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“Conversational Advice”: A mixed-methods analysis of medical residents’ experiences co-managing primary care patients with behavioral health providers

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ABSTRACT

Objective: When integrated behavioral health clinicians (IBHCs) and residents co-manage patients, residents may learn new approaches. We aimed to understand the effect of co-management on residents’ behavioral health (BH) management learning.

Methods: Residents completed a web-based survey enquiring: whether co-management included a shared visit and/or face-to-face meeting with an IBHC, whether residents received feedback from the IBHC, and what they learned. Qualitative responses were coded thematically using a constant comparative method.

Results: Among 117 respondents (overall response rate 72%, 117/163), from five residencies recruited from **40 residencies with BH integration**, residents were significantly more likely to receive feedback if they had a shared visit with the patient and an IBHC (yes 69% vs. no 33%; adjusted OR 3.0, 95% CI 1.2–7.6). Residents reported three major learning themes: interpersonal communication skills awareness, BH skills awareness, and newly adopted attitudes toward BH. Residents who received feedback were more likely to report themes of interpersonal communication skills awareness (yes 26.6% vs. no 9.4%).

Conclusion: BH integration **promotes increased feedback for** residents **practicing** face-to-face co-management with IBHCs, and a positive influence regarding residents’ attitudes and perceived skills.

Practical implications: Residency programs can meaningfully improve residents’ learning by promoting face-to-face co-management with IBHCs.

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1. Introduction

Integrated behavioral health clinicians (IBHCs)—professionals trained in clinical counseling for behavioral health (BH) conditions such as mental health and substance abuse disorders—provide services in many primary care practices. To expand access for patients with BH conditions and improve patient outcomes, health systems are increasingly turning to IBHCs [1,2]. Residency programs that train future primary care physicians also utilize IBHCs to teach residents how to understand and better treat patients with BH conditions.

Research suggests that teaching by IBHCs positively impacts the learning experience of residents, particularly when done in the context of actual patient care [3,4]. In many family medicine (FM)

residencies, BH clinicians whose role was previously more limited to supervising BH curricula [5] are now integrated, delivering care alongside residents [6]. Internal medicine (IM) residencies that formerly had no distinct BH curriculum now have IBHCs working in their clinics [7]. For both FM and IM residency programs, program directors can benefit from understanding what occurs when IBHCs co-manage patients with residents and what types of learning are perceived by the latter. For example, feedback and clinical coaching based on direct observation may promote improved performance in learners [8]. Previous published studies lack sufficient evaluation of residents’ educational experiences to provide a clear understanding of how IBHCs’ work affects residency education [4,6,9–13]. Understanding how residents and IBHCs interact remains a critical task since clinical collaboration with allied health professions shapes the content and experience of residents’ learning and may provide them with clinical role-models [14].

This study aimed to elucidate what types of interactions residents are having with IBHCs during co-management

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experiences. Do they communicate face-to-face, electronically, or merely review each other's notes? We also wished to know in residents' own words what they learned from the co-management experience. By asking a combination of closed- and open-ended survey questions [15], we sought to assess the association between types of co-management interactions and the following outcomes: (1) whether residents received feedback on patient management, (2) residents' perceptions of patient benefit from co-managing, and (3) common learning themes. To examine these questions, we surveyed residents from FM and IM residencies with existing IBHC involvement in their primary care continuity clinics. We hypothesized that higher degrees of face-to-face co-management would be associated with increased receipt of feedback and a greater range of learning themes.

2. Methods

2.1. Study setting and participants

For this cross-sectional survey, we recruited participants from residency training programs via the American Academy of Family Physicians Collaborative Care Research Network and the Society of General Internal Medicine Mental Health Interest Group. Initially, we contacted representatives from more than 40 residency programs within the two networks. For the five programs that responded and agreed to participate, a researcher (PH) scheduled a 30-min discussion with an IBHC or program director to understand the program's approach to IBHCs within the primary care practice. We then directly contacted 163 residents from these five programs via email to invite participation in the survey via an embedded link. The recruitment process and survey instrument were reviewed

and approved by an institutional review board at Johns Hopkins University.

Only residents providing continuity primary care who reported at least one co-managed patient during their residency were included in this study. We collected surveys at one institution in May 2014 and at four other institutions between August 2014 and June 2015. To encourage participation, survey respondents were entered into a drawing for a gift card. If residents did not respond to the initial invitation, we contacted them up to three other times by email as reminders.

2.2. Survey instrument

We developed survey questions (both closed- and open-ended) through a consensus process with study authors. After piloting questions with resident and faculty volunteers to test clarity and time needed to complete the survey, we refined them for meaningful responses. Residents were asked about their most recent patient encounter that was co-managed with an IBHC. If this encounter was atypical, they were asked to report their last typical encounter. Close-ended questions included the following: how recent the encounter was (e.g., in the last week), what condition or conditions were addressed with the patient (e.g., depression, medication non-adherence), what types of interactions were had with the IBHC (e.g., shared appointment, email exchange), and whether the resident received feedback from the IBHC. Residents were also asked to answer the following question with a rating from 0 (highly negative) to 10 (highly positive): "For this patient, what do you think was the impact of having access to an [integrated] BH approach?" (This numerical scale has been used in other social and behavioral research to measure subjective phenomena [16].) Finally, residents were asked the following

Table 1
Participant demographics (N = 113) and characteristics of index co-management visit according to treatment intensity.

	No shared appt, No F2F meeting (N = 21)	No shared appt, Yes F2F meeting (N = 30)	Yes shared appt, No F2F meeting (N = 21)	Yes shared appt, Yes F2F meeting (N = 41)
Demographics				
Specialty				
Family medicine	19.0% (4)	36.7% (11)	66.7% (14)	75.6% (31)
Internal medicine	81.0% (17)	73.3% (19)	33.3% (7)	24.4% (10)
Age <30 yrs				
	71.4% (15)	63.3% (19)	71.4% (15)	73.1% (30)
Race (non-white)				
	38.1% (8)	33.3% (10)	47.7% (10)	41.5% (17)
Sex				
Female	90.5% (19)	53.3% (16)	71.4% (15)	60.1% (25)
Male	8.8% (2)	46.7% (14)	28.6% (6)	39.9% (16)
Year of residency				
1	52.3% (11)	46.7% (14)	23.8% (5)	39.0% (16)
2	14.3% (3)	26.7% (8)	42.9% (9)	39.0% (16)
3	33.3% (7)	26.7% (8)	33.3% (7)	22.0% (9)
Last co-managed visit				
1 week	19.0% (4)	26.7% (8)	19% (4)	46.4% (19)
1–4 weeks	42.9% (9)	30.0% (9)	47.6% (10)	39.0% (16)
>4 weeks	38.1% (8)	42.2% (13)	33.3% (7)	14.6% (6)
Behavioral health condition addressed				
Depression	47.6% (20)	60.0% (18)	52.3% (11)	85.4% (35)
Anxiety	33.3% (7)	60.0% (18)	52.3% (11)	65.6% (27)
Substance abuse	14.3% (3)	20.0% (6)	33.3% (7)	17.1% (7)
Professional training of integrated behavioral health clinician				
Psychologist	25.6% (6)	43.3% (13)	62.0% (13)	41.5% (17)
MD/NP	23.8% (5)	26.7% (8)	19.0% (4)	17.1% (7)
Other	47.6% (10)	30% (9)	19.0% (4)	41.5% (17)

Appt = appointment; F2F = face-to-face; MD = physician (psychiatrist or generalist); NP = nurse practitioner.

Other professional trainings included marriage & family therapist, licensed clinical social worker, nurse care manager.

open-ended question: “What did you learn from working with the IBHC in the care of this patient?” The survey included 47 total items and took approximately 8–10 min to complete (See Appendix in Supplementary material).

2.2.1. Degree of face-to-face co-management variable

To determine independent variables for analysis, we conducted an exploratory data analysis regarding the frequency of types of resident/IBHC interactions. Responses were not mutually exclusive. The most common types of co-management were shared visits (55%)—in which the resident and IBHC were together with the patient in the same visit—and face-to-face discussions outside of the visit (63%); 36% of co-management visits included both of these elements. Residents were less likely to co-manage patients using email and chart review (24.8%) or case-conference formats (12.4%). The distribution of the presence/absence of shared visits and face-to-face discussions allowed us to assign each respondent an ordinal measure (degree of face-to-face co-management) with four categories (yes/no shared appointment, yes/no face-to-face meeting), as demonstrated in Table 1. We examined differences in proportions of responses according to resident demographic groups and visit characteristics (number of weeks since the encounter, visit diagnoses, and type of professional training of IBHC).

2.2.2. Statistical modeling

Using mixed-model linear regression, we examined the association between degree of face-to-face co-management and perceived patient impact. Practice site was used as the random effect in these models to control for variation between clinics [17]. Similarly, we used mixed-model logistic regression to examine the association between degree of face-to-face co-management and residents' report of feedback (yes or no). Residents who reported “unsure” were coded as “no feedback,” since we were examining for explicit feedback. We conducted the above regression analyses for both unadjusted and adjusted estimates (adjustments included resident sex, age [<30 vs. ≥ 30 years], race [white vs. non-white], specialty [FM vs. IM], year of training, and influence of BH integration on residency choice [yes or no]). We additionally examined the effect of a shared visit on receipt of feedback. All statistical analyses were conducted using STATA 13 (StataCorp, College Station, TX). All statistical tests were two-sided with an alpha of 0.05.

2.2.3. Qualitative and mixed-methods analysis

To examine learning themes experienced by residents, we extracted all open-ended responses from the data and examined qualitative responses regarding co-managed visits. These responses were recorded in a spreadsheet alongside subject identification numbers. Researchers were blinded to respondents' other responses. Two researchers (PH and JG) separately coded each open-ended response, generating a list of initial codes. Themes were then developed using a constant comparative method that moves iteratively between codes and text [18,19].

The constant comparative method involves redesigning and reintegrating codes and themes for theory generation [20]. We examined our coding for differences and adjudicated these by discussion until we reached a consensus.

We integrated the survey (quantitative) results with the themes derived from open-ended (qualitative) responses through the use of a joint display [21,22]. We used the joint display to array the degree of co-management reported on the survey with themes derived from open-ended responses to illustrate how open-ended responses about BH integration were related to degree of co-management and receipt of feedback in the clinic. Representative quotes were agreed on by all authors.

3. Results

3.1. Survey demographics

Five residency programs (two IM and three FM) participated, generating a total of 117 individual responses (71.3% response rate). Altogether, 113 (96.5%) of respondents reported having co-managed at least one patient. Two residencies were in Maryland, two were in Colorado, and one was in Massachusetts. Three residencies were at community-based hospitals and two were at academic health centers. Our initial screening interviews with faculty determined that IBHCs at all participating sites co-managed patients with residents at least weekly.

The demographics of survey respondents are summarized in Table 1, stratified by the four categories of degrees of face-to-face co-management. A large majority (75%) of the residents with the highest degree of face-to-face co-management were FM residents, whereas 81% of residents with the lowest degree were IM residents. In total, 66% of residents were women, which is higher than the national average of 45% [23]. The survey included more first-year residents than third-year residents (38.5% vs. 28.7%).

We examined characteristics of the most recent co-managed encounter (Table 1). Encounters with lower degrees of face-to-face co-management were more likely to have occurred more than one month prior to survey collection. Conditions addressed in co-managed encounters included depression (65.5%), anxiety (55.7%), smoking cessation (17.9%), medication adherence (6.2%), addiction (21.2%), and other psychiatric disorders (8.8%). Also, 85.4% of visits with the highest degree of face-to-face co-management addressed a depressive disorder vs. 47.6% of those in the lowest degree category. Residents reported working with IBHCs who represented a variety of training backgrounds, including psychology (43%), medical providers (psychiatrists, general physicians, or nurse practitioners, 21.2%), and a group of other training backgrounds (35%). This other group included marriage and family therapists, and clinical social workers.

3.2. Receipt of feedback

Table 2 demonstrates the association between the degree of face-to-face co-management and the receipt of feedback from

Table 2

Percentage and adjusted odds of receiving feedback by intensity of co-management and by presence/absence of shared appointment.

	% receiving feedback (n/N)	OR (95% CI)	% receiving feedback	OR (95% CI)
No shared appointment, No F2F meeting	9% (2/21)	Reference	No shared appointment	
No shared appointment, Yes F2F meeting	50% (15/30)	7.9 (1.9–46.3) [*]	33% (17/51)	Reference
Yes shared appointment, No F2F meeting	62% (13/21)	12.0 (1.9–75.8) [*]	Yes shared appointment	
Yes shared appointment, Yes F2F meeting	73% (30/41)	21.2 (3.4–131.7) [*]	69% (43/62)	3.0 (1.2–7.6) [†]

Mixed effects multiple logistic regression with practice site as the random effects model and adjustment for specialty, year of training, sex, race, age, visit within the last week (y/n), and presence of depression.

^{*} $p < 0.001$.

[†] $p < 0.05$.

IBHCs to residents regarding their patient care. Residents with the highest degree of co-management were much more likely than those with the lowest degree to report receiving feedback (yes 73% vs. no 9%; adjusted OR 21.2, 95% CI 3.4–131.7). Residents who had face-to-face co-management and no shared appointment were also more likely than those without these interactions to receive feedback (yes 62% vs. no 9%; adjusted OR 12.0, 95% CI 1.9–75.8). Those residents who had a shared visit without other face-to-face co-management also had increased odds of receiving co-management when compared to those without these interactions (shared meeting [yes] 50% vs. shared meeting [no] 9%; adjusted OR 7.9, 95% CI 1.9–46.3). The presence of a shared appointment was associated with increased odds of receiving feedback (yes 69% vs. no 33%; adjusted OR 3.0, 95% CI 1.2–7.6).

3.3. Patient impact

Residents' perception of patient impact was high across all degrees of face-to-face co-management. When asked to rate the overall impact of having BH integration included in the patient's care (on a scale from 0 [highly negative] to 10 [highly positive]), the overall mean score was 8.0 (SD 1.6). There was no association between degree of face-to-face co-management and perceived impact. The mean impact among those with the lowest degree was 7.8 (SD 1.7) compared with a mean score of 8.2 (SD 1.5) among those with the highest degree.

3.4. Qualitative learning themes

Altogether, 37.7% of residents reported at least one learning theme from the experience of co-managing patients with IBHCs. FM residents were more likely to report a learning theme than IM residents (50% vs. 24.1%, respectively). Three major themes and 14 sub-themes were identified (Fig. 1, Table 3). Table 3 also reports on the resident-IBHC dyad and whether or not feedback occurred. We examined relative frequencies of learning themes by specialty (FM vs. IM) and by receipt of feedback (yes vs. no). In the following 3 paragraphs, we document apparent trends for each of these learning themes.

Theme 1 (interpersonal communication skills awareness) sub-themes included: partnering with patients, history gathering, patient counseling, and teaching patients. Qualitative differences in learning themes were most striking for Theme 1. No residents

without face-to-face co-management reported this theme. Many of the comments from residents focused on skills for “better communication” and “better understanding” between provider and patient. One resident characterized this learning as “conversational advice” from the IBHC. Theme 1 quotes were also predominantly from a FM resident/psychologist dyad. Overall, FM residents were more likely than IM residents to report learning about Theme 1 (FM 28.1% vs. IM 8.6). Residents who reported receiving feedback were also more likely than those who did not receive feedback to report Theme 1 learning (yes 26.6% vs. no 9.4%).

For Theme 2 (BH skills awareness), sub-themes included co-managing with IBHCs, diagnosis, personality dynamics, pharmacology, managing complexity, and professional ethics. Residents also mentioned use of support groups and community treatment programs. Theme 2 quotes also came from multiple FM resident/psychologist teaching dyads. Overall, FM residents were more likely than IM residents to report learning about Theme 2 (FM 30% vs. IM 9.4%). Residents who reported having received feedback were not more likely than those who did not receive feedback to report Theme 2 (yes 22% vs. no 19%).

Finally, in Theme 3 (newly adopted attitudes), residents reported several sub-themes, including: appreciation for the importance of BH, the IBHC allowing more time for patients, benefits from care management, and the value of an independent IBHC perspective. Perceived benefits also included increased patient adherence/compliance and an alternate perspective from the IBHC. Interestingly, some IM residents with a high degree of co-management reported relief at being able to delegate complex psychosocial concerns to the IBHC. Theme 3 quotes represented relatively equal numbers of IM and FM residents working with a variety of IBHCs. There was no difference in the number of FM residents reporting Theme 3 (FM 11.7% vs. IM 15%), and no difference in whether residents had received feedback or not (yes 12% vs. no 15%).

4. Discussion and conclusion

4.1. Discussion

Our study provides multiple critical new insights into IBHCs' potential to enhance residency education, since we document dozens of instances where residents perceived learning valuable clinical lessons. This is the first mixed-methods examination of BH integration across multiple specialties and residencies, and our findings suggest that IBHCs are influencing residents' management styles, interpersonal approaches, and attitudes regarding BH. Residents' qualitative responses suggest several potential applications for BH integration in medical education.

At the five residencies included in this survey, BH co-management is commonplace. These residencies likely place more emphasis on BH training than their peers. A majority of respondents had co-managed at least one patient in the previous month, most often in patients with depression or anxiety. As reported in a companion paper, these residents' confidence in co-managing BH conditions was associated with the total number of patients that they co-managed during residency [3]. Residents and IBHCs co-managed patients most frequently through face-to-face interactions; these interactions are quite different from the standard primary care referral-to-specialty mental health approach, where co-management is infrequent [12]. This elimination of barriers between physical and mental health care management is consistent with the aims of BH integration [24].

Our findings suggest that face-to-face co-management allows IBHCs to observe residents and give feedback. Although the association between face-to-face interactions and feedback seems intuitive, our findings suggest that different degrees of interaction

Theme 1: Interpersonal Communication Skills Awareness

- Partnering with patients
- History gathering
- Patient counseling
- Teaching patients

Theme 2: BH Skills Awareness

- Co-managing with BH providers
- Diagnosis of BH conditions
- Personality dynamics
- Pharmacology
- Managing BH and medical comorbidity
- Professional ethics for BH cases

Theme 3: Newly Adopted Attitudes

- Importance of BH
- IBHC allows more time for patients
- Benefits of care management
- Value of independent IBHC perspective

Fig. 1. Residents' learning: major themes and sub-themes from open-ended responses regarding BH co-management.

Table 3

Selected quotes from each major theme organized by degree of co-management, specialty of resident (IM vs. FM) with IBHC (psychol, MD, NP, SW, or MFT), and receipt of feedback (yes or no).

	Theme 1: Interpersonal Communication Skills Awareness	Theme 2: BH Skills Awareness	Theme 3: Newly Adopted Attitudes
No shared appt, No F2F meeting	No residents in this group reported this major theme	"I learned about the severity of my patient's Posttraumatic Stress Disorder, which he had only mentioned to me briefly, and I got more information about his coping resources." FM/psychol, no feedback	"With BHI, patients have additional support and tend to be more compliant." IM/MD, no feedback
No shared appt, Yes F2F meeting	"I learned to have stronger communication with my patient's family." IM/MD, no feedback "I learned different ways of addressing medication problems with the patient and to approach her about chronic pain." FM/SW, yes feedback	"I learned about ethical issues, physician obligations, and reporting requirements to law enforcement." IM/MD, yes feedback "I learned about community resources available for intravenous drug addicts." FM/psychol, no feedback	"I developed more understanding of the impact of social stressors on health." IM/psychol, no feedback "The alternate perspective on disease often provides the key to treatment adherence." FM/SW, no feedback
Yes shared appt, No F2F meeting	"I learned different ways to presents medical information in ways that patients understand." FM/psychol, yes feedback	"I learned about quick interventions for my patient in a single visit." FM/psychol, yes feedback	"It is helpful to have a neutral party and to coordinate the message that the patient receives." FM/psychol, yes feedback
Yes shared appt, Yes F2F meeting	"I learned to ask what other concerns a patient has—if there is a part that is missing from what the patient is telling me—that can help for therapeutic relationship." FM/psychol, yes feedback "The BHC gave conversational advice in steering the interview." FM/psychol, yes feedback	"I learned how to address some of the most common issues—opioid dependence and depression." FM/MFT, yes feedback "I learned various weight-loss support groups and strategies for patients." FM/psychol, yes feedback	"I can delegate this aspect of care to the IBHC to free up time for me to deal with this patient's complex medical conditions." IM/SW, no feedback "I learned that behavioral health issues are complex and require special management considerations." IM/MD, yes feedback

Appt = appointment; BH = behavioral health; BHC = behavioral health clinician; F2F = face-to-face; FM = family medicine; IBHC = integrated behavioral health clinician; IM = integrated medicine; MD = physician (psychiatrist or generalist); MFT = marriage and family therapist; NP = nurse practitioner; psychol = psychologist; SW = clinical social worker.

can impact receipt of feedback. A particularly fruitful opportunity for observation and feedback is the shared medical visit, which certain FM and pediatrics residencies have used for over a decade. In this study, 73% of the residents received feedback if they had a shared visit and met outside the visit with the IBHC. Other published reports have demonstrated that the impact of shared visits on residency education [4,10,13]. Feedback can be a challenge to coordinate for physician preceptors with various competing priorities of teaching in the midst of clinical care [25]. Furthermore, accurate evaluation of residents' skills may require evaluations from many independent clinical observations [26,27]. Medical educators agree that appropriate and timely feedback is often not given to learners, but is essential to developing skills and professionalism [28,29]. Based on the qualitative responses of our residents, some are modifying their skills and attitudes as a result of feedback. Several residents explicitly credited this feedback for adding value and contributing to their growth. The prominence of FM resident/psychologist dyads in our qualitative findings suggests that certain FM residency programs may be a model for effective teaching in primary care BH. By using identified best practices from FM education, IM programs may begin to address longstanding differences in attitudes and practice regarding BH care between FM and IM [30,31].

Beyond a focus on mental health and substance abuse, our findings suggest that BHI can impact residents' training in interpersonal communication with patients. Interpersonal communication skills (Theme 1) may offer an opportunity to improve education and thereby improve the care that residents provide to patients. Theme 1 learning may come about principally through observation and feedback, described by one resident as "conversational advice." IBHCs—with training in psychology and counseling skills—bring a unique set of skills, knowledge, and perspectives that may offer different ways to present medical information. Although interpersonal communication skills are often addressed in medical school curricula, they may be most pertinent to the high-intensity clinical work of residency [32,33]. Residents may

prefer to receive feedback and coaching during actual patient care, since it has an immediate value for them and their patients. Direct patient care has advantages over other interpersonal skills trainings, such as simulated patients and peer role-plays, since they may be viewed by trainees as more relevant [34,35]. Residency programs seeking to improve residents' interpersonal skills could benefit from IBHCs who in the United States can collect a professional fee for their service and provide proven, direct benefits to patients.

Themes 2 (BH skills awareness) and 3 (newly adopted attitudes) highlight potential shifts in how residents manage patient care in BH integrated settings. Because BH integration makes a referral easier, some practitioners worry that it may decrease physicians' ability or willingness to address BH issues with patients. Our findings suggest that some residents do believe BH co-management allows them to focus on more familiar medical subjects with patients. By simply increasing access to BH services, in this case, BH integration has helped patients and maintained the division between physical and mental health; however, residents surveyed more commonly perceived that their attitudes and clinical skills shifted toward an increased appreciation of collaborative practice with BH clinicians to achieve better outcomes for their patients.

Our study has limitations. The number of residencies included is small and purposefully selected for the presence of BH integration, and therefore our findings may not be generalizable to all FM and IM residencies with IBHCs in their continuity practices. We did not choose "typical" residency programs. In order to understand functioning BH integration practices, we chose residencies with functioning BH integration and an approach to BH education. As such, we consider these practices to be high-performers worthy of emulation. As a cross-sectional study, we are only able to examine associations and not infer causality. Our survey instrument had not been validated in other populations. Each measure was self-reported, and residents' actual co-management practices could not be objectively verified. Although we asked residents whether they received feedback, we did not

assess the content or quality of the feedback, and we also cannot independently assess the quality of role-modeling by IBHCs. Certainly, not all role-models are worthy of emulation. While responses to our open-ended survey questions suggest rich positive learning experiences, only a minority (37%) of respondents gave answers to these questions, potentially limiting the range of experiences reported. By introducing qualitative methods into our research, our findings may somewhat reflect our own biases. However, the aim of qualitative methods is to generate further hypotheses. In this case, we believe we have revealed new information capable of informing future curricula centered on BH integration.

4.2. Conclusion

BH integration, increasingly adopted by health systems, can play a vital role in training FM and IM residents. Through regular co-management, residents have new opportunities to learn skills that are both specific to managing BH and generalizable to interpersonal interactions with all of their patients. Features such as shared medical visits and observation with feedback appear to facilitate these essential learning themes.

4.3. Practical implications

Our findings reveal important educational benefits from implementing or expanding behavioral health integration in primary care. By merely working alongside IBHCs, residents can gain increased awareness of several important patient care skills. If residents have more opportunities to do face-to-face co-management or even see patients together with IBHCs, they are likely to gain meaningful insight into crucial interpersonal communication skills. Residency program leaders can thereby benefit their trainees by facilitating greater co-management with IBHCs in their continuity practices.

Informed consent

Although we do not use individual patient data herein, we confirm that all patient/personal identifiers have been removed or disguised so that the patient/person(s) described are not identifiable and cannot be identified through the details of the story.

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Potential conflicts of interest

None.

Prior presentation(s)

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Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at <http://dx.doi.org/10.1016/j.pec.2017.07.014>.

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