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Assessing the impact of COVID-19 on mental health providers in the southeastern United States

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ABSTRACT

The COVID-19 pandemic has increased the need for mental health care despite novel barriers to services. Little is known about how the pandemic has affected mental health providers and their practice. In July 2020, we conducted a web-based survey of 500 licensed mental health providers to assess their employment and caseloads, logistics of care, quality of care, and patient-provider relationships and communication during the pandemic. Over 90% of providers reported changes to their employment (e.g., furloughs), with 64% no longer practicing. Providers who reported no longer practicing were older in age, racial minorities, served rural communities, worked in small clinics/provider networks, were social workers and marriage and family therapists, and relied on private insurance or out-of-pocket payment. Most practicing providers reported similar-to-increased caseloads (62%), new patients seeking services (67%), and appointment frequency (70%). Approximately 97% of providers used telemedicine, with 54% providing services mostly-to-exclusively via telemedicine. Most providers reported losing contact with patients deemed unstable (76%) or a danger to themselves/others (71%). Most providers reported maintained-to-improved quality of care (83%), patient-provider relationships (80%), and communication (80%). Results highlight concerns relating to mental health services during the pandemic, however practicing providers have demonstrated resilience to coordinate and provide high quality care.

1. Introduction

The COVID-19 pandemic has substantially impacted the U.S., with over 27 million cases and 470,000 deaths reported to date (CDC, 2020a). Several U.S. government agencies have issued social distancing and stay-at-home guidelines that limit non-emergent medical visits and in-person encounters to mitigate the spread of the virus (CDC, 2020b). Social distancing and physical quarantine measures are known to increase stress, anxiety, and depression (Brooks et al., 2020b; Pfefferbaum and North, 2020; Salari et al., 2020; Twenge and Joiner, 2020). Since the onset of COVID-19, individuals without a preexisting mental illness have experienced an acute rise in depression and anxiety (Holdingue et al., 2020). Psychological distress in the initial phases of the COVID-19 pandemic was attributed to perceived health risks associated with the virus (Robinson and Daly, 2020), which drew back to baseline levels by mid-2020s (Daly and Robinson, 2021). Despite this, physical risks associated with transferring the novel 2019 coronavirus were immediate (Wang et al., 2020; Portnoy et al., 2020), resulting in a rapid and sustained transition to remote mental health care delivery as early as March 2020 (Pierce et al. 2020; Sammons et al. 2020a; Sammons et al. 2020b; Torous et al., 2020; Uscher-Pines et al., 2020). Disruptions in caseloads and provider concerns about quality of care have occurred in tandem with this shift in care delivery (Sammons et al., 2020a; Sammons et al., 2020b; Torous et al., 2020; Uscher-Pines et al., 2020). Despite the significant need for mental health care in the nation, little is known about how the pandemic has affected provider status as a practicing clinician and the process of how care is delivered.

The COVID-19 pandemic has resulted in employment disruptions within the U.S. healthcare system. An April 2020 survey of allied health professionals (e.g., audiologists, mental health providers, dieticians) revealed widespread disruptions in employment, with nearly one-third of providers reporting changes in their employment status and 15% reporting being furloughed or laid off (Coto et al., 2020). A similar trend has appeared among mental health providers, despite the demand for mental health providers to reach high-risk patients following the onset

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of the pandemic. For example, in a March 2020 study, over 10% of community mental health clinics in California had terminated or furloughed employees while an additional one-third had considered furloughing employees in the future (Bartels et al., 2020). Research investigating employment trends among mental health providers in other parts of the U.S. is needed. Evidence demonstrating that other states in the U.S. with high rates of mental health distress alongside a reduction in practicing mental health professionals will signal the need for advocacy efforts to increase state funds that support and protect providers’ practices.

In addition to affecting employment trends, the COVID-19 pandemic may also impact mental health providers’ caseloads and logistics of coordinating care. In a national survey of psychologists, 59% of respondents had a reduction in their total caseloads in March 2020 compared to pre-pandemic levels (Sammons et al., 2020a). The results of a follow-up study found that these caseloads had not fully recovered as of September 2020 (Sammons et al., 2020b). Despite this knowledge, it is unknown how providers are managing care for current and new patients following the onset of the pandemic. Relatively, limited research has examined how providers who continue to practice following the onset of the pandemic are handling day-to-day aspects of clinical practice such as scheduling appointments, billing patients, and protecting the continuity of care among their patients (e.g., reducing no shows, retaining high-risk patients), especially given general shifts toward remote mental health care delivery (Pierce et al., 2020; Sammons et al., 2020a; Sammons et al., 2020b). Exploring these considerations will create a comprehensive understanding of the capacity for the mental health system to manage existing patients and accommodate new patients for the remainder of pandemic and once it is resolved.

Regardless of potential disruptions in employment and caseloads following the onset of the pandemic, mental health providers have a professional duty to offer the highest quality of care. High-quality health care is, “the assessment and provision of effective and safe care, reflected in a culture of excellence, resulting in the attainment of optimal or desired health” (Allen-Duck, Robinson, and Stewart, 2017). Uscher-Pines and colleagues (2020) recently conducted a study with psychiatrists, who were generally satisfied with the quality of care they provided following the onset of the pandemic. They expressed concerns about guidance for best practices to deliver care, particularly via telemedicine. However, regardless of the modality used to deliver care, the highest quality of care is patient-centered and occurs when patients’ needs and preferences are known and communicated to healthcare providers for the purposes of informing health decisions (Agency for Healthcare Research and Quality [AHRQ], 2014). For example, research has demonstrated that clear and open patient-provider communication is associated with better patient outcomes and safety considerations, including proper diagnoses and treatment prescriptions (Belasen et al., 2020). Limited research has examined mental health providers’ abilities and satisfaction with respect to providing care following the onset of the pandemic, including the ability to effectively communicate and nurture relationships that foster patient-centered care. The social stress of the pandemic coupled with risk mitigation strategies has significant clinical implications on these factors that must be explored (Ghosh et al., 2020).

We have little understanding of how the pandemic has affected mental health providers belonging to a variety of specialties, particularly their employment status and the logistics and quality of care they provide. The purpose of this study was to assess the impact of the COVID-19 pandemic on mental health care (MHC) providers and their practices. To accomplish this, we conducted a survey among a diverse sample of licensed mental health providers in Florida, a state in the U.S. with considerably limited access to mental health care (Mental Health America, 2018) and a high rate of COVID-19 cases and deaths (423,855 and 5,011, respectively) at the time this study was conducted (Florida Department of Health, 2020). We focused specifically on how the pandemic has affected their employment since the onset of the pandemic, including their status as a practicing clinician, their caseloads, logistics of providing care, quality of that care, and patient-provider relationships and communication.

2. Methods

2.1. Subjects and procedures

We conducted a web-based survey of licensed mental health providers throughout the State of Florida. Providers were recruited through listservs of the following organizations: University of South Florida’s health system, Florida Psychological Association, Florida Counseling Association, Hillsborough County Department of Health, and Florida Psychiatric Association. We also recruited members of Facebook groups hosted by South Florida Social Workers Connect, Florida Family Therapy Alliance, and Florida Psychiatric Society. Providers were eligible to participate if they (1) were at least 18 years old, (2) were a licensed mental health provider in Florida USA, (3) were practicing prior to the onset of the COVID-19 pandemic in March 2020, and (4) had one of the following mental health specialty titles: Psychiatrist (MD/DO), Mental Health Counselor (LMHC, LPC, LCADAC), Social Worker (LICSW, LCSW, ACSW), Psychologist (PhD, PsyD), and Marriage and Family Therapist (LPMFTs).

The survey was conducted via Qualtrics between July 24th and July 30th, 2020. We set a goal of enrolling 100 mental health providers belonging to each of the five specialties, and successfully reached our quota (N = 500 licensed mental health providers) within less than a week. Of the 752 providers who accessed the survey, 688 (91.5%) consented to participate in the study. Of these, 500 providers completed the survey (72.7% completion rate). The average survey completion time was 8 minutes. The survey began with information about the purpose of the study—to assess the impact of the COVID-19 pandemic on mental health providers—followed by screening questions assessing eligibility criteria. Electronic informed consent was obtained prior to data collection. Providers who completed the survey received a $10 Amazon e-gift card as compensation for their participation. The Institutional Review Board (IRB) at the University of South Florida approved all data collection procedures in this study.

2.2. Survey

The survey was developed by the study team and was based on existing studies investigating telehealth mental health providers (Bunnell et al., 2020) and initial responses by clinical psychologists to changes in practice following the onset of the COVID-19 pandemic (Sammons et al., 2020a). Item readability, relevance, and survey efficiency were assessed through an iterative review process. The survey included questions within the following domains (and in this order): (1) socio-demographics of providers and their practice; (2) effects of the pandemic on employment; (3) effects of the pandemic on logistics of providing care; and (4) effects of the pandemic on perceived quality of care, relationships, and communication with patients.

2.2.1. Socio-demographic characteristics of providers and their practice

We collected socio-demographic information about providers, including their age, sex, race, and ethnicity. Subsequent questions asked about their specialty, type of practice (e.g., large health organization, small clinic, network of providers), practice setting (i.e., inpatient vs. outpatient), geographical location of practice (e.g., rural, urban), primary method of reimbursement, primary age group seen, and primary treatment paradigm (e.g., cognitive-behavioral, family systems, psychodynamic).

2.2.2. Effects of the pandemic on employment

Providers were asked to indicate whether they continued to practice following the onset of the pandemic and whether there had been a change in their employment status since the onset of the pandemic (e.g.,
more/less hours, furloughed). Providers who indicated no longer practicing following the onset of the pandemic were directed to the end of the survey, as the questions would not be applicable. Providers who continued to practice following the onset of the pandemic were asked to indicate the degree to which they felt their practice was prepared to handle the COVID-19 pandemic (i.e., 1 = Very Unprepared to 4 = Very Prepared). Then they were asked about changes to their caseload as a result of the pandemic and their satisfaction with their current caseload (i.e., 1 = Greatly Decreased to 5 = Greatly Increased; 1 = Very Dissatisfied to 5 = Very Satisfied).

### 2.2.3. Effects of the pandemic on logistics of providing care

Providers who continued practicing following the onset of the pandemic were asked to indicate their primary method of seeing clients (i.e., in-person, telemedicine, mix of in-person and telemedicine) and their comfort of providing care in-person (i.e., 1 = Very Uncomfortable and 5 = Very Comfortable). Next, they were then asked about changes to their frequency of appointments, number of clients seeking services, and no-show rates since the beginning of the pandemic (i.e., 1 = Greatly Decreased and 5 = Greatly Increased). They were also asked to indicate whether their clients were predominantly existing or new since the onset of the COVID-19 pandemic, and to estimate the percentage of clients they have lost contact with who are unstable or a danger to themselves or others. Finally, providers were asked to indicate the extent to which the pandemic had imposed difficulties relating to billing/collecting payments and scheduling appointments (1 = Much More Difficult to 5 = Much Easier).

### 2.2.4. Effects of the pandemic on perceived quality of care and communication

Providers who continued practicing following the onset of the pandemic answered whether their quality of care, quality of relationships with clients, and ability to communicate with clients had changed (i.e., 1 = Greatly Decreased and 5 = Greatly Increased). They were also asked to indicate their satisfaction with the quality of care they had been providing, their overall practice, quality of relationships and communication with their clients (i.e., 1 = Very Dissatisfied and 5 = Very Satisfied).

### 2.3. Data analysis

SPSS v26 (IBM Corp.) was used to compute frequencies and descriptive statistics for socio-demographics of providers and characteristics of their practice, and changes in employment following the onset of the pandemic. Chi-squared and independent samples t-test were statistically significant at \( p < .05 \). Note

### 3. Results

#### 3.1. Characteristics of providers and practice settings

Provider demographics are displayed in Table 1 and characteristics of providers’ practice settings are displayed in Table 2. On average, providers were 40.6 years old (SD = 6.6; Range = 25 to 71), and most were white (72.2%) and non-Hispanic (93.6%). Most providers reported either working within hospitals or large health organizations (28.0%), individual practices (25.4%), small clinics (22.8%), or networks of providers (18.6%). Nearly two-thirds of providers (59.2%) reported working in outpatient settings, and roughly half (47.2%) were practicing in urban/suburban settings. Public insurance (e.g., Medicare, Medicaid) was the primary form of reimbursement for nearly half of all providers (43.4%). About one-third of providers (34.0%) worked primarily with adults aged 18-64 years, with an even distribution of providers working with children (22.2%), adolescents (23.2%), and older adults (20.6%). With respect to treatment paradigms typically followed by providers, there was a relatively even distribution of providers aligning with Cognitive-Behavioral (19.6%), Family Systems (16.2%), Existential/Humanistic (15.2%), Psychodynamic/analytic (15.4%), Interpersonal (12.2%), Behavioral (10.8%), and Social Learning (10.6%) orientations.

#### 3.2. Effects of the pandemic on employment

Results relating to the effects of the pandemic on providers’ employment and caseloads are displayed in Table 3. Most (92.0%) providers reported some change in their employment status following the onset of the pandemic. Commonly endorsed changes in employment included furloughs (20.6%), reduced (28.8%) or increased (21.0%) hours, and reduced pay (22.2%). About two-thirds (64.0%) of providers reported they were no longer practicing following the onset of the pandemic. Among currently practicing providers, two-thirds (66.8%) felt their practice was prepared to respond to the pandemic and social isolation measures. An equal proportion of currently practicing providers reported seeing increases (37.0%) and decreases (38.1%) in their caseloads, with roughly a quarter reporting no change. Over half of providers (58.0%) reported being satisfied or very satisfied with their current caseload.

Several characteristics of providers and their practices were associated with whether they continued practicing following the onset of the pandemic. Demographically, providers who were no longer practicing tended to be older in age (\( r [498] = -3.84, p < .001 \)).
Table 2

Professional characteristics according to status as a practicing provider.

| Practice Characteristic | Continued Practicing, n = 181 | No Longer Practicing, n = 319 | Total, N = 500 |
|-------------------------|-------------------------------|--------------------------------|----------------|
| **Type of Mental Health** |                               |                                |                |
| Practice (%)            |                               |                                |                |
| Hospital or large health organization (%) | 73 (40.3) | 67 (21.0) | 140 (28.0) |
| Individual Practice     | 43 (23.8)                      | 84 (26.3)                      | 127 (25.4)     |
| Small Clinic (%)        | 24 (13.3)                      | 90 (28.2)                      | 114 (22.8)     |
| Network of Providers (%) | 16 (8.8)                       | 77 (24.1)                      | 93 (18.6)      |
| School (K-12) (%)       | 5 (2.8)                        | 1 (0.3)                        | 6 (1.2)        |
| College or University (%) | 19 (10.5)                    | 0 (0.0)                        | 19 (3.8)       |
| Government Agency (%)   | 1 (0.6)                        | 0 (0.0)                        | 1 (0.2)        |
| Inpatient vs. Outpatient (%) | 133 (73.5)                 | 163 (51.1)                     | 296 (59.2)     |
| Outpatient (%)          | 48 (26.5)                      | 156 (48.9)                     | 204 (40.8)     |
| **Geographical Region of Practice (%)** |                                 |                                |                |
| Urban/Suburban (%)      | 132 (72.9)                     | 104 (32.6)                     | 236 (47.2)     |
| Rural (%)               | 24 (13.3)                      | 117 (36.7)                     | 141 (28.2)     |
| Both (%)                | 25 (13.8)                      | 98 (30.7)                      | 123 (24.6)     |
| **Primary Method of Reimbursement (%)** |                                 |                                |                |
| Public Insurance (%)    | 105 (58.0)                     | 112 (35.1)                     | 217 (43.4)     |
| Private Insurance (%)   | 26 (14.4)                      | 106 (33.2)                     | 132 (26.4)     |
| Self-Pay (%)            | 29 (16.0)                      | 101 (31.7)                     | 130 (26.0)     |
| Salary (Paid by a school) (%) | 21 (11.6)                    | 0 (0.0)                        | 21 (4.2)       |
| **Primary Age Group (%)** |                                        |                                |                |
| Adults (18-64 years old) (%) | 94 (51.9)                     | 76 (23.8)                      | 170 (34.0)     |
| Adolescents (11-17 years old) (%) | 44 (24.3)                    | 72 (22.6)                      | 116 (23.2)     |
| Children (0-10 years old) (%) | 23 (12.7)                     | 88 (27.6)                      | 111 (22.2)     |
| Older adults (65+ years old) (%) | 20 (11.0)                     | 83 (26.0)                      | 103 (20.6)     |
| **Primary Treatment Paradigm (%)** |                                 |                                |                |
| Cognitive/Behavioral (%) | 49 (27.1)                      | 49 (15.4)                      | 98 (19.6)      |
| Family Systems (%)       | 36 (19.9)                      | 45 (14.1)                      | 81 (16.2)      |
| Psychodynamic/Analytic (%) | 28 (15.5)                     | 49 (15.4)                      | 77 (15.4)      |
| Existential/Humanistic (%) | 17 (9.4)                      | 59 (18.5)                      | 76 (15.2)      |
| Interpersonal (%)        | 24 (13.3)                      | 37 (11.6)                      | 61 (12.2)      |
| Behavioral (%)           | 19 (10.5)                      | 35 (11.0)                      | 54 (10.8)      |
| Social Learning (%)      | 8 (4.4)                        | 45 (14.1)                      | 53 (10.6)      |

Note. * Chi-squared tests were statistically significant at p < .001.

Table 3

Effects on employment and caseload.

| Employment/Caseload Characteristic | Continued Practicing, n = 181 | No Longer Practicing, n = 319 | Total, N = 500 |
|-----------------------------------|-------------------------------|--------------------------------|----------------|
| Change in Employment, n (%)       |                               |                                |                |
| Fewer hours (%)                   | 50 (27.6)                     | 94 (29.5)                      | 144 (28.8)     |
| Reduced pay (%)                   | 34 (18.8)                     | 77 (24.1)                      | 111 (22.2)     |
| More hours (%)                    | 40 (22.1)                     | 67 (21.0)                      | 107 (21.4)     |
| Furloughed (%)                    | 24 (13.3)                     | 79 (24.8)                      | 103 (20.6)     |
| No change (%)                     | 39 (21.5)                     | 1 (0.3)                        | 40 (8.0)       |
| Laid off (%)                      | 0 (0.0)                       | 1 (0.3)                        | 1 (0.2)        |
| Change jobs (%)                   | 1 (0.6)                       | 0 (0.0)                        | 1 (0.2)        |
| Started an additional job (%)     | 1 (0.6)                       | 0 (0.0)                        | 1 (0.2)        |
| Change in Caseload (%)            |                               |                                |                |
| Preparedness of Practice to handle COVID-19, n (%) | Very unprepared | 13 (7.2)                        |                |
| Very unprepared (%)               | 47 (26.0)                     |                                |                |
| Prepared (%)                      | 96 (53.0)                     |                                |                |
| Very prepared (%)                 | 25 (13.8)                     |                                |                |
| Change in Employment (%)          |                               |                                |                |
| Dissatisfied (%)                  | 14 (7.7)                      |                                |                |
| Dissatisfied (%)                  | 24 (13.3)                     |                                |                |
| Neither satisfied nor dissatisfied | 38 (21.0)                    |                                |                |
| Satisfied (%)                     | 91 (50.3)                     |                                |                |
| Very satisfied (%)                | 14 (7.7)                      |                                |                |

Note. * = Responses for this item were only recorded for mental health providers who continued practicing following the onset of the COVID-19 pandemic (n=181).

Humanistic and Social Learning treatment paradigms (χ² [6, N = 500] = 27.27, p < .001). Providers who continued practicing tended to work in hospitals or large healthcare organizations (χ² [6, N = 500] = 82.58, p < .001), be reimbursed by public insurance (e.g., Medicare, Medicaid; χ² [6, N = 500] = 77.40, p < .001), provide services to adults (χ² [6, N = 500] = 51.06, p < .001), and follow Cognitive Behavioral treatment paradigms (χ² [6, N = 500] = 27.27, p < .001).

Regarding changes in employment, providers who were no longer practicing following the onset of the pandemic tended to report being furloughed, χ² (1, N = 500) = 9.35, p < .002. No other changes to employment status were statistically significantly associated with status as a practicing or non-practicing mental health provider.

3.3. Effects of the pandemic on logistics of providing care

Table 4 shows the results relating to the effects of the pandemic on logistics of delivering care among providers who continued to practice following the onset of the pandemic. Most (87.3%) providers reported seeing a combination of established and new clients/patients. More providers reported an increase (44.2%) in the number of new clients seeking services than a decrease (33.1%). Nearly half (44.7%) of the providers reported an increased frequency of appointments for their average clients. A relatively even distribution of providers reported that no-show rates had increased (30.3%), increased (34.8%), and remained the same (34.8%) for their practice. Despite half (50.2%) of providers reporting feeling comfortable seeing patients in-person, most providers (96.8%) reported providing care via telemedicine. Nearly three-quarters of providers lost contact with patients they deemed unstable (76.3%) or...
### 3.4. Effects of the pandemic on perceived quality of care, relationships, and communication

Table 5 shows results relating to perceptions of quality of care, relationships, and communication providers who continued to practice following the onset of the pandemic. Most providers reported feeling that the quality of care they provided either had not changed (39.8%) or had improved (43.6%) since the onset of the pandemic, and over half were satisfied with that quality of care (62.5%) and their overall practice (58.5%). Roughly 45% of providers felt that the quality of their relationship with their patients had improved. And, nearly 40% of providers reported an increased ability to communicate with their clients/patients since the onset of the pandemic, and most providers (64.1%) reported being satisfied with this communication.

### 4. Discussion

The COVID-19 pandemic has placed significant strain on U.S. mental healthcare systems, providers, and patients alike by creating an increased demand for mental health care (Holingue et al., 2020), along with novel barriers to health care services (Magoon et al., 2020). The current survey study aimed to assess the impact of the COVID-19 pandemic on mental health providers in the State of Florida, including

#### Table 5

Perceptions of quality of care, relationships, and communication among currently practicing providers.

| Aspect of Care                                | n (%)  |
|----------------------------------------------|--------|
| Change in Quality of Care Provided          |        |
| Greatly decreased                            | 6 (3.3) |
| Decreased                                   | 24 (13.3) |
| Hasn’t changed                              | 72 (39.8) |
| Increased                                   | 65 (35.9) |
| Greatly increased                           | 14 (7.7) |
| Satisfaction with Quality of Care Provided  |        |
| Very dissatisfied                           | 10 (5.5) |
| Dissatisfied                                | 20 (11.0) |
| Neither satisfied nor dissatisfied          | 38 (21.0) |
| Satisfied                                   | 89 (49.2) |
| Very satisfied                              | 24 (13.3) |
| Satisfaction with Overall Practice          |        |
| Very dissatisfied                           | 6 (3.3) |
| Dissatisfied                                | 20 (11.0) |
| Neither satisfied nor dissatisfied          | 38 (21.0) |
| Satisfied                                   | 89 (49.2) |
| Very satisfied                              | 24 (13.3) |
| Change in Quality of Relationships with Clients |      |
| Greatly decreased                           | 15 (8.3) |
| Decreased                                   | 20 (11.0) |
| Hasn’t changed                              | 65 (35.9) |
| Increased                                   | 62 (34.3) |
| Greatly increased                           | 19 (10.5) |
| Satisfaction with Quality of Relationship with Clients |     |
| Very dissatisfied                           | 11 (6.1) |
| Dissatisfied                                | 13 (7.2) |
| Neither satisfied nor dissatisfied          | 35 (19.3) |
| Satisfied                                   | 102 (56.4) |
| Very satisfied                              | 20 (11.0) |
| Change in Ability to Communicate with Clients |        |
| Greatly decreased                           | 14 (7.7) |
| Decreased                                   | 23 (12.7) |
| Hasn’t changed                              | 69 (38.1) |
| Increased                                   | 63 (34.8) |
| Greatly increased                           | 12 (6.6) |
| Satisfaction with Ability to Communicate with Clients |      |
| Very dissatisfied                           | 11 (6.1) |
| Dissatisfied                                | 20 (11.0) |
| Neither satisfied nor dissatisfied          | 34 (18.8) |
| Satisfied                                   | 95 (52.5) |
| Very satisfied                              | 21 (11.6) |
their status as practicing clinicians and any experienced changes to their employment, logistics of healthcare delivery, and quality of care they provide their patients.

Most mental health providers reported some change in their employment status following the onset of the pandemic, with two-thirds (64%) indicating they were no longer practicing. Of those providers who continued practicing following the onset of the pandemic, over half reported observing similar-to-increased caseloads, new clients/patients seeking services, and a greater frequency of appointments for their average client. Most providers reported providing care via telemedicine and more than half provided care mostly or only via telemedicine but did not report major difficulties or changes with billing, scheduling, and no-shows. And although three quarters of providers reported losing contact with patients deemed unstable or a danger to themselves or others, they maintained or increased quality of care, therapeutic relationships, and communication with their patients.

In addition to the abundance of mental health providers who reported no longer practicing following the onset of the pandemic, over 90% of the providers reported some change in their employment status. For example, providers who were no longer practicing were most likely to report being furloughed. This was unexpected given the reported increase in demand for mental health services because of the pandemic (Brooks et al., 2020; Holmungue et al., 2020; Pfeiferbaum and North, 2020; Salari et al., 2020; Twenge and Joiner, 2020). Certain mental health professionals (i.e., social workers and marriage and family therapists), providers employed in small clinics or provider networks, and providers who serve rural clients were most likely to report no longer practicing following the onset of the pandemic. A possible explanation from prior literature might be health system budget shortfalls (Coto et al., 2020; Bartels et al., 2020) or decreases in caseload levels (Sammons et al., 2020; Sammons et al., 2020). This is supported by our results, which also demonstrated that providers were less likely to practice following the onset of the pandemic if they relied on private insurance or out-of-pocket payments rather than public insurances like Medicare and Medicaid. However, as stated previously, over half of providers reported similar-to-increased caseloads, new patients and appointments, suggesting an increased demand for mental health services. Regardless, it is concerning there are too few practicing providers, especially those who are older and racially diverse, despite their services being in high demand. As a result, mental health services may not reach those who need it most. Further, the burden may fall on other healthcare providers who may not be skilled or comfortable to productively navigate conversations about mental health.

Nearly all providers who continued to practice following the onset of the pandemic reported providing care via telemedicine and more than half provided services mostly or solely via telemedicine. This was expected as most mental health providers have transitioned their services from in-person to telemedicine modalities (Pierce et al., 2020; Sammons et al., 2020; Sammons et al., 2020b). However, these findings shed new light on how providers have handled the logistics of providing care in a pandemic environment. Overall, still-practicing providers demonstrated a remarkable resiliency in operating their practices, with most reporting no serious disruptions to essential components of care delivery (e.g., billing, scheduling, and no-shows). Nevertheless, roughly three quarters of providers reported losing contact with patients they deemed unstable or a danger to themselves or others. This finding indicates that the COVID-19 pandemic may have compromised continuity of mental health care for patients who have specialized, long-term care needs and support, and is made more serious with the understanding that these patients are most at risk for worsening of their symptomatology (Holmungue et al., 2020). Although not all providers in this study exclusively used telemedicine to treat their caseloads, the vast majority of telemental health providers are not comfortable providing remote services to high-risk patients (Sammons et al., 2020), potentially compounding the problem of access. Future research is needed to understand the factors contributing to this loss of contact (e.g., patient symptomatology, provider discomfort delivering care remotely). Additionally, it may be prudent to understand what community-level safety net resources are available to bridge care.

Providers who continued to practice following the onset of the pandemic largely reported maintaining or increased quality of care, therapeutic relationships, and communication with their patients. These results align with prior studies indicating providers to be largely satisfied with their ability to deliver care in the current pandemic environment (Sammons et al., 2020a; Sammons et al., 2020b; Uscher-Pines et al., 2020). Despite evidence that patients are also satisfied with remote care (Holz, 2020), there is evidence that telemedicine may perpetuate and even magnify disparities in patient-centered communication among patients with moderate-to-high psychological distress (Paige et al., 2021). A better understanding is needed for how providers are practicing patient-centered communication and fostering therapeutic relationships to improve their quality of remote healthcare delivery. Specifically investigating the characteristics of providers who are most able to foster effective communication and relationships with their patients would be useful for training purposes. Such inquiry may help address lingering concerns about how providers and patients connect via telemedicine following the onset of a global crisis, such as the COVID-19 pandemic (Chwistek, 2020).

This study is not free from limitations. Despite utilizing a robust nature of recruitment from professional organizations, the study sample included solely included mental health providers located in the State of Florida. Although the sample demographics were consistent with mental health providers and the U.S. workforce (e.g., Lin et al., 2018), this limits the generalizability of findings to providers in this state. Additionally, the cross-sectional survey design prevents the inference of causal relationships between variables, especially as a timeframe for practicing before and following the onset of the pandemic was not established. Relatedly, the use of a survey limits the ability to gain more in-depth insight into the reasons for certain significant findings (e.g., why such a large proportion of providers were no longer practicing following the onset of the pandemic). Future research should make use of qualitative methodology to provide a better understanding of these and related issues, especially regarding why older and racially/ethnically diverse providers no longer practiced following the onset of the pandemic. Despite these limitations, this study provides an important and unique contribution to our understanding of how the COVID-19 pandemic has affected mental health providers and their practices.

In conclusion, these results elicit serious concerns relating to mental health providers’ employment status, continued practice, and ability to stay in contact with potentially high-risk patients. However, providers who have continued practicing following the onset of the COVID-19 pandemic are resilient in their ability to coordinate and provide high quality care to their patients. Future research should investigate specific factors relating to changes in employment and continued practice of mental health providers following the onset of the COVID-19 pandemic, as well as loss of contact with high-risk patients. Additional studies should make use of longitudinal study designs to examine trends in provider employment status, patient demand for mental health services, and continuity of care.

Author contributions

Conceptualization, H.S., B.E.B.; Methodology, B.E.B., H.S., J.F.B.; Formal Analysis, B.E.B., S.R.P., H.S.; Investigation, H.S., B.E.B, A.G., C. L., D.Z., H.H., J.F.B., S.R.P.; Resources, B.E.B.; Data Curation, B.E.B.; Writing – Original Draft Preparation, H.S., B.E.B., S.R.P.; Writing – Review and Editing, H.S., B.E.B, A.G., C.L., D.Z., H.H., J.F.B., S.R.P. Supervision, B.E.B.; Project Administration, J.F.B.; Funding Acquisition, B. E.B.
Declaration of Competing Interest

Drs. Bunnell and Paige, and Ms. Barrera are employed by Doxy.me LLC.

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