

**ORIGINAL RESEARCH**

# Clinician Staffing, Scheduling, and Engagement Strategies Among Primary Care Practices Delivering Integrated Care

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**Purpose:** To examine the interrelationship among behavioral health clinician (BHC) staffing, scheduling, and a primary care practice's approach to delivering integrated care.

**Methods:** Observational cross-case comparative analysis of 17 primary care practices in the United States focused on implementation of integrated care. Practices varied in size, ownership, geographic location, and integrated care experience. A multidisciplinary team analyzed documents, practice surveys, field notes from observation visits, implementation diaries, and semistructured interviews using a grounded theory approach.

**Results:** Across the 17 practices, staffing ratios ranged from 1 BHC covering 0.3 to 36.5 primary care clinicians (PCCs). BHC scheduling varied from 50-minute prescheduled appointments to open, flexible schedules slotted in 15-minute increments. However, staffing and scheduling patterns generally clustered in 2 ways and enabled BHCs to be engaged by referral or warm handoff. Five practices predominantly used warm handoffs to engage BHCs and had higher BHC-to-PCC staffing ratios; multiple BHCs on staff; and shorter, more flexible BHC appointment schedules. Staffing and scheduling structures that enabled warm handoffs supported BHC engagement with patients concurrent with the identification of behavioral health needs. Twelve practices primarily used referrals to engage BHCs and had lower BHC-to-PCC staffing ratios and BHC schedules prefilled with visits. This enabled some BHCs to bill for services, but also made them less accessible to PCCs in when patients presented with behavioral health needs during a clinical encounter. Three of these practices were experimenting with open scheduling and briefer BHC visits to enable real-time access while managing resources.

**Conclusion:** Practices' approaches to PCC-BHC staffing, scheduling, and delivery of integrated care mutually influenced each other and were shaped by the local context. Practice leaders, educators, clinicians, funders, researchers, and policy makers must consider these factors as they seek to optimize integrated systems of care. (J Am Board Fam Med 2015;28:S32–S40.)

**Keywords:** Delivery of Health Care, Integrated; Mental Health; Primary Health Care; Qualitative Research

Integration of primary and behavioral health care is associated with improved experience of care, better quality, and controlled costs (ie, the triple aim)<sup>1</sup> and

is an increasing focus of local, regional, and national transformation efforts.<sup>2–5</sup> We define inte-

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grated care as a team of primary care and BHCs, working together with patients and families, to address the spectrum of behavioral health concerns that present in primary care.<sup>6,7</sup> A growing number of studies describe how real-world practices have integrated primary care and behavioral health care,<sup>8–14</sup> or offer guidance to support implementation of integrated care.<sup>15,16</sup> An important consideration for these practices is how to staff and schedule BHCs to support integrated care delivery.<sup>17</sup>

Resource allocation around staffing and scheduling play an important role in enabling integrated care delivery.<sup>18</sup> Inadequate personnel and funding to meet the behavioral health needs of families was the most important finding in a recent report by the U.S. Department of Defense; the authors noted that practices were doing the best they can with the staff on hand rather than providing what was actually needed.<sup>19</sup> Similarly, a national study published in 2013 found that 90% of Federally Qualified Health Centers (FQHCs) could not access behavioral health services to fully meet their patients' needs.<sup>20</sup> Research on practices that aspired to have BHCs provide brief treatment for both mental health and behavioral health concerns at the point of care found that implementation depends on an interaction between described ideals, locally available resources, and decisions regarding resource deployment.<sup>10,21</sup> Despite these apparent challenges with accessing BHC services, little is known about the relationship between staffing, scheduling, and a primary care practice's approach to integrated care.

Advancing Care Together (ACT) and The Integration Workforce Study (IWS) offered the opportunity to empirically describe BHC staffing and scheduling patterns in a sample of real-world primary care practices implementing integrated care. The purpose of this study was to examine the relationship between staffing, scheduling, and the approach to integrated care in these settings. Our analysis focused on BHCs that worked directly with primary care teams (eg, psychologists, social workers, or other masters' trained therapists), and not those working in traditional mental health settings or who provided psychiatric services.

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## Methods

### *Participants and Setting*

We studied 17 primary care practices in the United States at various stages of integrating behavioral health and primary care. The methods used in this study are described in detail elsewhere<sup>8,22,23</sup> and summarized below.

### *Data Sources*

The same multidisciplinary research team with expertise in practice transformation, mixed-methods evaluation, and integrated care collected data for both ACT and IWS. We analyzed data from the 9 primary care practices engaged in ACT, a 3-year longitudinal study of practices in Colorado implementing integrated care. We excluded 2 ACT practices that were community mental health agencies as the staffing and scheduling structures they used to support integrated care seemed distinct from the primary care practices. ACT data sources included program documents (eg, grant application, semianual reports); practice surveys with details on practice characteristics (eg, practice type, ownership); field notes from observation visits and ACT meetings; semistructured interviews with clinicians, staff, and administrators; and online diaries, in which practice members regularly recorded implementation experiences.<sup>24</sup> Eight practices were involved in IWS, a retrospective study of sites identified by an advisory committee as experienced in integrating care. IWS data sources included practice surveys, 2-to-4-day observations visits, and semistructured interviews with practice members (eg, clinicians, staff, administrators). During ACT and IWS observation visits we shadowed multiple care team members, including BHCs, PCCs, and front and back office staff as they provided care to patients and performed other professional tasks. For more information on these practices, please see Cohen et al,<sup>23</sup> in this issue.

### *Data Management*

Practice surveys were manually entered into Excel then analyzed using SAS. Research team members took jottings during observation visits and used these to prepare field notes. Interviews were audio recorded and professionally transcribed. Qualitative data were deidentified and entered into Atlas.ti (Version 7.0, Atlas.ti Scientific Software Development, GmbH) for analysis. The Institutional Re-

view Boards at Oregon Health & Science University and the University of Texas Health Science Center at Houston approved this study.

### **Data Analysis**

Because the number and full-time equivalents of BHCs and PCCs varied over time for several of the practices, our team identified 1 representative staffing ratio for the period of observation using data from the practice surveys, interviews, and field observations. We used a grounded theory approach,<sup>25</sup> using multiple immersion-crystallization cycles<sup>26</sup> to examine staffing and scheduling patterns across practices. First, we analyzed each case (ie, individual practice) and coded text segments using key words (eg, staffing, referral). In a second immersion-crystallization cycle, 2 approaches to engaging the BHC in delivery of integrated care emerged: referral (ie, when a patient is directed to make an appointment with another professional; assistance with scheduling may or may not be provided) or warm handoff (ie, when a clinician introduces a patient to another professional during the visit when a need is detected then the new professional conducts a focused patient assessment and engages the patient in a brief clinical encounter).<sup>23</sup> Through this process we observed an interconnection among how resources, staffing, and scheduling interacted to affect how practices delivered integrated care, and we conducted a third immersion-crystallization cycle to examine these relationships.

### **Results**

Practices varied in size, ownership, geographic location, BHC-to-PCC staffing ratios, and BHC scheduling patterns (Table 1). Eight practices had designations as FQHC, of which 4 were clinician owned and 4 had funding structures that enabled delivery of primary care and specialty mental health care in the same setting (eg, joint Community Mental Health Center and FQHC designations; Governmental systems). ACT practices were beginning to integrate care. All IWS practices had sustained integrated care in their practices for more than 5 years (mean, 8 y; range, 5 to 14 y); 1 of these practices was part of organization that had used an integrated approach for over 30 years. All sites had BHCs physically located at the practice that worked with the primary care team. BHC-to-PCC staffing ratios across the 17 practices varied, with 1

BHC covering 0.3 to 36.5 PCCs. BHC scheduling patterns ranged from back-to-back, prescheduled 50-minute appointments throughout the day to those with open, flexible schedules slotted in 15-minute increments. Practices' approaches to staffing, scheduling, and delivery of integrated care mutually influenced each other and were shaped by the local context (eg, available resources, patient population, vision of integrated care). In the next section we show how staffing ratios and scheduling patterns clustered in 2 ways, enabling practices to engage BHCs primarily by warm handoff or referral.

### **Staffing and Scheduling Patterns of Practices Predominantly Using Warm Handoffs**

In 5 practices (No. 2, 3, 4, 5, 16), warm handoffs were the predominant means used to engage BHCs in patient care. In these practices it was routine for primary care team members to find and invite the BHC into a visit at the time a behavioral health need was detected. BHCs conducted focused patient assessments, identified treatment targets or determined whether higher levels of care were needed, and engaged patients in a brief clinical encounter. We defined this sequence of behaviors as a warm handoff.

These 5 practices had staffing ratios of 1 BHC for 2 to 6 PCCs. All these practices had more than 1 BHC on staff, which enabled BHCs to cover for one another when demand was high. One BHC commented, "If I get stuck in an appointment with a crisis or urgent issue, I can page the other BHCs to fill in for me" (Field Notes, Practice 3). Practices also worked to align staffing ratios with patient and provider demand for integrated services. For example, 1 practice (No. 4) increased the number of BHCs on staff and revised scheduling protocols to meet demand, shifting from an approach where BHCs had prebooked 50-minute visits scheduled throughout the day to one in which BHCs had a more open, flexible schedule built around brief encounters (15 to 30 min). A Physician at this practice stated:

...We could always use more behavioral health providers here... We used to only have 1, and that person was very overwhelmed. She was pulled in a lot of directions, and the need for her was always great. Plus, she was still seeing

**Table 1. Staffing, Scheduling, and Characteristics of Practices Integrating BHCs in Primary Care (n = 17)**

Practice ID	Federal Designation(s)	Ownership	Geography	BHC Appt. Length <sup>a</sup>	BHC Appt. Scheduling <sup>b</sup>	PCC-to-BHC Pathway <sup>c</sup>	PCC FTE	Estimated BHC FTE	Ratio (PCC:BHC)
3	Government	Private	Urban	Brief	Flexible	Warm handoff	48.2	17.4	2.8:1
2	FQHC/CMHC	Private, not for profit	Suburban	Brief	Flexible	Warm handoff	6.5	3.2	2.0:1
4	FQHC	Private, not for profit	Suburban	Mixed	Flexible	Warm handoff	11.0	2.0	5.5:1
16	FQHC	Hospital System	Suburban	Brief	Flexible	Both	9.0	1.4	6.4:1
5	None	Hospital System	Urban	Brief	Flexible	Warm handoff	5.8	1.6	3.6:1
1	FQHC/CMHC	Private, not for profit	Urban	Long	Prescheduled	Referral	22.5	1.0	22.5:1
7	None	Clinician	Suburban	Long	Prescheduled	Referral	10.0	0.5	20.0:1
14	None	Hospital System	Suburban	Mixed	Prescheduled	Referral	21.9	0.6	36.5:1
6	FQHC	Private, not for profit	Suburban	Long	Prescheduled	Referral	1.2	3.8	0.3:1
12	FQHC	Hospital System	Suburban	Long	Prescheduled	Referral	3.2	0.9	3.5:1
11	None	Hospital System	Suburban	Long	Prescheduled	Referral	5.0	1.0	5.0:1
9	None	Clinician	Rural	Mixed	Prescheduled	Referral	2.0	0.5	4.0:1
17	FQHC	Private, not for profit	Rural	Long	Prescheduled	Referral	6.0	2.0	3.0:1
8	FQHC	Private, not for profit	Urban	Mixed	Prescheduled	Referral	9.9	2.9	3.4:1
15	Government	Government	Urban	Mixed	Mixed	Warm handoff	70.0	5.6	12.5:1
13	None	Clinician	Urban	Mixed	Mixed	Warm handoff	13.6	1.0	13.6:1
10	None	Clinician	Suburban	Mixed	Mixed	Referral	4.8	0.5	9.6:1

Abbreviations: BHC, behavioral health clinician; CMHC, Community Mental Health Center; FQHC, Federally Qualified Health Center; FTE, full-time equivalent; PCC, primary care clinician. Practices are grouped by staffing, scheduling, and approach to integrated care. Numbering corresponds with other articles in this supplement.<sup>23</sup>

BHC is defined as the behavioral health clinicians who worked directly or most closely with the PCC. It does not include traditional mental health therapists working in a practice in the same building yet operating separately from primary care.

<sup>a</sup> BHCs generally saw patients for brief (15-to-30-min) or long (50-min) encounters.

<sup>b</sup> BHC appointments could be prescheduled back to back across the day or open and flexible to accommodate emerging patient needs.

<sup>c</sup> The approach used to transition patients between the PCC and the BHC. All practices used a referral pathway to access traditional mental health services.

patients for traditional therapy appointments and that schedule was almost impossible to maintain. [Eventually, leadership] realized that the demand was so high, and that we can definitely keep a behavior health provider busy... one of the previous heads of behavior health initiated the postdoc program at that time... that provided an opportunity to continue expanding behavioral health and be able to provide integrated care like we do now. (Interview with MD, Practice 4)

Scheduling patterns in these practices facilitated real-time BHC accessibility. For example, all 5 practices limited the number of prescheduled BHC follow-up appointments, held open slots to enable BHC flexibility when the practice was busiest, and structured BHC schedules in brief blocks of time aligned with primary care clinical workflows. One BHC described their approach to scheduling as follows:

[My schedule] is based on the patterns of my clinic. I schedule the beginning of the day with follow-up patients. I usually schedule about 10 appointments, and I schedule them in 30-minute increments, even though I know I am not going to spend more than 15 to 20 minutes with them. But that gives me some flexibility because then I know that every hour I can absorb at least 1 more patient if everybody shows up.... I also know the patterns of this clinic. It is somewhat unpredictable, but in general I know that the clinic has to get churning an hour and a half or so before I hit my peak volume times in terms of warm handoffs, or what we call 'on demands.' So I will also put an admin spot in my schedule at those high-volume times. That does not mean that I can only work a patient in during that time, that is a buffer. So when I get running 30 to 45 minutes late because I've continued to absorb patients throughout the morning, that is my catch-up time. (Interview with BHC, Practice 2)

BHCs also explained to patients that they could be interrupted during scheduled appointments, normalizing the possibility of being pulled away during an encounter. In practices with this combination of staffing and scheduling we observed PCCs and other team members engage BHCs when behavioral health needs were detected during a patient's visit.

### ***Staffing and Scheduling Patterns of Practices Predominantly Using Referrals***

Twelve practices predominantly used referrals to engage BHCs in patient care. BHCs in these practices were scheduled with back-to-back follow-up appointments to provide therapy during 30-minute or 50-minute encounters; this limited PCC real-time access to the BHCs. BHC staffing in these practices was influenced by resource availability, patient characteristics, and the practice's approach to integration.<sup>23</sup> For instance, Practice 6 provided care to a large number of homeless patients; they employed more BHCs than PCCs and used 50-minute prescheduled encounters for mental health treatment as a way to meet the needs of their population. Three large practices (No. 1, 7, 14) had 1 BHC covering multiple primary care sites and 20 or more PCCs; these BHCs received referrals to help patients connect with mental health treatment services.

Interestingly, 5 practices (No. 8, 9, 11, 12, 17) that used referrals had staffing ratios of 1 BHC for 3 to 5 PCCs, which was similar to the ratio observed in practices using warm handoffs. However, in these practices, primary care teams rarely engaged BHCs during the initial appointment when a behavioral health need was detected through screening or clinical discretion. Some PCCs engaged BHCs when patients presented in crises (eg, suicidal ideation, domestic abuse). BHCs working in these practices commented on the challenges of seeing scheduled patients while being available in real time to the PCC, as illustrated in the following quotation:

The BHC says he has seen 5 patients already today. Four were scheduled for 30-minute sessions and 1 was a walk-in. With a packed schedule, I ask how he is pulled in for warm handoffs. The different providers have different preferences: some will have the front desk call

his desk phone, some providers will call his cell phone, some will send their medical assistant, and some will knock on his door. He does not have a preference, but it is hard to be available on days his schedule is full of 30-minute appointments plus walk-ins. He tries to take walk-ins if he knows they will be quick... If he suspects the patient will need more time, he talks to them briefly in the waiting room or in the hallway outside of his office and gets an appointment scheduled. (Field Notes, Practice 8)

Practice members identified 2 benefits of the referral approach: some BHCs could bill for providing psychotherapy or psychological testing (and thus generate revenue to cover their salary) and having a BHC located in the primary care practice reduced treatment barriers (eg, stigma around behavioral health treatment, travel distance) for these services. Although leadership wanted BHCs to be more available to primary care teams, this was balanced against concerns about lost revenue and potential dead time when BHCs appointments were not prescheduled. This tension was described in the following interview with a behavioral health manager:

We're trying to have unscheduled time for specific BHCs where they can get pulled into the medical visits. One of the problems we have is that on some days there is not a single crisis, but last Friday I had like 10 suicidal people all at the same time. [Chuckles]... you cannot really predict the volume.... I cannot have the BHC sitting all day with unscheduled patient time, but then at the same time sometimes I need the BHC to be open... so it is hard to gauge how many slots to keep open, because... she may only have 2 calls 1 day and then the next day she's nonstop.... So it is really hard if I leave it unscheduled. (Interview with Behavioral Health Manager, Practice 1)

In an effort to improve real-time access to BHCs some practices were changing staffing levels, sched-

uling patterns, and approach to delivering integrated care. For example, practices 10, 13, and 15 were beginning to combine a referral model with staffing and scheduling patterns to allow BHCs to also engage in warm handoffs. Although these practices had staffing ratios of 1 BHC for 10 to 14 PCCs, practice members reported that BHCs generally worked with a subset of PCCs who were early adopters and willing to help refine new integrated care workflows. These practices also experimented with different scheduling approaches to improve access to BHCs, including briefer visits (< 40 min), alternating scheduled and unscheduled appointment slots, and exploring ways to balance BHC appointment types (eg, new patient intakes vs followups) as described by a practice manager below:

I'd say the largest change that has developed over the past month is related to our approach to scheduling the BHC. Before, we had 30 minutes scheduled appointments and 45 minutes of open time for warm hand offs. For whatever reason (providers feeling more confident or medical assistant's able to schedule the patient) the PCCs do not feel the need for warm hand offs as often—there was a hot handoff implemented instead. If the provider felt as if the patient would not come back or it was very urgent, the provider would interrupt the BHC to make a hot hand-off. This now leaves a bit more time for traditional mental health appointments, which will now be made for 30 to 40 minutes with time for the BHC to do the note before the next patient. This will then be followed by a 15-minute open time for warm handoffs. (Practice Manager's Diary Entry, Practice 10)

Clinic leadership enabled these staffing and scheduling changes through grant funding or by making incremental adjustments over time as resources allowed and practice-wide buy-in to a new integrated approach grew.

## Discussion

In this sample of 17 primary care practices integrating behavioral health care, we observed PCCs en-

gage BHCs in patient care in 2 fundamental ways: by referral or warm handoff. The 5 practices in which warm handoffs predominated had higher BHC-to-PCC ratios, multiple BHCs on staff, and shorter BHC appointments with schedules kept strategically open to facilitate access and engagement with patients at the time a behavioral health need was detected. Conversely, the 12 practices that predominantly used referrals tended to have lower BHC-to-PCC staffing ratios (fewer BHCs to PCCs) and filled BHC schedules with back-to-back patient appointments. Although these practices were able to cover some of their costs by billing for delivery of mental health treatment, BHCs were not routinely accessible to the PCCs when a behavioral health need arose. In fact, 3 of these practices were moving toward shorter BHC visits and more flexible schedules to enable warm handoffs and real-time access to behavioral health services.

Although determining how to staff and schedule patients to support access to integrated care is a developmental process, practices do sustain BHC and PCCs at the ratios we report. Practices looking to implement integrated care may want to consider how staffing and scheduling interact with BHC availability. As in prior research, practices in our study worked to balance their ideal approach to integrated care delivery with the resources and infrastructure at hand.<sup>10,19,21</sup> ACT and IWS practices that aspired to staff and schedule BHCs to enable real-time delivery of integrated care via warm handoffs secured resources to expand BHC staffing, dealt with billing structures that reinforced scheduling patterns for delivering traditional mental health care during 50-minute appointments, and put in the effort required to change care delivery in their organization. In addition, local availability and capabilities of the BHC workforce, who may be trained in a referral model with 50-minute pre-scheduled therapy appointments, may constrain what is feasible to implement, at least initially.<sup>27</sup> Like other emergent properties of complex adaptive systems, staffing, scheduling, and approach to integrated care influence each other in nonlinear ways and may evolve based on local or national changes.<sup>28</sup>

Multiple factors may shape staffing, scheduling patterns, and a practice's approach to integrated care (ie, referral, warm handoff). For example, how clinics staff and schedule BHCs at the practice level, and whether a practice uses a referral and/or

warm handoff approach, may shape how and the extent to which professionals work together to deliver integrated care (cf, Cohen et al,<sup>29</sup> description of consulting, coordinating, and collaborating behaviors), as well as the types of behavioral health conditions (eg, depression, anxiety, coping with life stressors) on which BHCs focus. Physical layout of the practice is another factor that can facilitate or impede interactions between clinicians in integrated settings<sup>30</sup> and may shape whether practices use a referral or warm-handoff approach. More research is needed to understand the interdependencies among these factors and how they influence proximal outcomes, such as interprofessional interactions and the focus of BHC services, as well as longer-term patient outcomes, including patient experience of care.

This study has a few notable strengths and limitations. First, we studied practices using a range of approaches to integrated care with varied resources and experience with implementation.<sup>23</sup> The diversity of this sample ensures that the patterns we observed in staffing and scheduling were robust, and likely to be transferable to other primary care settings. Second, although we recognize in our report that staffing ratios can be fluid in a practice, we report staffing and scheduling ratios at 1 point in time. Readers should keep this in mind as they consider our results. Longitudinal studies aimed at examining fluctuations in BHC and PCC staffing patterns and approach to integrated care delivery may be warranted. Third, we did not report on the REACH (the extent to which the integration program was delivered to the identified target population) of these interventions or consider how staffing patterns of other care team members beyond the PCC (eg, care managers, consulting psychiatry, traditional mental health therapists) may affect integrated care delivery. Fourth, although we know the staffing and scheduling patterns for the BHCs and PCCs, we cannot say whether this ratio was sufficient for addressing practice needs or if it led to improvements in behavioral health outcomes for patient. These limitations highlight important areas for future research that could contribute to an important body of work aimed at identifying best practices for delivery of integrated care.

## Conclusion

BHC staffing, scheduling, and a clinic's approach to integrated care (ie, referral, warm handoff) are

interrelated. Higher BHC-to-PCC staffing ratios, multiple BHCs on staff, and short BHC appointments with open, flexible schedules enabled PCCs to engage BHCs in patient care via warm handoffs at the point of care. We encourage practice leaders, policy makers, funders, researchers and clinicians to use these results to refine BHC staffing and scheduling structures as they envision, study, and implement systems to deliver integrated care over time.

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