', and it happens."
Resident physicians implied a desire to incorporate more behavioral interventions into their encounters with patients but struggle to do this when they have 10-15 minutes to spend with patients.	"I think it's an issue of time…I think it would be beneficial to learn [behavioral interventions], but the way our clinic is structured, I don't really know how much more I'd be able to implement in an encounter."
Resident physicians highlighted that a lack of finances, transportation, and social resources pose challenges for patients to make it to primary care appointments, let alone the addition of traditional behavioral health appointments.	"Some patients already come once a month...coming back additionally throughout the month is just too much."
Resident physicians articulated patients have benefited from the services and expertise of the behavioral health team. They noted a desire for an increased number of BHPs to increase consultation coverage.	"We see a very at-risk patient population that has a large demand for behavioral health resources. The more BHPs we can get, the better off our patients will be."
Resident physicians indicated that having BHPs integrated within the clinic setting is beneficial as patients can meet with them during brief consultations to discuss establishing for traditional therapy, while simultaneously building rapport and increasing behavioral health appointment show rates.	"For our population, making a connection with the BHP makes a huge difference as to whether patients will follow up with behavioral health services."
Behavioral Health Rotation	
Resident physicians demonstrated that the behavioral health rotation assists them in learning patterns of communication and listening skills that assist in providing patient centered care. This care encompasses a biopsychosocial approach in which attention is increased to screening for psychological well-being.	"I've had a higher success rate utilizing patient centered techniques."
Resident physicians identified that through becoming more familiar with motivational interviewing techniques and practicing motivational interviewing skills during the rotation, they are better able to support patients in fulfilling positive behavior changes.	"I utilize motivational interviewing to figure out patients' goals for pain management."
Resident physicians addressed the need for increased competence and confidence in treating mental disorders as mental disorders are common in primary care settings. In addition, there is often a dearth of psychiatrists available for consultation or patient referrals.	"I'm weak in identifying and diagnosing psychiatric disorders. I need more training in that area."

indicated that the rotation assisted them in learning effective communication and motivational interviewing skills that fostered patient-centered, biopsychosocial care. Resident physicians identified the need for increased training in assessment and intervention of psychiatric disorders.

Discussion

Our study found that family physicians were significantly satisfied with the access and quality of IBH. Physicians perceived IBH improved their knowledge and skills in managing behavioral health issues, and they increasingly recognized behavioral health management as a part of their fundamental skill set. Further, physicians noted a stronger commitment to behavioral health within the residency program.

Resident physicians perceived that IBH improved patient care. They noted that, through consulting with BHPs and reviewing BHPs' assessments, they had a deeper understanding of the social and psychological factors impacting patient health. Additionally, resident physicians identified that it was easy to discuss patient care with BHPs, as well as ask for immediate patient consultation if needed. Furthermore, resident physicians noted that patients were more likely to follow up for their behavioral health appointments because they had often met their BHP during a brief intervention, and visits were colocated and often coscheduled at the residency clinic.

The findings from this study parallel current findings related to IBH. Integrated behavioral health improved patient outcomes, increased physician satisfaction, and increased treatment effectiveness. With IBH and training targeted at managing behavioral health disorders, resident physicians are better equipped to manage a myriad of behavioral health disorders within primary care settings.

Our study identified several areas for future improvement in IBH and behavioral health education. First, resident physicians valued BHP's assessments and skills and desired more transparency in BHP assessments and interventions techniques to improve patient care and their own knowledge. This could be realized by blocking time in resident physicians' continuity clinics to attend BHP's brief interventions with their patients. Second, resident physicians noted continual access to BHPs for themselves and patients would be beneficial. Patient access could be further improved by increasing coscheduling of appointments to limit multiple separate visits and transportation barriers. Also, the hiring of full-time BHPs, in addition to BHP interns, would allow for greater continuity of providers, which could in turn foster stronger relationships and increase collaboration. Third, resident physicians indicated that they desired greater competency in assessment and intervention of psychiatric disorders. Providing behavioral health training with increased psychiatric rotations and didactic presentations would assist with this deficit.

There are several limitations to this study. The main limitation is that the pre-and-post datasets were not paired, reducing the ability to draw inference of changes within the group. Second, this study included a single-center, Midwestern family medicine residency setting, and therefore findings may not be generalizable to all programs. Third, the Provider Survey utilized has not been validated.[18] Fourth, the retrospective nature of the surveys and focus groups may be prone to recall bias. Lastly, the group think phenomenon may or may not have occurred during the focus group interviews.[23,24]

In conclusion, family physicians value IBH in supporting patients' behavioral health treatment, and family medicine resident physicians hone behavioral health management skills both through collaborating with BHPs and completing behavioral health training. This and other family medicine residencies should increase focus on teaching essential skills in behavioral health management. Future areas for research include evaluating the objective impact of IBH and behavioral health training on resident physicians' knowledge and skills, as well as improvement in patient care.

PRESENTATION: The findings from this study were presented in October 2019 at the Collaborative Family Healthcare Association's Annual Conference in Denver, Colorado.

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