Integrated Behavioral Health Adaptations During the COVID-19 Pandemic

Melissa K. Filippi, PhD, MPH, Andrea Nederveld, MD, MPH, Mark D. Williams, MD, Elise Robertson, MA, Chyke Doubeni, MD, MPH, Jeanette A. Waxmonsky, PhD, and Christina M. Hester, PhD, MPH

Introduction: COVID-19 pandemic lockdowns threatened standard components of integrated behavioral health (IBH) such as in-person communication across care teams, screening, and assessment. Restrictions also exacerbated pre-existing challenges to behavioral health (BH) access.

Methods: Semistructured interviews were completed with clinicians from family medicine residency programs on the impact of the pandemic on IBH care delivery along with adaptations employed by care teams to ameliorate disruption.

Results: Participants (n = 41) from 14 family medicine residency programs described the rapid shift to virtual care, creating challenges for IBH delivery and increased demand for BH services. With patients and care team members at home, virtual warm handoffs and increased attention to communication were necessary. Screening and measurement were more difficult, and referrals to appropriate services were challenging due to higher demand. Tele-BH facilitated continued access to BH services but was associated with logistic challenges. Participants described adaptations to stay connected with patients and care teams and discussed the need to increase capacity for both in-person and virtual care.

Discussion: Most practices modified their workflows to use tele-BH as COVID-19 cases increased. Participants shared key learnings for successful implementation of tele-BH that could be applied in future health care crises.

Conclusion: Practices adapted readily to challenges posed by pandemic restrictions and their ability to sustain key elements of IBH during the COVID-19 pandemic demonstrates innovation in maintaining access when in-person care is not possible, informing strategies applicable to other scenarios. (J Am Board Fam Med 2023;00:000-000.)

Keywords: COVID-19, Family Medicine, Integrated Behavioral Health, Integrated Health Care Systems, Mental Health, Pandemics, Primary Health Care

Introduction

The COVID-19 pandemic upended previous notions of care delivery, team communication, and patient

interaction. Integrated behavioral health (IBH) was particularly disrupted by the shift to virtual care during the public health emergency, compounding the typical challenges associated with IBH in primary care.¹ IBH is an effective and essential part of whole person care, promotes access to behavioral

This article was externally peer reviewed. *Submitted* 28 March 2023; revised 28 June 2023; accepted 7 July 2023.

This is the Ahead of Print version of the article.

From the American Academy of Family Physicians National Research Network, American Academy of Family Physicians, Leawood, KS (MKF, ER, CMH); Robert Graham Center for Policy Studies in Family Medicine and Primary Care, Washington, DC (MKF); University of Colorado Anschutz, Aurora, CO (AN); Department of Psychiatry and Psychology, Mayo Clinic, Rochester, MI (MDW); Department of Family and Community Medicine, The Ohio State University Wexner Medical Center, Columbus, OH (CD); Department of Family Medicine, University of Colorado Anschutz Medical Campus, Aurora, CO (JAW).

Funding: Supported by funding from the Health Resources and Services Administration (HRSA) of the U.S. Department

of Health and Human Services (HHS) under grant number UH1HP33881 (PI: Doubeni), titled Academic Units for Primary Care Training and Enhancement. This information or content and conclusions are those of the authors and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

Conflict of interest: None.

Corresponding author: Melissa K. Filippi, PhD, MPH, American Academy of Family Physicians National Research Network, 11400 Tomahawk Creek Parkway, Leawood, KS 66211 (E-mail: mfilippi@aafp.org).

health (BH) services in primary care settings.^{2–9} Key components include team interactions through warm handoffs, huddles, and curbside consultations; multidisciplinary communication; and workflows incorporating screening and measurement.^{10–12} However, there are few studies that describe how such elements were impacted by the pandemic and how care teams adapted to deliver services.^{13–15} In this article, we report on these disruptions and adaptations.

Methods

We conducted a cross-sectional, qualitative study to evaluate the delivery of IBH in family medicine residency programs affiliated with the American Academy of Family Physicians (AAFP) National Research Network; detailed methods for the overarching study are described elsewhere.¹⁶ We used a survey to collect practice characteristics and assess levels of BH integration using the Integrated Practice Assessment Tool (IPAT, Waxmonsky et al., 2014),¹⁷ and we conducted individual in-depth, semistructured interviews between March 24, 2021 and July 13, 2021. Practices and individual participants received remuneration of \$500 and \$150 respectively for their participation. We utilized an inductive approach to analyze the qualitative data.^{18,19} For this substudy, we focused on the categories and themes related to disruptions to care and adaptations to service delivery during the COVID-

Table	1.	Practice	Demographics
-------	----	----------	--------------

19 pandemic.¹⁶ This study was approved by the AAFP Institutional Review Board (IRB).

Results

We interviewed 41 participants across 14 family medicine residencies (Table 1). Themes described below emerged from participant responses. Exemplary quotations corresponding to each theme are in Table 2.

COVID-19 Related Impacts to IBH: The Need for and Adaptation to Virtual Care

Participants from all practices except 1 reported a rapid shift to delivering BH services virtually. As COVID-19 restrictions kept most people home, participants stated virtual connectivity became a necessity. Introductions by a primary care clinician (PCC) of a BH team member to the patient (warm handoff) had to occur via video and phone. Participants described the need for more intentional communication through the electronic health record (EHR), instant messaging, and oncall availability, especially for acute needs. Some practices implemented changes to ensure that if BH service could not be given on the day of encounter, tele-BH services would take place the following day.

Participants reported in-person interactions with BH team members were canceled (eg, huddles, all-

Practice #	IPAT Score	Clinicians ¹		Interviewee Roles		
		Physicians	BHPs	Residency Faculty	Behavioral Health	Practice Leadership
1	5	<5	1	2	1	0
2	4	≥15	2	1	1	1
3	5	≥15	6	2	1	0
4	4	≥15	2	0	2	0
5	5	≥15	3	1	1	1
6	4	≥15	2	1	1	1
7	6	≥15	2	1	1	1
8	5	≥15	2	2	1	0
9	4	≥15	4	0	2	1
10	5	5 to 9	1	1	1	1
11	5	≥15	9	0	1	2
12	4	≥15	5	1	2	0
13	5	≥15	5	1	1	1
14	5	≥15	5	1	1	1

Note. ¹Responses were based on participant perception, and numerical estimates may be inflated by inclusion of those outside the clinic who are part of the larger health system.

Abbreviations: BHP, Behavioral Health Provider; IPAT, Integrated Practice Assessment Tool.

COVID-19 related impacts to IBH: The need for and adaptation to virtual care	Every day our clinic, we have a morning buddle, and both our clinical psychologist and our social worker are on that phone call. It used to be done in person, but now with COVID it's all done virtually via Zoom. They're on that, and they daily report their availability and schedule. In terms of in-the-moment communication, if nothing gets brought up as part of that buddle that they need to be aware of, we have either means through our electronic medical record for communication. Our psychologist always has Skype open, so that's our business communication platform for instant messaging. They're available via phone call. There's an on-call phone number during office hours for our social worker to be obtained for those acute needs that need to be addressed in the moment. Otherwise, for things that may not need to be done at that time and can be delayed by a day or two, they are very responsive to in-basket messages and Epic or to referrals for follow-up with certain patients.			
Measurement harder with virtual patients	We can kind of make it up as we go along without really having a sense of "here's the best practice for how to do telemedicine for behavioral health services". How do you do co-visits? How do you do handoffs? What are some of the best practices for brief interventions by phone? How do you do PHQ screening and GAD screening? You don't really have a model in place for that.			
Increased demand and other services missing	[The need for BH services since COVID has increased] significantly. It's been kind of overwhelming honestly for our team to keep up with our referrals. We initially started falling really behind. That's part of why we changed our system and we had to go to the whole work flow process, is because we had pretty long wait list for people who needed more of that long term therapy and just weren't getting in when you're new patients. We've seen a pretty significant increase in referrals. I feel like this is anecdotal, but I know I've talked with some of my other psychology colleagues in my own clinic, but then also in other clinics. I feel like the intensity and the severity has been higher too.			
Tele-behavioral health	Some of our patients really have limited access. They may have a pay-by-the-minute phone, and, so, to use their phone to do this, may not be possible. They may not have a computer or a tablet or some other means of technology to do it, so that can be a limiting factor, just simply the cost and the technology. It's some of our patients are just less comfortable with the medium itself. I've had people say, "It just doesn't feel as personal over the—on video, and I don't like that. I don't really know who I'm talking to," those kinds of things. I've had some of that response.			
Opportunities to stay connected with patient and teams	[Tele-bealth bas] been a really amazing thing and it's not worth losing more than half a million people's lives, but I'd been pushing for this for a decade and suddenly, it's not innovative anymore. It's just normal and I do a bunch of my follow up visits with patients using the patient portal, which bas also been super useful, just being able to have people message me about how they're doing. I have as part of my routine to have people send me a message in a week, whether they've started their medicine, started their exercise plan, eating better, contacting their social network, all that stuff. In addition, I do a tele-med visit with them, 15-minute visit in a couple of weeks to a month, within a month of starting them on care, and that works super well. It's equally good to being in person for sure.			

Abbreviations: PHQ, patient health questionnaire; GAD, generalized anxiety disorder questionnaire; IBH, integrated behavioral health.

provider meetings, and educational encounters). Some practices reported adapting via virtual meetings and/or electronic communication platforms, allowing for asynchronous, interactive sharing and learning within and among care teams. Participants viewed these collaboration efforts with varying degrees of satisfaction.

Participants reported curbside consultations often needed to be virtual. Before COVID-19, BH team members usually debriefed with PCCs about patient medications, assessments, or treatment on the day of service within the same workspace. However, due to remote work environments or hybrid schedules, these conversations often did not happen in-person or same day.

Measurement Harder with Virtual Patients

Some participants described screening and measurement,^{20,21} as harder with virtual patients (measures were tied to rooming). Some expressed difficulty in performing these tasks and a desire for more guidance in conducting diagnostics virtually.

Increased Demand and Other Services Missing

Increased demand for behavioral and mental health services was the result of pandemic-related factors such as new trauma or exacerbations of existing depression and anxiety, social isolation, fear of contracting COVID-19, anxiety about resuming inperson social interactions, unemployment, loss of loved ones due to COVID-19 infection, and an increase in interpersonal violence (IPV) in families being forced to stay within a household. Participants also spoke of increased referrals and logistic challenges such as reworking the patient flow due to long waitlists. This increase in referrals for already limited resources complicated psychiatric prescribing and triage to mental health services.

Tele-Bebavioral Health

All practices but 1 reported transitioning quickly to offering tele-BH in March or April 2020. Participants generally agreed leveraging tele-BH helped meet increased demand for BH services as the pandemic endured. Virtual options enabled access for those who may have previously been inhibited due to having to travel long distances, caregiving responsibilities, or limited time off work. Participants also reported it was easier to fill cancelations with tele-BH appointments where a patient need not travel.

Participants described tele-BH barriers from patient and clinician perspectives. Patients struggled with internet access or connection and costs associated with data plans, lack of digital literacy, and insurance coverage concerns. Clinician-stated barriers included patient discomfort with virtual visits and missing nonverbal cues. Some asserted initial assessments were more beneficial if they were done in-person. Privacy and safety concerns were also voiced, particularly for those patients at risk for IPV. Both patients and clinicians were apprehensive about payer reimbursement for these services.

Opportunities to Stay Connected with Patient and Teams

Participants reported tele-BH allowed for patients to attend appointments they would not have otherwise. Implementing virtual handoffs and screening for behavioral and mental health issues enabled continued connectivity, even though virtual diagnostics lagged. Some participants mentioned they needed a better platform or a better way to use a current platform to enhance patient accessibility. For example, they suggested the EHR could be used to send screening tools for mental health conditions and document results for screening instruments not already integrated into the EHR. Lastly, participants discussed the need to increase capacity for both in-person and virtual care. To best serve their patients, they commented having more BH team members and/or psychiatrists would improve access and allow appropriate matching of skillset and specialization for specific populations. In addition, they suggested increasing the number of medical assistants or other staff to aid BH team members because, generally, these staff only support medical clinicians.

Discussion

COVID-19 disrupted BH delivery, and we explored how care teams shifted primarily to virtual care. Most practices modified their workflows to use tele-BH as COVID-19 cases increased. Consistent with other research findings, IBH practice adaptations were born out of necessity and implementation was sometimes less than ideal.^{13,22} BH interactions have the advantage of being independent of physical examination, therefore these visits are well-suited for telemedicine. These interviews elucidated key learnings for successful implementation of tele-BH including the following:

- Invest in infrastructure for virtual patient care: Adopt patient interactive technologies that can pivot from in-person to virtual and gather screening and monitoring data.^{10–12,23,24}
- Fully utilize capabilities for virtual, clinical team communication: Leverage EHR or otherwise encrypted messaging platforms and other asynchronous, interactive, electronic communication (both text and video).
- *Formally document processes:* Develop a set of best practices tailored specifically for tele-BH visits regarding handoffs, curbside consultations, brief interventions, and screenings (including tools for virtual diagnostics).^{25–27} Also, discern when a patient should be seen in-person for best outcomes.
- *Reinforce support for IBH training:* Ensure program capacity includes training for in-person and virtual care delivery, allowing for PCCs and BH team members to be better prepared to address increased demand.²⁸
- *Maximize BH team capacity:* Invest in psychiatry and additional BH team members, either in-house or through pre-established pathways, to increase capacity for treatment and monitoring patients who require complex care and to keep services in-house for optimal care coordination and continuation.

Limitations

We interviewed participants from practices with IBH training programs¹⁶ that scored a 4 or above on the IPAT, meaning that they had well established collocated or fully integrated IBH.¹⁷ Inclusion of clinical practices with IPAT scores of less than 4 (practices that had minimal collocated BH or no BH on site) may have generated differing perspectives. Therefore, results may not represent all primary care

practices. In addition, the participants described their experiences as viewed through their personal lens. Their perception may not have reflected objective measures. For example, none of our participants were able to definitively quantify increased patient demand in BH services. Therefore, they may have over- or underestimated the demand. Lastly, our purposive sampling design limits the generalizability of the study's findings. The sample included practices with interest in IBH and all had family medicine residency programs; these characteristics are not representative of all practices. Furthermore, even though the sample included practices located in different parts of the country, potential differences in patient populations may also affect the representativeness of the information provided in the interviews.

Conclusion

This study revealed how the COVID-19 pandemic affected IBH practice and how care teams adapted to unprecedented change and limitations to care accessibility. As the need for behavioral and mental health services evolved, primary care practice teams modified their collaborative workflows to be responsive to external factors that influenced their ability to deliver BH care. Lessons learned here may encourage adoption of tele-BH and incorporation of virtual care delivery and communication strategies. These may enhance the capabilities of providing BH services and allow for maximal care team coordination. Insights from this study could provide a foundation or reference in preparing IBH programs to be more resilient for better management of future health care crises.

To see this article online, please go to: http://jabfm.org/content/ 00/00/000.full.

References

1. Prom MC, Canelos V, Fernandez PJ, et al. Implementation of integrated behavioral health care in a large medical center: benefits, challenges, and recommendations. J Behav Health Serv Res 2021;48:346–62.

- 2. Archer J, Bower P, Gilbody S, et al. Collaborative care for depression and anxiety problems. Cochrane Database Syst Rev 2012;10:CD006525.
- Miller-Matero LR, Dykuis KE, Albujoq K, et al. Benefits of integrated behavioral health services: the physician perspective. Fam Syst Health 2016; 34:51–5.
- 4. Possemato K, Johnson EM, Beehler GP, et al. Patient outcomes associated with primary care behavioral health services: a systematic review. Gen Hosp Psychiatry 2018;53:1–11.
- Schmit M, Watson J, Fernandez M. Examining the effectiveness of integrated behavioral and primary health care treatment. Journal of Counseling & Development 2018;96:3–14.
- Unützer J, Katon W, Callahan CM, IMPACT Investigators. Improving Mood-Promoting Access to Collaborative Treatment, et al. Collaborative care management of late-life depression in the primary care setting: a randomized controlled trial. Jama 2002;288:2836–45.
- Hunter CL, Funderburk JS, Polaha J, Bauman D, Goodie JL, Hunter CM. Primary care behavioral health (PCBH) model research: current state of the science and a call to action. J Clin Psychol Med Settings 2018;25:127–56.
- Reiter JT, Dobmeyer AC, Hunter CL. The primary care behavioral health (PCBH) model: an overview and operational definition. J Clin Psychol Med Settings 2018;25:109–26.
- Sandoval BE, Bell J, Khatri P, Robinson PJ. Toward a unified integration approach: uniting diverse primary care strategies under the primary care behavioral health (PCBH) model. J Clin Psychol Med Settings 2018;25:187–96.
- Cifuentes M, Davis M, Fernald D, Gunn R, Dickinson P, Cohen DJ. Electronic health record challenges, workarounds, and solutions observed in practices integrating behavioral health and primary care. J Am Board Fam Med 2015;28 Suppl 1:S63–72.
- O'Malley AS, Draper K, Gourevitch R, Cross DA, Scholle SH. Electronic health records and support for primary care teamwork. J Am Med Inform Assoc 2015;22:426–34.
- 12. Woodson TT, Gunn R, Clark KD, et al. Designing health information technology tools for behavioral health clinicians integrated within a primary care team. J Innov Health Inform 2018;25:158–68.
- Lombardi BM, de Saxe Zerden L, Greeno C. Federally qualified health centers use of telehealth to deliver integrated behavioral health care during COVID-19. Community Ment Health J 2022;1–9.
- 14. Benedetto E, Holmes M, Greig A, et al. Responding to COVID-19 through an integrated primary care/

This study was done in partnership with the American Academy of Family Physicians (AAFP) through the AAFP National Research Network. The AAFP has not contributed to this publication, and the information or content and conclusions are those of the authors. This study would not have been possible without the participation of the AAFP National Research Network practices and individual care team members. We thank them for their essential contributions to this work. The authors also thank Elizabeth Staton, MSTC, for her thorough review of the manuscript.

behavioral health program. Fam Syst Health 2021; 39:644–9.

- Bogucki OE, Mattson AB, Leasure WB, Berg SL, Mulholland HL, Sawchuk CN. Adaptations of an integrated behavioral health program during COVID-19. Cogn Behav Pract 2021;28:481–91.
- Filippi M, Waxmonsky J, Williams M, et al. Integrated behavioral health implementation and training in primary care: a qualitative study in a large practice-based research network. Accepted, J Am Board Fam Med 2023.
- Waxmonsky J, Auxier A, Wise-Romero P, Heath B. Integrated practice tool assessment (IPAT). Available at: https://www.integratedcareconference. com/wp-content/uploads/2019/09/D4_Handout. pdf. Published 2014. Accessed May 5, 2022.
- Singer M, Baer H. Introducing medical anthropology: a discipline in action. 2nd ed. Lanham, MD: AltaMira Press; 2011.
- Patton M. Qualitative evaluation and research methods. 2nd ed. Thousand Oaks, CA: SAGE Publications; 1990.
- 20. The PHQ-9: A new depression diagnostic and severity measure [press release]. US: SLACK2002.
- Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med 2001;16:606–13.
- 22. Cooper Z, Zerden LS. How COVID-19 has impacted integrated care practice: lessons from

the frontlines. Soc Work Health Care 2021;60: 146–56.

- 23. Raney L, Bergman D, Torous J, Hasselberg M. Digitally Driven Integrated Primary Care and Behavioral Health: How Technology Can Expand Access to Effective Treatment. Curr Psychiatry Rep 2017;19:86.
- Chang YP, Casucci S, Roma N, Dermen K, Barrick C. Engaging patients in integrated behavioral health and primary care: a technology-based system to facilitate behavioral health screening for patients in rural and underserved areas. Comput Inform Nurs 2020;39:215–20.
- Haderlein TP, Dobalian A, Raja PV, Der-Martirosian C. Association between virtual care use and sameday primary care access in VA primary care-mental health integration. J Prim Care Community Health 2022;13:21501319221091430.
- Newell S, Denneson L, Rynerson A, et al. Veterans Health Administration staff experiences with suicidal ideation screening and risk assessment in the context of COVID-19. PLoS One 2021;16:e0261921.
- 27. Ratzliff A, Sunderji N. Tele-behavioral health, collaborative care, and integrated care: learning to leverage scarce psychiatric resources over distance, populations, and time. Acad Psychiatry 2018;42:834–40.
- 28. Hall J, Cohen DJ, Davis M, et al. Preparing the workforce for behavioral health and primary care integration. J Am Board Fam Med 2015;28 Suppl 1:S41–51.