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Clinical Workflows and the Associated Tasks and Behaviors to Support Delivery of Integrated Behavioral Health and Primary Care

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Abstract

Background: Integrating primary care and behavioral health is an important focus of health system transformation.

Method: Cross-case comparative analysis of 19 practices in the U.S. describing integrated care clinical workflows. Surveys, observation visits, and key informant interviews analyzed using immersion-crystallization.

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Results: Staff performed tasks and behaviors – guided by protocols or scripts – to support four workflow phases: (1) Identifying; (2) Engaging/transitioning; (3) Providing treatment; and (4) Monitoring/adjusting care. Shared electronic health records (EHR) and accessible staffing/scheduling facilitated workflows.

Conclusion: Stakeholders should consider these workflow phases, address structural features, and utilize a developmental approach as they operationalize integrated care delivery.

Keywords

behavioral medicine; primary care; mental health; practice management; medical home / patient-centered medical home; qualitative research / study; longitudinal; case study

INTRODUCTION

Integration of primary and behavioral health care embodies triple aim objectives of better care, better quality, and controlled costs[1] and is an important focus of local, regional, and national health system transformation efforts.[2–6] We define integrated care as a practicing team of primary care and behavioral health clinicians (BHCs), working together with patients and families, to address the spectrum of behavioral health concerns that present in primary care, including mental health disorders as well as psychosocial factors associated with physical health, at-risk behaviors, or health behavior change (e.g., smoking, diet).[7, 8] A growing number of resources describe integrated care and how to implement it.[7, 9–13] Nevertheless, practices still find it challenging to translate their vision for integration into clinical reality.[14]

Prior work by our team has described critical dimensions of how integrated care is delivered across diverse settings based on two studies, Advancing Care Together (ACT) and the Integration Workforce Study (IWS).[13, 15–26] For example, Cohen and colleagues identified five organizing constructs that interact with practice context to influence the integration of primary care and behavioral health, ranging from identifying the target population through understanding stakeholder's mental models.[13] Additionally, Gunn and colleagues described how physical layout impacts team interactions in integrated settings.[23] Although prior ACT and IWS publications describe aspects related to the delivery of integrated care,[13, 20, 21] this work does not provide insight into how integrated care workflows are operationalized.

Therefore, in this study we examine and identify how a group of diverse, real-world practices operationalize clinical workflows to support delivery of integrated care. We define clinical workflows as a process involving a series of tasks performed by various people within and between work environments to deliver care. Accomplishing each task may require actions by one person, between people, or across organizations – and can occur sequentially or simultaneously.[4] Further, we identify contextual factors that could facilitate or impede the tasks and behaviors associated with these workflows and provide citations to ACT/IWS manuscripts that describe specific factors in greater detail. We anticipate that findings may help researchers, end users (e.g., health system leaders, primary care clinicians, BHCs), and policy makers conceptualize and address barriers as they redesign practice to operationalize integrated care delivery.

METHODS

Participants and Setting

We studied 19 practices in the United States; 11 practices were participating in Advancing Care Together (ACT) and 8 practices were from the Integration Workforce Study (IWS). Both ACT and IWS focused on understanding implementation of integrated care. ACT was a three year longitudinal study of practices in Colorado implementing integrated care, most sites were in the early stages of integration.[13, 21] IWS was a cross sectional study of sites across the United States identified as experienced in delivering integrated care.[12] These studies and data collection strategies are described in detail elsewhere[13, 19–21] and summarized below. The Oregon Health & Science University and University of Texas Health Science Center at Houston Institutional Review Boards approved these studies.

Data Collection

A multidisciplinary research team with expertise in practice transformation, mixed-methods, and integrated care collected and analyzed data for both ACT and IWS. To understand clinical workflows and tasks supporting integrated care delivery, we analyzed practice surveys and conducted onsite observation at each site. Practice surveys were completed by the primary point of contact for each site and included questions about ownership, staffing patterns, turnover, and patient panel characteristics. Observation visits lasted between two to four days and included watching teams deliver integrated care and conducting interviews with 2–17 stakeholders (e.g., administration, clinicians, staff) depending on practice size. Interviews followed a semi-structured guide designed to clarify gaps in understanding around a practice's clinical workflows and provide insight on how practice leaders helped develop and implement these workflows.

Data Management and Analysis

Practice information surveys were manually entered into Excel™ then transferred into SAS™ for analysis. Research team members took jottings during observation visits and used these to prepare rich, detailed fieldnotes, typically within 24 hours. Interviews were audio-recorded and professionally transcribed. Qualitative data (i.e., interview transcripts, fieldnotes) were de-identified and uploaded to Atlas.ti™ for analysis.

We conducted a descriptive analysis of quantitative practice survey data to describe the spectrum of practices participating in the study.

We analyzed qualitative data using multiple immersion-crystallization cycles[27] to identify clinical workflows that support integrated care delivery. Qualitative data collection and analysis occurred concurrently. First, we immersed ourselves in the data, meeting weekly to analyze each case (i.e., individual practice) and explore the tasks, behaviors, and organizational factors that shaped delivery of integrated care. We tagged important segments of text using key words as codes (e.g., screening, warm-handoff). In a second immersion-crystallization cycle, we identified clinical workflows that supported integrated care delivery and explored when, how, and who performed the associated key tasks and behaviors. We conducted a third immersion-crystallization cycle and looked across the cases to understand

how various contextual factors (e.g., staffing, physical space) impacted the ability of clinicians and staff to deliver integrated care clinical workflows.

RESULTS

The 19 participating practices included 12 primary care practices, three community mental health centers (CMHC), and four CMHC-Federally Qualified Health Center (FQHC) hybrids. All practices used an electronic health record (EHR); 16 practices (84%) allowed BHCs and primary care clinicians to document in the same EHR system. We observed 230 unique patient encounters during our observation visits, including 74.3% with primary care clinicians (n = 171), 26.5% with BHCs (n = 61), and 8.3% with psychiatrists (n = 8.3%). We conducted 160 total key informant interviews with BHCs (28.1%), primary care clinicians (27.5%), leadership (16.9%), medical assistants (10.6%) and other clinic roles such as care coordinators, front desk staff, and quality improvement leads (16.9%).

Key Workflow Phases in Integrated Care Delivery

We identified four key workflow phases in which teams delivering integrating care engaged: (1) Identifying patients needing integrated care; (2) Engaging patients and transitioning to the integrated care team; (3) Providing integrated care treatment; (4) Monitoring immediate treatment outcomes and adjusting treatment. Practices were refining clinical workflows and changing structural elements to improve integrated care delivery based on real-time learnings. Below, we describe these clinical workflow phases and provide examples of what happens when supporting structural components for these workflows are missing or underdeveloped. Table 2 summarizes these findings and provides references for ACT/IWS publications that describe the identified behaviors/tasks and structural factors in greater detail.

Identifying Patients Needing Integrated Care

A critical workflow for integrated care was to identify patients in need of psychosocial care. Practices created workflows that allowed for provider/staff discretion in identifying patients and supported systematic screening. One BHC described both workflows in her clinic:

> …All new patients get screened [for behavioral health needs]. It's a vital sign that we use in our EHR that's done just like blood pressure and is recorded in the chart….If the [screening] is positive…the nurse or the medical provider will come get us. Or if anything happens during the visit, they'll come to us. (BHC Interview, Practice 2)

As noted in the quote above, clinicians and staff could identify patients who described or displayed behavioral health needs during appointments. In addition, some practices implemented "huddles" so that primary care, BHCs, and other staff could jointly review the clinical schedule and proactively identify individuals who might benefit from integrated care (e.g., prior positive screen that went unaddressed, personal knowledge). Huddles had the added benefit of allowing teams to strategize and adjust the timing of care tasks and who would support key activities during the scheduled encounter.

In addition to provider/staff discretion, practices developed workflows that supported patient identification through systematic screening. Practices administered various screening tools designed to detect conditions such as depression and anxiety (e.g., PHQ-2, PHQ-9, GAD-7), substance misuses (DAST, AUDIT), or unmet social needs. Screening occurred using paper-based forms, electronic tablets, or through verbal inquiry and direct entry into the EHR. More detailed follow-up screens were sometimes administered following a positive initial screen. As illustrated in the case example in Figure 1, brief screenings initiated by front desk staff during check-in or by medical assistants (MAs) during rooming aligned with existing workflows. Practices also had to decide how often they would screen their general patient population (e.g., annually, at each visit) as well as when they would re-screen patients receiving integrated treatment. Many practices screened patients systematically at every visit. A few, however, incorporated protocols or clinical decision support tools to re-screen patients at specified intervals (e.g., annually, 6-months).

Staffing, scheduling and EHR features could support or impede patient identification. A shared EHR with discrete fields facilitated entry and transfer of clinical screening data. Some practices built, activated, or tailored their EHR systems to have easy-to-use templates for common screening tools (e.g., PHQ-2, GAD-7) and decision support tools to alert health care professionals when screening or integrated care was needed. Part time BHCs or those covering multiple medical providers were often unable to participate in team huddles and alternate workflow strategies were developed. For instance, one part-time BHC always missed the morning huddle; rather than schedule a second huddle at noon, the MA and primary care clinician dyad flagged the BHC in the EHR on patients that may need integrated care.

Engaging Patients and Transitioning to the Integrated Care Team

Following patient identification, a critical workflow was to communicate with the patient about integrated care and initiate the transition to the BHC. Practices developed protocols and scripts for practice members to use when transitioning patients among integrated care team members. These protocols set a strong foundation for engagement in services and established that attention to physical and behavioral health needs was “just what the practice does here.” Practice members described how patients got confused or offended when the language and/or clinical workflow to transition patients between primary care and BHCs was unclear, noting this happened for their clinics early in implementation or with new staff. The case example in Figure 2 illustrates how a medical clinician locates and works with the BHC to engage a patient presenting with depression, substance misuse, and multiple chronic conditions in integrated care.

As illustrated in the second case example (Figure 2), medical clinicians and BHC staff had important roles handing off and receiving the patient transition. Medical clinicians initiated discussions about integrated care with patients by describing the practice’s commitment to whole person care, introducing the BHC as a member of the care team, reinforcing his/her trust in the BHC, and emphasizing how the BHC was an expert qualified to help with the patient’s presenting need. The following quote illustrates this transition from the perspective of a medical provider:

> …I might say to a patient, “Hey, I’m working with [BHC name]. She’s my BHC… and you’ve brought up that Johnny is having trouble with anxiety attacks. Can I bring her in to help with this?” And I’ll say, “She’s a counselor by training. This is exactly what she’s here for, and she can help us work on this.” (Medical Provider Interview, Practice 3)

To support the patient transition, BHCs would come into the same clinical exam room to initiate contact with the patient. Outside the exam room, medical clinicians/staff would sometimes brief the BHC on emergent patient needs – enabling the BHC to initiate their interaction with the patient by reiterating their role on the team, describing their initial knowledge of the patient’s situation, and emphasizing their ability to contribute to the patient’s care. “Mini-huddles” between integrated team members were used to provide updates on new and existing patients throughout the day and could be very brief (less than 1 minute) for experienced, high functioning teams who had refined their workflow and communication practices by working together over time.

Protocols for care team interruptions, close physical proximity, adequate staffing/scheduling, and the ability for ancillary staff to swiftly reorganize workflows (e.g., labs before the BHC encounter, BHC in before the medical clinician such as displayed in Figure 1) facilitated point of care access. Practices that were understaffed (e.g., part-time BHC, one BHC covering multiple practices/clinicians) or used 50–60 minute appointments for BHC encounters (similar to traditional mental health scheduling) experienced challenges in enabling the transition to and initial engagement with integrated care.

Providing Integrated Care Treatment

The ability of the BHC to provide brief intervention/treatment following the patient transition and to determine the appropriate level of care was an important workflow phase (see Figures 1 and 2). To achieve these goals, BHCs displayed a blend of utilizing strategies to build rapport, concurrent delivery of interventions suited to primary care (e.g., addressing basic coping skills, stress management), and conducting rapid and focused assessments that built on prior data (e.g., history, screening results from the brief or EHR). For patients who could be managed in primary care, BHCs worked to develop and implement a shared care plan (e.g., a record that summarized the problem, concern, outlined a course of treatment, and ensured the patient and all involved clinicians were on the same page regarding goals and responsibility) with the primary care clinician and clinical team. Some patients could not be managed in the integrated care setting and required triage to additional services (e.g., traditional mental health, substance use treatment). Although referral out could be supported by ancillary staff, BHCs played a critical role in facilitating access to the right level of care based on their knowledge of available services, as illustrated by the following quote:

> [BHC] notes that it’s their job to know the right level of care for the patients. [This system has] 13 different programs for patients – including partial programs and day treatment. They also have counseling services, which they consider specialty BH… One thing that’s unique about this site is that they have one of the largest hospital and behavioral health systems in the country…They’ve worked to build the right continuum of care for their patients. (Fieldnotes, Practice 5)

Prior experience of BHCs in settings external to the primary care clinic facilitated knowledge of and access to additional levels of needed behavioral health care.

BHC scheduling and EHR features played a critical role in shaping treatment workflows. Separate EHR systems or restrictions in access to the full patient record resulted in workflow disruptions as team members had to look in multiple locations – or simply lacked understanding of the full scope of a patient's care. A BHC's ability to provide treatment was also facilitated by strategic scheduling, including: a) building BHC appointment templates to mirror primary care clinic flow (e.g., 15–30 minute visits versus one hour); b) scheduling follow-up appointments at quiet times in the clinic; c) blocking out visits when primary care patient volume was highest to enable consults at the point of care; and d) allowing BHCs to manage their own schedules (e.g., scheduling follow-ups; adding patients seen during a warm hand-off). The following quote illustrates how BHCs in one practice tailored their schedules to match the cadence of primary care:

> "[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 in 30-minute increments, even though I know I'm 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 one more patient if everybody shows up….[Clinic patterns are] 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 doesn't mean that I can only work a patient in during that time, that's a buffer…that's my catch-up time." (BHC Interview, Practice 2)

Monitor Integrated Outcomes and Adjust Treatment Plans

A final workflow step involved tracking and adjusting patient treatment plans. In general, ACT and IWS practices and integrated teams were developing and refining tools and protocols to support patient monitoring. Some practices established protocols to follow-up with integrated care patients during routine primary care appointments or scheduled two to six brief visits with the BHC and specified when to escalate patient treatment to higher levels. A few practices created new positions (e.g., panel managers) to support proactive screening, monitoring and outreach to patients receiving integrated care. As illustrated in the case example in Figure 1, the primary care clinician and BHC strategically scheduled their follow-up appointment together to enable monitoring of the patient's depression and medication changes.

Integrated care team members also used brief consults by phone or in person to inform treatment plan adjustments, as illustrated in the following interaction between a consulting psychiatrist, pharmacy manager, and primary care clinician.

> …the consulting psychiatrist calls the pharmacy manager on her cell. The psychiatrist says he needs help. A patient this morning was stable but struggled after a medication change…The psychiatrist [already] consulted with the patient's primary care provider. The patient was doing well on [Med A], but not good with

> [Med B]. The patient would rather risk the medical symptoms than change the medication and "start drugging/drinking again." The EHR says it's a Level 3 interaction – more study needed. It looks like the patient may need a higher dose of [Med B] based on how [Med A] interacts with the blood serum. They make a plan to override the warning and flag the primary care provider to increase [Med B]. (Fieldnotes, Practice 2)

Treatment adjustments were supported when practices had a shared EHR with full access to BHC and primary care notes and staffing/scheduling patterns that enabled real-time consultation with integrated team members. Many practices had EHRs that could not initially track integrated care quality indicators – a few had reporting features that could help track patient-level clinical (e.g., PHQ9 scores, HbA1C) and process outcomes (e.g., referrals status). Many clinics were building these features in their EHRs. In the absence of these features, some BHCs used excel templates or other databases to monitor patient outcomes and referral status.

DISCUSSION

Four important clinical workflow phases enabled delivery of integrated primary care and behavioral health across 19 diverse U.S. practices: (1) Identifying patients needing integrated care; (2) Engaging patients and integrated care team; (3) Providing integrated care treatment; and (4) Monitoring outcomes and adjusting integrated care treatment based on patient response. BHCs, primary care clinicians, and clinical staff performed important tasks and behaviors within each phase – often guided by protocols or scripts – to support workflows for integrated care that were timely and patient centered. As described for each workflow phase, staffing, scheduling, and/or EHR features could facilitator or impede integrated care delivery. Additionally, while all practices were developing and refining their workflows in real-time; it is notable that the workflow for monitoring outcomes and adjusting treatment was the least developed across the practice sites.

A growing number of resources are designed to help practices implement integrated care by providing templates for clinics to review and tailor critical workflow components (e.g., detecting patient need, creating communication structures) to the local setting.[9, 10] This manuscript addresses gaps in the field by describing the behaviors and tasks practices use to operationalize integrated care delivery. Although authors note the importance of staffing and EHR features on integrated care delivery, few have described how they directly shape integrated care clinical workflows.[17, 22, 28] Our present study leverages prior work from ACT and IWS by presenting a comprehensive summary of workflows that enable delivery of integrated care and links to articles that describe facilitating and impeding factors in greater detail (see Table 2).[13, 15–26]

There are a few limitations with the current work. First, we studied practices with varied models of integrated care and different resources and experience implementing these new approaches. Additionally, while much of our data was longitudinal, only cross sectional data was collected on a sub-set of more experienced practices. As such, we may have missed key changes in workflows over time. Second, although we studied both primary care and

CMHCs that had integrated care, our findings predominantly focus on the experience of primary care clinics integrating behavioral health. This may be because CMHCs often embedded small integrated clinics within their larger traditional mental health care delivery system. Third, we used observational and interview data to identify clinical workflows associated with integrated care delivery. It is possible that activities focused specifically on generating workflows may have yielded different or more "ideal" results. Despite these challenges, our study provides critical insight into what, how, and who performs key tasks and behaviors to support delivery of integrated care and identifies factors that can help or hinder these workflow processes.

Refined integrated care workflows can help professionals from different backgrounds consult, coordinate, and collaborate to deliver integrated care.[19] Practices and policy makers stiving to increase quality of care, help bend the cost curve, and improve the patient and provider experience[1] by implementing integrated care should attend to these workflow phases - and the critical way staffing, scheduling, and EHR features shape care delivery.[17, 22] Support in the form of practice facilitation or technical assistance from outside resources may enable practices to reflect upon and enhance workflows to support delivery of integrated care over time.[29–32] Even with workflows in place, practices may concurrently need to address other structural elements of integrated care delivery, including training,[24] organization of physical space,[23] and cultural differences of behavioral health and medical professions.[13, 18] Given the impact of integrated care on clinical outcomes and patient experience of care in ACT and IWS settings,[15, 26] we encourage practices to consider our findings as they progress along their journey to integrate behavioral health and primary care.

CONCLUSION

Delivering integrated behavioral health and primary care requires practices to establish workflows that enable patient identification, engagement, treatment, and monitoring/adjusting care. This manuscript extends prior work from ACT and IWS and address key gaps in knowledge by providing an empirical description of the clinical workflows – and their associated tasks and behaviors – that enable delivery of integrated care. Findings highlight the importance of access to integrated care team members through staffing, scheduling, and refinement of EHR features. Findings provide a reference point for researchers, health system leaders, and policy makers working to operationalize integrated care and highlight the importance of process improvement over time.

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Key Messages:

- Clinical workflows operationalize ideas about integrated care into individual and team-based tasks and behaviors.
- We identified four workflow phases associated with integrated care delivery: identification, engagement, treatment, and care monitoring/adjustment.
- BHCs, primary care clinicians, and clinical staff performed important tasks and behaviors within each phase – often guided by protocols or scripts
- Electronic health records (EHR) features, staffing and scheduling structures, and other organizational factors could facilitate or impede integrated care workflows.
- Findings can be used as a reference point for operationalizing integrated care and highlight the importance of process improvement over time.

This is an urban FQHC in a hospital system seeing over 17,000 patients a year. The clinic is staffed with 9 primary care clinicians and 2 behavioral health clinicians (BHCs). BHCs are an embedded part of the clinical team, with their office located in a shared "bullpen" - an open-plan room housing workstations for many of the care team members, including clinicians, BHCs, and patient navigators. BHCs are routinely called into patient encounters when needs arise – clinic staff wear paging devices to communicate about patient needs in real-time. The clinic is also working with hospital partners to implement systematic screening for behavioral health needs and to connect patients to needed care.

We observe a woman in her 60s approach the front desk to check in for her appointment. The front desk staff asks her to complete a brief behavioral health screening tool. On this form, the patient indicates that she is struggling with depression. An MA calls the patient into the back, rooms her and collects vitals, and reviews the completed screening form. As the MA leaves the exam room, she puts a yellow flag up outside the exam door, which indicates the need for the BHC. The MA also uses her paging device to let the BHC know that she's needed and where.

Prior to entering the exam room the BHC reviews the completed screening tool and remarks that she has seen this patient before. The BHC enters the room and greets the patient in a friendly way. The BHC asks, "What's going on?" The woman says she is having trouble with her blood pressure medication and a new depression medication. The BHC asks the woman if she's seen any improvement in her anxiety. The woman says, "I'm trying to stay busy, but I am worried about my blood pressure. It's been high lately and my car broke down today. I'm actually worried that I'm too calm and I don't know if that's good or bad." BHC says that anxiety and anxiety meds can be like a fire alarm going off then stopping suddenly. It can be disorienting. She reassures the patient that what she's feeling is normal. The BHC continues to reassure the woman that she's responding exactly as she should be to the meds and not to worry if improvement is not happening sooner. The BHC wants to be on top of this and make sure that everything is happening as it should. She says she will give the patient a sheet with faces showing various emotions on it. She wants the woman to circle which emotions she feels the most at the end of each day. At their next appointment, the BHC will look at the emotions to see if the patient is feeling is a range of emotions, not just a couple. The BHC reinforces the importance of physical activity and asks the woman if she plans to keep going to water aerobics. The woman is and says she appreciate the socialization aspect of it too.

The BHC communicates that she wants the woman to stay on the same anti-depressant, which is fairly new. She says it takes 6 months for the body to get used to taking it and for it to really create an effect. If she goes off before that, her depression can come back. The BHC says she is going to leave and get the emotion sheet for the woman and then explains that [name of patient's primary care clinician] will come in to talk to her about all her medications and any other problems or questions she has.

The BHC and I leave the room and she pages the primary care clinician to tell her she'd like to talk with her about the patient before her visit. The doctor says she's finishing up with another patient and will come find the BHC. I ask who typically sees the patient first and the BHC says that it varies depending on who is more available. If it's an initial visit, the primary care clinician sees the patient first then brings BHC in for a warm hand off. Sometimes they go into visits together (first time or otherwise).

We go briefly back into the exam room where the BHC communicates that she will see her again in 3 weeks and look at her sheet. We leave the woman in the exam room and go back to the bullpen to wait for the doctor. The doctor comes into the bullpen and they discuss the patient: the patient had been doing well with staying active but is having problems adjusting to her new depression medication. BHC tells the doctor that she plans to see the patient again in 3 weeks for a follow up visit and asks if she's like to coordinate the visit so they can both see the patient. The doctor says she open to that plan and will talk with the patient about scheduling it so the visits get on both of their calendars. The patient had also asked the BHC if she should get a hormone panel, so the BHC passes this question onto the doctor.

The doctor asks another provider in the bullpen a question about hormone panels; she doesn't think the woman needs the panel, but wants confirmation. The other doctor says that the woman's hormones would not be causing high blood pressure, so he agrees it's unnecessary. The patient's doctor then looks up a particular medication interaction on the computer because she'd like to add a new blood pressure medication.

I go with the doctor to see the patient. As we walk to the room, she says this woman is her favorite patient. She says she's normally very happy, but for some reason, she just came in with some depression recently. She had had it earlier in her life, but hadn't suffered from it in some time. We walk into the room and the doctor asks the patient what's going on. The woman talks about her frustration with her high blood pressure. The doctor told her that the combination of meds she's on should actually be making her blood pressure lower, but she says they should still do something about it. The doctor says she heard about all the activities she's been up to from BHC. The woman nods and says that she even quit smoking. The doctor is very enthusiastic and congratulatory about this bit of news. The woman says "I can't smoke. I can't drink. I might as well be a nun!" They both laugh about this.

The woman talks about how the anti-depressant is making her feel. The doctor says she must just be sensitive to the medications and to give it some more time to see if the flat feeling goes away. She then brings up the idea of introducing a new blood pressure med. The woman had a previous heart attack and the doctor doesn't want to take any chances. The doctor says she will call the new blood pressure prescription into the pharmacy then asks if there are any other problems she'd like to discuss. The woman asks if she should have a hormone panel taken, which is an issue she raised with BHC.

The doctor says there is no reason to test her hormone levels since she's had a hysterectomy – and that the woman just has "straight depression". The doctor asks the woman if she is willing to take a new pill for blood pressure and the patient reluctantly agrees. The doctor says she'd like to see her at her visit in 3 weeks with the BHC and then we leave. The MA comes back into the room after doctor leaves and works with the patients to make the appointment with the primary care clinician and BHC.

Figure 1:

Case Study – Screening, Briefing, and Follow-up through Integrated Appointments in Practice 16.

This is a private, not for profit FQHC/CMHC hybrid located in a suburban area. The primary care clinic is staffed by 8 primary care clinicians and 14 behavioral health clinicians and has 10,972 annual patient visits. The practice has been integrating care for over 20 years and has developed a program to provide integrated care training to practices across the US. In the primary care practice, BHCs are an embedded part of the clinical team, with their office located directly between the 3-exam room pods and general work stations of the two medical teams they serve. Across the whole practice, BHCs work collaboratively triage and address patient needs when demand gets high.

The clinic uses scripts by front office staff, medical providers, and BHCs to introduce integrated care to patients. Patient need is detected through the administration of evidence-based screens by the MA during rooming and through clinical discretion. The practice uses warm handoffs as the primary mechanism for connecting patients with behavioral health needs to BHCs. These transitions are fluid and well-orchestrated – with availability of BHC staff at the point of primary care, clear mechanisms for briefing and debriefing around patient need, and even a process such that the warm handoff can be turned into a "luke-warm" handoff where the medical and BHC are not physically present in the patient exam room at the same time.

We observed an encounter between a medical doctor and a patient with a chief complaint that, "His sleep meds are not working." The patient reports that he's taking his medications but he can't sleep; he starts to get agitated as he shares that he cries for no reason. The doctor asks if he's ever seen their BH staff – the patient has, but it was over a year ago and he stopped because he was doing better. The doctor assesses the patient's use of alcohol and finds he drinks 2-3 cans per night to help him sleep. The doctor notes patiently and kindly…"the meds don't work if you're drinking too. It's a cycle, you can't sleep so you drink which makes you sad." The patient is getting really agitated and starts to well up with tears. The doctor gives the patient tissues and says, "Let me see if Dr. [BHC name] can see you today…We'll get someone to help."

We leave the exam room and hear the man throw the pill bottle against the wall as we exit. The doctor walks next door to the BHC's office and goes in. She says she needs help with a consult. The doctor describes the patient – "trouble sleeping, depression…but he's also drinking alcohol and has a history of drug use. His main complaint is that the sleep meds aren't working. There's also an alcohol smell and he's crying." The doctor leaves the room. The BHC puts the patient on her schedule, pulls up the patient's record in the EHR and takes a few minutes to review the chart notes.

We go in the exam room and the BHC says, "Hey [patient name], Doctor [name] asked me to help a bit. I'm trained as a psychologist – but I don't work as one. I work as a consultant here to the medical clinicians. I looked over your chart and I see that you've got a history of sleep problems, and with alcohol and drugs. Can we talk for a bit?" The man nods. She explains that what they talk about will be kept confidential – they don't share it with anyone else outside the clinical team without the man's written consent. The BHC says that it sound like he's suffering a lot…the man starts to cry again. He can't speak for a while he's so teared up. The BHC gives him more tissue, pauses, then continues by doing a full assessment of the patient's condition, although she uses a very conversational style. She assesses his social history, drinking habits, employment, drug use, and mental health status. The BHC says, "the Doctor is worried about your drinking, we are both worried about your drinking." The BHC says that "she wants to put her head together with the doctor to see what they can do to help the patient." The man says he needs something for sleep. The BHC acknowledges this concern and explains how alcohol can disrupt your sleep – it makes is to you don't get the deeper stages of sleep that you need, so you don't feel as rested when you wake up. She asks if he'd be willing to come and talk with a BHC since it's helped in the past. The man agrees, "Yes, get me back together. This [the crying] is not me." The BHC completes the check-out sheet and tells the patient to come in in 2 weeks for a follow-up appointment. She also says that at the end of the appointment sheet will have her name and phone number, and that he can call her at any time.

We leave the room and the BHC goes to find the doctor. We follow her to their office in the pod and the BHC provides a brief update. The BHC describes her assessment and briefly what she talked to the patient about, "He's receptive to coming back to see a BHC, much of his motivation is centered around sleeping better." The BHC notes that when the patient comes back she might start to work with him on his sobriety….They talk about meds that the patient is on and how there are two prescriptions for antidepressants. I follow the BHC back to her office.

[Later I see the Doctor in the hallway and she says that she was able to prescribe a new sleeping med that also has mood stabilizing characteristics. She said the patient was positive when she went back in and seemed thankful.]

Figure 2:

Case Study - Clinical Scripts, Point-of Care Access, and Delivery of Team-based Integrated Care in Practice 2.

Table 1.

Characteristics of Participating Practices at Baseline (N = 19)

Characteristic	N (%)
Initial Practice Type *	
Primary Care Clinic	12 (63)
Community Mental Health Center	3 (16)
Both	4 (21)
Practice Ownership	
Private	9 (47)
Hospital system	5 (26)
Clinician owned	4 (21)
Government owned	1 (5)
Geographic Setting	
Urban	6 (32)
Suburban	9 (47)
Rural	4 (21)
Annual patient visits, Mean (Range)	52,557 (4,680 – 298,168)
Primary Care Clinician Staffing	
Number, Mean (Range)	15.4 (0–71.0)
FTE, Mean (Range)	13.0 (0 – 70.0)
Behavioral Health Clinician Staffing	
Number, Mean (Range)	5.4 (0–26.0)
FTE, Mean (Range)	4.6 (0 – 22.8)
Integrated Care Features	
Embedded BHC on primary care team	11 (58)
Shared office space for primary care and BHC	8 (42)
Systematic screening for behavioral health needs	13 (68)
BHCs can document in shared EHR	16 (84)

Note: Individual practice characteristics are available in other publications.[13, 17, 19, 22–24]

Abbreviations: FTE = Full Time Equivalent; BHC = Behavioral Health Clinician

* 7 clinics had designations as Federally Qualified Health Centers (FQHCs)

Table 2.

Clinical Workflows and Structural Factors that Facilitate or Impede Delivery of Integrated Care

Workflow Phase	Behaviors and Tasks that Support Clinical Operationalization of Integrated Care	Factors That Serve as Barriers or Facilitators to Target Workflow
Identify Patients Needing Integrated Care	• Allow for provider/staff discretion, but also use medical and behavioral health screening tools to identify patient needs (e.g., systematic screening, follow-up on clinical discretion).[13, 16, 20] • Develop and implement standards and protocols for screening intervals (e.g., annually). • Schedule morning team huddles to review clinical schedule and strategize around patient's integrated care needs.[20]	• Develop one EHR system and ensure that primary care and behavioral health patient information is easily available to all.[17] • Establish documentation protocols for entry of integrated care screening data (discrete and numerical fields).[17] • Staff clinical team members so that all are available to participate in team huddles.[22]
Engage Patients and Integrated Care Team	• Develop protocols (including scripts) for transitioning patients between integrated care team members (e.g., primary care clinicians, behavioral health, other supportive staff).[19, 20] • Establish methods and physical structures that enable behavioral health and primary care clinicians to quickly brief each other about patient needs.[20, 23]	• Establish processes that enable access to integrated services at the point of care (e.g., adequate staffing, scheduling, access structures).[13, 22]
Provide Integrated Care Treatment	• Conduct rapid assessments and determine appropriate level for patient care.[13, 20] Provide brief, problem-focused treatments tailored to integrated care setting (e.g., relaxation, self-care).[26] • Develop and reinforce shared treatment plans.[20] • Facilitate linkages to additional services (e.g., consulting psychiatry, traditional mental health, substance use treatment) if needed using established clinical pathways.[13, 19]	• One shared EHR enables supplemental review of patient's record to provide additional details and care foundation (e.g., prior encounters with other BHCs).[17, 20] • Document treatment/encounter notes in EHR templates according to clinic specified protocols.[17]
Monitor Integrated Care Outcomes and Adjust Treatment	• Follow-up with patients during routine primary care appointments and schedule as needed integrated appointments.[22] • Identify framework for when patient treatment needs to escalate to higher levels of care (e.g., specialty services).[13, 20] • Update shared treatment plan with relevant adjustments in level of care; share patient encounter details with other integrated team members as clinically indicated (e.g., cc encounter note, face-to-face debrief) to facilitate treatment monitoring.[19, 20]	• Develop tracking tools in the EHR; Build capacity to run queries for monitoring patient-level process (e.g., referral status) and clinical outcomes (e.g., PHQ9 scores, HbA1c).[16, 17] • Reinforce scheduling to support real-time interactions and hold complex case management meetings so team members can strategize when patients need adjustments in integrated care.[22]