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ORIGINAL PAPER

Mental Health Clinic Administrators' Perspectives on the Impact of Clinic-School Partnerships on Youth Mental Health Services Continuity and Quality

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Abstract
Partnerships between mental health (MH) clinics and school systems in which providers deliver MH services on school grounds are growing. To date, however, there is little research examining MH clinic administrator perspectives on how this service delivery model affects continuity and quality of MH services among low-income youth. We conducted a state-wide (online and mail) survey of administrators at MH clinics ($n=60$) to assess their perspectives on the advantages and challenges of school MH services for Medicaid-enrolled youth. Among survey respondents ($n = 44$), 86% reported that their clinic had at least one school partnership. With respect to advantages, more than four-fifths reported that school-based MH services (compared to clinic-based services) were very helpful or extremely helpful (versus not helpful at all, a little helpful, or somewhat helpful) for: (1) reducing gaps in MH treatment (86.8%); (2) improving communication between MH providers and teachers (86.9%), and (3) improving the overall quality of MH care (89.5%). In addition, the estimated no-show rate for appointments in school settings (7.2%) was lower than the estimated no show-rate for clinic appointments (23.9%; $p<0.01$). Several challenges were also reported; more than two-thirds of respondents reported difficulties when delivering school-based services related to parent engagement (i.e., appointment attendance [89.5%], communication [81.6%], timely consent [68.4%]) that occurred sometimes, often, or always (versus rarely or never). As MH clinics continue to enter into and expand partnerships with schools, stakeholders should implement family-centered strategies to enhance engagement. Nevertheless, MH clinic administrators highlight potential benefits of school MH services (compared to clinic-based services) with respect to continuity and quality of MH care.

Keywords Targeted interventions · Community mental health · Quality · Engagement · Medicaid · Policy

Introduction

Nearly one in five youth in the USA experiences a mental health (MH) disorder with severe impairment at some point in their life (Merikangas et al., 2010), and those living in poverty are at increased risk (National Academies of Sciences, Engineering, and Medicine, 2015). Medicaid provides health insurance coverage to millions of children and adolescents from families with low income (Centers for Medicare and Medicaid Services, 2020). Yet, among Medicaid-insured youth who initiate MH services, treatment continuity, engagement, and quality of care are poor (Cummings et al., 2017b; Cummings et al., 2019; Richardson et al., 2004; Stein et al., 2012; Zima et al., 2005). A meta-analysis reported that between 28 and 72% of youth initiating MH services discontinued care prematurely, and that youth from low-income families were more likely to do so (de Hann et al., 2013).

Community-based MH treatment facilities are a crucial component of the outpatient child MH safety-net infrastructure because of the breadth of services they offer as well as their financial accessibility for low-income families (Cummings et al., 2015). These facilities typically offer a range of evidence-based services for youth with MH disorders, including psychotropic medication management, individual

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psychotherapy, group therapy, family therapy, and case management services (Substance Abuse and Mental Health Services Administration [SAMHSA], 2021; Hoagwood et al., 2001). More than four-fifths of children living in poverty are insured by Medicaid (Rudowitz et al., 2019), and more than 93% of outpatient MH treatment facilities that serve youth accept Medicaid (SAMHSA, 2021).

Although community-based MH treatment facilities are an essential component of the child MH care safety-net system, youth from families with low income face significant logistical barriers to care when services are delivered in these clinic-based settings. Barriers include lack of transportation, distance to the nearest facility, caregiver responsibilities (i.e., work and/or childcare), and low appointment availability outside of school hours (Cummings et al., 2017a; Santiago et al., 2013; Syed, et al., 2013). The logistical challenges are especially acute for youth who are seeking psychosocial services (including psychotherapy), which are recommended as a first-line treatment by clinical guidelines for many common child MH disorders (Birmaher & Brent, 2007; Cohen, 2010; Connolly & Bernstein, 2007; Lock & La Via, 2015; Pliszka, 2007; Steiner & Remsing, 2007). Notably, these services are often recommended on a bi-weekly or weekly basis, or even more frequently depending on the severity and prognosis (Cohen, 2010; Connolly & Bernstein, 2007; Geller & March, 2012; McClellan et al., 2007; Steiner & Remsing, 2007). When these services are delivered onsite at a MH treatment facility, the frequency of appointments can require regular school absences for the child, regular work absences for a caregiver, or both. These logistical barriers contribute to the poor treatment continuity, as well as the high rates of treatment drop-out among Medicaid-enrolled youth initiating care (Santiago et al., 2013).

MH treatment continuity and quality may be improved among underserved youth when community MH providers partner with schools to deliver MH services on school grounds (Eklund et al., 2020; Jaycox et al., 2010; Weist et al, 2001, 2006). In this care model, a therapist employed by the community MH provider organization travels to the school to deliver screening, assessment, psychotherapy, psychoeducation, and/or other services. To the extent that the delivery of MH services on school grounds reduces logistical barriers to care, these partnerships have the potential to facilitate consistent MH appointment attendance among youth.

Prior research has sought to elucidate stakeholder perspectives on potential benefits of partnerships between community MH organizations and schools to expand MH services offered in school settings, as well as challenges that may occur when implementing these partnerships (Blackman et al., 2016; Mellin & Weist, 2011; Mellin et al., 2017; Powers et al., 2013). In a survey of 384 teachers, Mellin et al. (2017) identified several perceived benefits of these collaborative relationships; these perceived benefits included increased support for teachers to address student MH needs, increased MH programming available for students, improved MH care access for students and families, and improved family-school relationships (Mellin et al., 2017). To inform potential challenges associated with these collaborative relationships, two studies of specific programs collected qualitative data from school leaders and stakeholders from MH agencies (Mellin & Weist, 2011; Powers et al., 2013). Reported challenges from stakeholders included: siloed systems in which schools and MH agencies have different language concerning MH and different missions (Powers et al., 2013); resistance to MH services delivered by MH agencies due to misunderstanding about student MH challenges and stigma related to MH (Powers et al., 2013); lack of role clarity of different stakeholders participating in the partnership (Mellin & Weist, 2011); and lack of buy-in from school professionals when MH services are delivered by community-based clinicians (Mellin & Weist, 2011).

To date, there is a dearth of empirical data in the extant literature about the perspectives of administrators at MH facilities on the perceived benefits of these partnerships—including the extent to which they can improve continuity and quality of MH care among the Medicaid-enrolled youth they serve. To address this gap, we developed and administered a statewide survey of administrators in outpatient MH facilities about their experiences partnering with schools. The aims of our study are to present descriptive data from this statewide survey on MH clinic administrators' perspectives on: (1) potential benefits of MH facility-school partnerships (including MH treatment continuity and quality) and (2) the frequency of challenges they encountered when establishing and delivering care through these partnerships.

Methods

To achieve the study aims, we developed and fielded a survey to administrators at specialty outpatient MH facilities in Georgia that serve youth less than 18 years of age who are enrolled in the Medicaid program. This study was approved by the Institutional Review Board (IRB) of Emory University.

Study Context

This survey was conducted as part of larger project that sought to understand barriers and facilitators of care for Medicaid-enrolled children who seek MH treatment in safety-net settings and to identify strategies to improve service utilization (Blake et al., 2019; Cummings et al., 2017b; Cummings et al., 2019; Cummings et al., 2021). We conducted this study in Georgia because it is a large, ethnically diverse state (31.2% of children less than 18 years of age

are non-Hispanic Black, 9.4% are Hispanic, and 3.9% are non-Hispanic Asian) (U.S. Census Bureau, 2019), and it has a high percentage of youth (19.5%) living in poverty (U.S. Census Bureau, 2020a, 2020b). In its most recent report, Mental Health America ranked Georgia second to last in the country for access to MH care (Mental Health America, 2020).

Survey Development Process

We designed a 28-item survey (~ 20 min) to capture MH clinic administrator perspectives on youth MH treatment continuity, Medicaid-managed care policies, and school MH services. In the first two sections of the survey, we included questions about child-, family-, provider-, and clinic-level factors that could contribute to: (1) appointment no-shows when the client did not arrive or cancel the appointment with at least 24-h notice (i.e., short-term breaks in continuity); and (2) premature dropout from psychotherapy (i.e., longer-term breaks in continuity). We also included questions about strategies and recommendations that clinic administrators have for reducing no-show rates and reducing premature dropout from psychotherapy. In the third section, the survey included questions about Medicaid-managed care mechanisms (e.g., prior authorization) that can affect MH treatment engagement and continuity among Medicaid-enrolled youth. The fourth section (used for the current study) included questions about how facility-school partnerships affect MH treatment continuity and quality among this population, as well as the frequency of challenges that occur when delivering services through these partnerships.

The development of survey items to assess how school partnerships influenced the delivery of psychosocial services for Medicaid-enrolled youth was informed by the Donabedian model of healthcare quality (Donabedian, 1966). Under the Donabedian framework, the "structure" of a MH organization influences the "clinical process" of MH care delivery, which in turn can affect patient outcomes. The structure of an organization includes its physical capital (e.g., clinic space), human capital (e.g., staffing), and financial capital. Clinical processes include the provider's activities in giving care within the MH organization as well as the activities of the child and family in seeking care (Donabedian, 1988). The creation of partnerships with schools to deliver care on school grounds represents a change to the MH organization's "structure" by including additional locations where services can be delivered. By providing services on school grounds and eliminating many logistical challenges for families to transport their child to a separate location for MH care, these school partnerships have the potential to improve the accessibility and continuity of services.

In addition to the Donabedian framework, the development of survey items was informed by our earlier qualitative work (Cummings et al., 2021), which included semi-structured interviews with administrators and providers at MH clinics and caregiver focus groups recruited from these settings. We explored barriers and facilitators of the provision and receipt of MH treatment among youth who seek care from safety net providers in Georgia. A component of the qualitative instrument also included questions about the potential advantages and challenges of school-based partnerships when seeking to serve this target population. Findings from this study revealed that the provision of services on school grounds has the potential to improve appointment attendance by reducing a number of logistical barriers to care. Findings also revealed that the delivery of services on school grounds has the potential to improve communication between MH clinicians and teachers, and between teachers and caregivers concerning the child's MH service utilization (Cummings et al., 2021)—both of which constitute changes in the process of care delivery as defined by Donabedian. If continuity of care and communication are improved when services are delivered at school, this has the potential to lead to overall gains in the quality of MH service delivery. The themes that emerged from this work guided how we prioritized among relevant constructs in the survey and informed our language to describe and characterize key constructs colloquially.

After we drafted the initial survey, we iteratively received input from a diverse group of stakeholders and experts to revise the survey. The stakeholders and experts engaged in this process included MH clinicians ($n = 3$), administrators ($n = 2$), consultants who regularly advise MH clinic leaders ($n = 2$), and MH services researchers and survey methodologists ($n = 7$). The engaged administrators pilot-tested the survey, and all stakeholders and experts provided input on survey items' face validity and construct validity, relative emphasis and prioritization of constructs, survey organization and layout, missing survey items, clarity, and respondent burden.

Participants

We developed our sampling frame through a multi-step process. First, we used the Substance Abuse and Mental Health Services Administration (SAMHSA) behavioral health treatment locator database (SAMHSA, 2020) to create a list of facilities in Georgia that: (1) provided outpatient MH treatment; (2) served children and adolescents; and (3) accepted Medicaid. The SAMHSA locator database includes public and private MH facilities that responded to the most recent version of the National Mental Health Services Survey (N-MHSS), and that indicated they were willing to be included in the treatment directory (SAMHSA,

2017). N-MHSS is a national survey of all known specialty public and private MH treatment facilities that provide services to those with mental illness (SAMHSA, 2018), and the SAMHSA locator database is the most comprehensive publicly available data source that provides information on the location of these facilities (SAMHSA, 2020). Next, we used information from the websites of the Georgia Association of Community Service Boards (GACSB) (Georgia Association of Community Service Boards, 2020) to supplement our initial list of facilities. GACSB is the organizational body of public MH organizations that serve twenty-five regions in Georgia. This strategy enabled us to include additional public facilities that met the inclusion criteria for the study, but were not included in the initial list derived from the SAMHSA locator database.

Using our procedure, we identified 159 MH facilities in Georgia that offered outpatient services, accepted Medicaid, and served youth (< 18 years of age); 104 (65.4%) of these facilities were publicly owned, and 55 (34.6%) were privately owned (including investor-owned and not-for-profit clinics). We then constructed a purposive sample of 60 facilities for our survey, including 40 public clinics and 20 private clinics. When selecting the public clinics from the sample, we included at least one clinic from each of the twenty-five public MH regions (i.e., Community Service Board Regions) in Georgia to ensure rich geographic diversity in our sample. We also oversampled clinics that appeared to provide school MH services based on information gathered in web searches.

Measures

All survey questions were designed to minimize respondent burden (e.g., simple, familiar language; "uncertain" option included) and maximize reliability and validity (e.g., five scale points; verbal labels divide up the continuum approximately equally) (Krosnick & Presser, 2s010).

Participation in Partnerships with Schools

We included a question to assess whether the facility had any existing partnerships with local schools to deliver MH services on school grounds (yes/no). If the respondent indicated that there was at least one existing partnership with a school, a series of subsequent questions (described below) ascertained their perspective on how these partnerships affected continuity of care, communication between relevant parties, and overall care quality, as well as the frequency of challenges that occurred.

If the respondent indicated that they did not have any partnerships with a local school, we asked them to indicate their interest in establishing school partnerships. Next, we asked hypothetical questions about how they anticipated providing school-based MH services would compare with providing in-clinic services with respect to affecting continuity of care, communication between relevant parties, and overall care quality—using a parallel question structure to those asked of facilities with at least one school partnership. Finally, we asked about specific barriers that had prevented the establishment of partnerships with schools up until the time of the survey.

Perceived Benefits of Providing MH Services in School Versus Clinic Settings

We included three 5-point Likert-scale questions, asking the respondent to rate how helpful school-based MH services are (versus clinic-based services) for: reducing the appointment no-show rate (i.e., the percentage of appointments for which the client did not arrive or cancel at least 24 h prior to the appointment), reducing gaps in treatment for youth, reducing MH treatment drop-out for youth, improving communication between MH providers and teachers, and improving communication between parents and teachers. We also asked respondents to rate, on a 5-point scale, how helpful school-based MH services are at improving the *overall quality* of MH treatment for youth. Response categories for all of these questions included: (1) not helpful at all, (2) a little helpful, (3) somewhat helpful, (4) very helpful, and (5) extremely helpful. A sixth response category was included for those who were "uncertain" about the response.

No-show Rate

We included two survey items to estimate no-show rate in the clinic setting and in the school setting in the past month.

Perceived Frequency of Challenges Related to School-Based Services

We created eight 5-point Likert-scale questions to ask respondents about the frequency with which different types of challenges occur. Four items assessed challenges related to the logistics of delivering services in the school setting: (1) private space for therapy is unavailable, (2) difficulty scheduling appointments at the school, (3) lack of cooperation from teachers hinders treatment progress for child, and (4) lack of cooperation from school administrators hinders treatment progress for child. Three items assessed challenges related to engagement in services: (1) it is difficult to communicate with caregivers about their child's MH treatment, (2) parent does not provide timely consent for treatment decisions, and (3) parent does not attend appointments when asked. The final item asked respondents how often "Youth have concerns about teasing, bullying, or other stigma if peers find out about the MH services they receive at school."

Response categories included: never, rarely, sometimes, often, and always. A sixth response category was included for those who were "uncertain" about the response.

Clinic Characteristics and Services Offered

We also asked respondents to provide key information about their clinic, including the number of full-time equivalent providers (delivering services in the clinic setting and the school setting) and demographic characteristics of the clients (age, race/ethnicity, and insurance status). Finally, we asked respondents to provide information about the types of services offered at their clinic and on school grounds.

Procedures

A member of our research team called each selected clinic to confirm their eligibility and obtain contact information for an administrator—defined as an individual with a leadership role and responsibilities related to staffing and scheduling (e.g., Clinical Director). We then invited the clinic administrator by mail and email to participate in the survey. Participants had the option to return the survey by mail or complete it online using Qualtrics (identical surveys). We obtained mailing addresses for the entire sample of 60 administrators and email addresses for 58 of them. Those who completed the survey were offered a $50 Amazon gift card to thank them for their time.

We administered the survey from July to October 2018. Of the 60 surveys that were administered, we received a total of 44 responses (response rate = 73.3%); twenty-nine (65.9%) administrators responded online, while the other fifteen (34.1%) responded by mail.

Analysis

To describe the extent to which administrators in MH clinics perceive that clinic-school partnerships can improve continuity of care, communication between relevant parties (e.g., MH clinicians and teachers), and overall care quality, we examined the distribution of the Likert-scale items that assess the perceived helpfulness of providing MH services in the school (versus clinic) setting. We also used a Student's t test to determine the statistical significance of the difference in reported no-show rates in the school versus in the clinic. Given the reduction of logistical barriers to get the child to an appointment when services were delivered on school grounds, we hypothesized that participants would report a lower no-show rate when services were delivered in the school setting than in clinic setting. To describe clinic administrator perspectives on how often several key challenges occur when establishing and delivering care through these partnerships, we examined the distribution of the Likert-scale items that assess the frequency of encountering specific challenges when delivering services in the school setting through these partnerships.

Results

Of the forty-four administrators that responded to the survey, thirty-eight (86.4%) reported that their clinic partnered with at least one local school to deliver MH services onsite at the school. Table 1 provides descriptive information about the clients that were served at the MH clinics that provide school-based services. Nearly two-fifths of respondents (39.5%) reported that more than half of clients served by the clinic were children, and nearly one-fifth of respondents (18.4%) reported that between 26 and 50% of clients were children. These clinics also served a large percentage of clients that were insured through Medicaid or uninsured. More specifically, 47.3% of respondents reported that more than 50% of their clients were enrolled in Medicaid, and 36.8% of respondents reported that more than 25% of their clients were uninsured. Lastly, the clinics in the sample served a

Table 1 Distribution of client demographics at mental health clinics with school partnerships ($n = 38$)

	Share of Clients				
	≤ 10% (%)	11–25% (%)	26–50% (%)	> 50% (%)	Missing/ uncertain (%)
Children (< 18 years) ±	13.2	21.1	18.4	39.5	7.9
Young adults (18–25 years)	36.9	31.6	23.7	0.0	7.9
Adults (≥ 26 years)	26.3	10.5	26.3	23.7	13.2
Black	13.2	10.5	15.8	42.1	18.4
Hispanic	55.3	23.7	2.6	5.3	13.2
Insured with Medicaid	5.3	7.9	31.6	47.4	7.9
Uninsured	39.5	13.2	23.7	13.2	10.5

±Row percent does not add to 100% due to rounding

racially and ethnically diverse population. More than two-fifths (42.1%) of respondents reported that the majority of their clients were Black. The clinics that partnered with a school did not differ meaningfully from those that did not with respect to any of the client demographic characteristics that we examined.

Table 2 presents descriptive information about the school-based MH services offered by the MH clinics in the analytic sample. The median number of partnerships each clinic had was 7, and the median number of full-time equivalent providers at each clinic delivering services in the school was 3. The most common type of MH service offered in schools was individual psychotherapy ($n = 84.2\%$), followed by MH screening ($n = 76.3\%$), group psychotherapy (47.4%), and family psychotherapy (44.7%); only 13.2% offered medication management on school grounds.

The majority of respondents reported that school-based MH services (compared to clinic-based services) were "very or extremely helpful" for: (1) reducing appointment no-show rates (65.8%), (2) reducing gaps in MH treatment (86.8%), and reducing MH treatment dropout among youth (73.7%) (Fig. 1). As shown in Fig. 2, the mean reported no-show rate for appointments in the clinic setting was 23.9%, while in school settings the mean no-show rate was 7.2% ($t = 6.46$, $df = 35$, $p < 0.01$).

Responses about the perceived helpfulness of school-based services (versus clinic-based services) for improving communication and overall quality were also very positive (Fig. 1). The majority of respondents reported that school-based MH services (compared to clinic-based services) were "very helpful" or "extremely helpful" for: (1) improving communication between MH providers and teachers (86.8%) and (2) improving communication between parents and teachers (60.5%). The vast majority (89.5%) of respondents reported that the delivery of services in the school setting was "very helpful" or "extremely helpful" for improving the overall quality of MH treatment for youth.

We also asked about the frequency of challenges that occurred related to family engagement in the delivery of services in school settings (Fig. 3). More than half (57.9%) of respondents said that providers "sometimes" experienced challenges communicating with parents about the child's MH treatment, and 23.7% of respondents said that these challenges occurred "often" or "always." Similarly, more than half (55.3%) of respondents reported that the providers "sometimes" experienced challenges with parent no-shows for requested appointments when services are delivered in the schools, and 34.2% of respondents said that these challenges occurred "often" or "always." Lastly, when asked about challenges obtaining timely consent for the child's treatment from the parents, 42.1% of respondents said that these challenges occurred "sometimes," and 26.3% said that they occurred "often" or "always."

Respondents also reported that challenges related to the logistics of delivering services through partnerships with schools occurred with considerable frequency (Fig. 3). For example, 63.2% of respondents reported that challenges related to scheduling appointments at the school occurred "sometimes," "often," or "always." Moreover, 42.1% of respondents reported that challenges related to the lack of availability of private space at the school occurred "sometimes," "often," or "always."

Among clinics without school partnerships ($n = 6$), five administrators "somewhat agreed" or "strongly agreed" with the statement that providers at their clinic were interested in providing MH treatment in the school. Respondents "somewhat agreed" or "strongly agreed" that their clinic did not provide school-bases services for the following reasons: (1) challenges working with the local school system ($n = 2$), (2) challenges working

Table 2 Descriptive information about school partnerships and types of services offered on school grounds by mental health clinics ($n = 38$)

	Median/%
Median number of school partnerships	7.0
Median number of FTE* providers dedicated to school-based MH services	3.0
Percentage of clinics partnering with each type of school	
Elementary school (kindergarten–5th grade)	94.7
Middle school (6th–8th grade)	89.5
High school (9th–12th grade)	89.5
Percentage of clinics offering specific services in school settings	
Screening for mental health problems	76.3
Individual psychotherapy	84.2
Group psychotherapy	47.4
Family psychotherapy	44.7
Psychotropic medication management	13.2

*FTE denotes full-time employee. For example, if a clinic has 2 employees and each one spends 20 h per week providing MH services in a school setting, the response would be 1 FTE

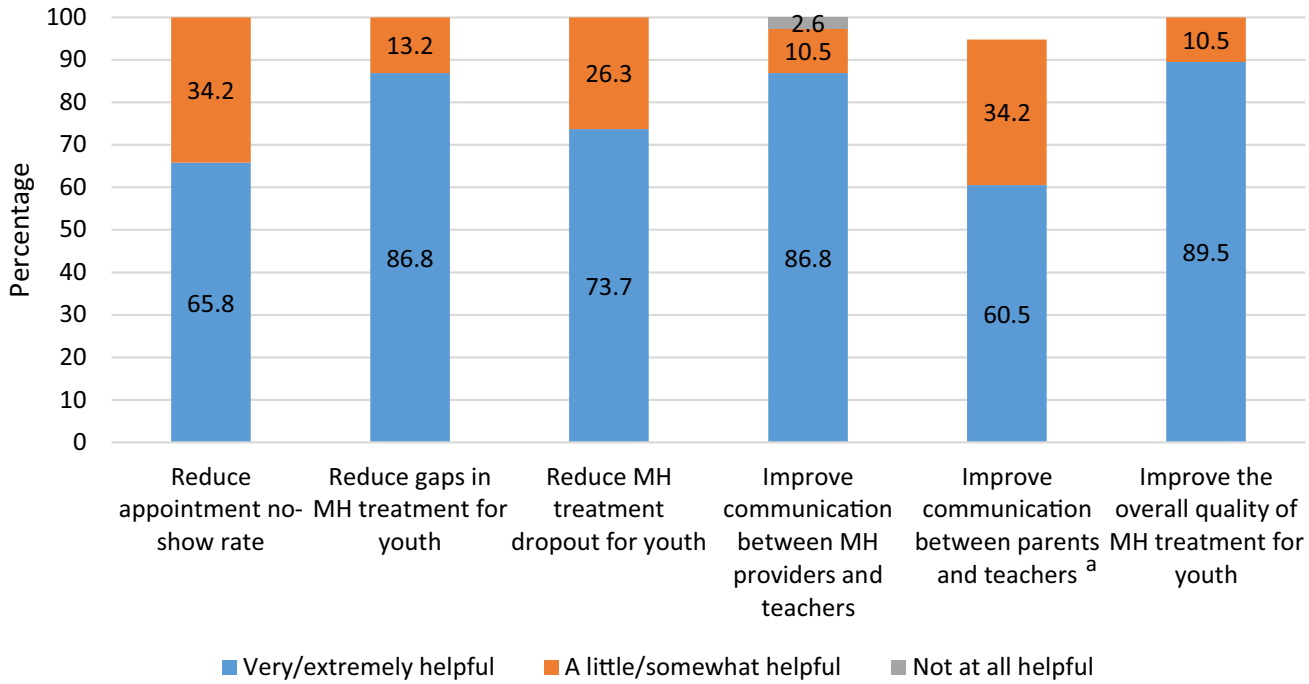

Fig. 1 Mental health clinic administrators' reports of perceived helpfulness of school-based services (compared to clinic-based services) for improving continuity and quality of mental health care among Medicaid-enrolled youth ($N=38$)

Note: We surveyed administrators at 60 mental health clinics in the state of Georgia that provided outpatient services, accepted Medicaid, and served youth (<18 years of age), and 44 (73.3%) responded to the survey. The analytic sample for Fig. 1 consists of 38 (86.4%) of the 44 respondents that reported their clinic partnered with at least one school to provide mental health services onsite at the school. Respondents were asked, "Compared to clinic-based services, please rate how helpful you think school-based MH services are at addressing the following issues." Response categories included: (1) not helpful at all, (2) a little helpful, (3) somewhat helpful, (4) very helpful, and (5) extremely helpful. A sixth response category was included for those who were "uncertain" about the response. [a]$n=2$ were missing ratings on "improve communication between parents and teachers"

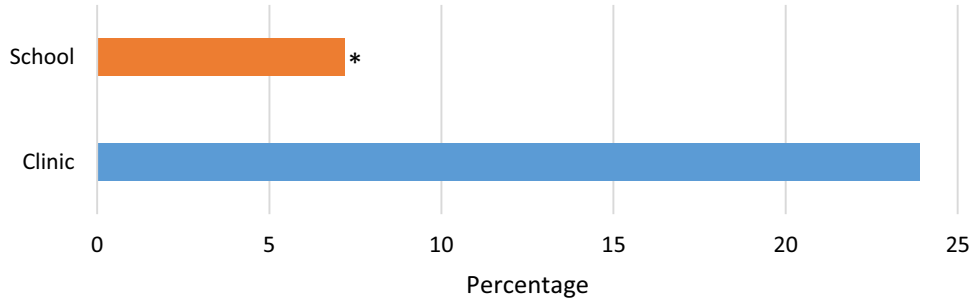

Fig. 2 Mental health clinic administrators' reports of estimated percentage of appointments for mental health services that result in a "no-show" by setting ($n=36$)

Note: We asked mental health clinic administrators to estimate the percentage of appointments that result in a "no-show" (defined as an appointment for which the client did not arrive or cancel at least 24 h prior to the appointment) in the school setting and in the clinic setting. $n=36$ (two of the 38 respondents whose clinic had at least one school partnership did not provide information about the no-show rate in the school setting). * $p<.01$ (P-value was calculated using a t-test)

with school administrators ($n=1$), (3) challenges getting reimbursed for services by Medicaid ($n=1$), and (4) challenges getting reimbursed for services by other insurers ($n=1$). Nevertheless, five of the six administrators whose clinic did not offer school-based MH services at the time of the survey responded that they *expected* MH services delivered in school settings (compared to clinic settings) to be "very helpful" or "extremely helpful" at each of: (1) reducing gaps in MH treatment, (2) reducing rates

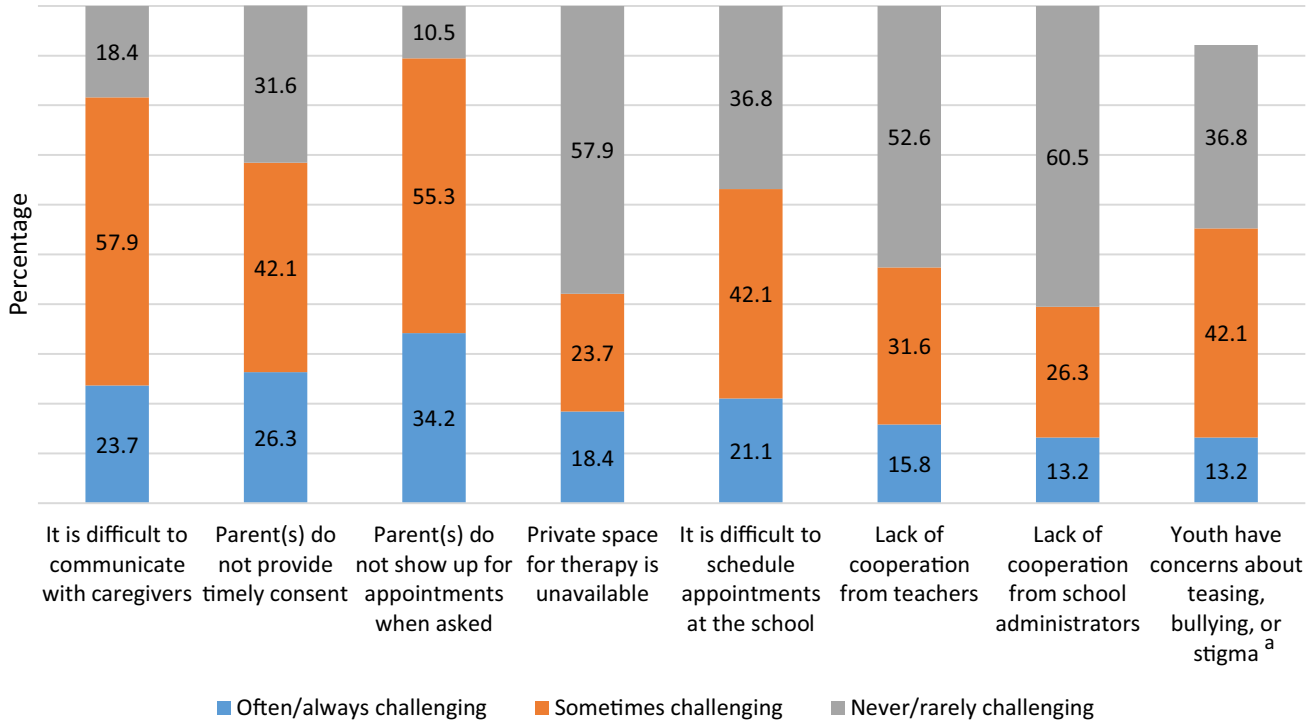

Fig. 3 Mental health clinic administrators' reports of frequency of challenges that occur when delivering services in school settings. ($N=38$)
Note: Respondents were asked, "How often do your providers encounter the following challenges when delivering school-based MH services?" Response categories included: (1) never, (2) rarely, (3) sometimes, (4) often, and (5) always. A sixth response category was included for those who were "uncertain" about the response. [a]$n=3$ were missing ratings on "youth have concerns about teasing, bullying, or other stigma"

of MH treatment dropout, (3) improving communication between parents and providers, (4) improving communication between parents and teachers, and (5) improving the overall quality of MH care.

Discussion

Findings from our survey of administrators at youth-serving outpatient MH facilities in Georgia indicated that respondents perceived a number of advantages of partnering with local schools to deliver services on school grounds. Nearly all respondents reported that school-based services were at least somewhat helpful (compared to services delivered in the clinic setting) at improving continuity of services, communication between relevant parties, and overall quality of care. Nevertheless, several key challenges related to the delivery of school-based services were also reported by respondents.

This is the first known survey to ascertain the perceived benefits of partnerships between community-based MH providers and schools from the perspective of MH organization leaders. Our work complements findings from prior research showing that teachers report "increased student access to MH programming" from these partnerships (Mellin et al., 2017). In our study, we examine more nuanced measures to capture elements related to treatment accessibility and continuity; all respondents reported that the delivery of MH services in school settings (compared to clinic settings) helped reduce appointment no-shows, reduce gaps in services, and reduce rates of treatment drop-out. In addition, 86.8% of respondents reported that in-school (versus in-clinic) services helped improve communication between MH providers and teachers, which aligns with teacher perceptions that these partnerships led to "more support for teachers" (Mellin et al., 2017). Our finding that 89.5% of respondents reported that in-school (versus in-clinic) services were very helpful or extremely helpful for improving the overall quality of MH treatment likewise aligns with teacher perceptions that these partnerships improve MH service quality (Mellin et al., 2017).

Prior research has documented high no-show rates at child and family MH clinics (Benway et al., 2003), and findings from our earlier qualitative work revealed that the reduction in appointment no-shows was one of most important advantages of in-school service delivery from the perspective of administrators and providers at MH facilities (Cummings et al., 2021). In our survey, the estimated no-show rate in

school-based settings (7.1%) was less than one-third of the estimated no-show rate for appointments in clinical settings (23.9%). When no-shows happen, it typically represents lost revenue for the facility because the insurer cannot be billed for services that were not delivered. This stark difference in no-show rates highlights the opportunity for MH facilities to enhance revenue capture if services are delivered at school. On a related note, our findings suggest that school-based services may have the potential to help therapists (whose salaries are tied to productivity) meet targets for billable hours, which could have downstream benefits of reduced provider stress and improved retention (Franco, 2015).

Even though clinic administrators perceived numerous benefits of school partnerships to deliver services on school grounds, they also reported several challenges concerning family engagement. These findings are consistent with and build on our prior qualitative research that included the perspectives of administrators and providers at MH agencies (Cummings et al., 2021). The current results indicate that between 70 and 90% of respondents reported that challenges related to consent, communication with parents, and parent no-shows at child appointments occurred sometimes, often, or always (versus never or rarely). Our findings highlight the importance of developing family-centered collaborations to enhance caregiver engagement in school MH services, which are strengths-based and empowering, and engage caregivers as partners (Anderson-Butcher & Ashton, 2004). Established frameworks for facilitating interconnected school MH such as the Interconnected Systems Framework can offer guidance for collaborating entities—including schools and community MH providers—to work with families to enhance caregiver engagement (Barrett et al., 2017). Strategies may include the provision of family support services, promoting family-to-family support by conducting multifamily support groups, and conducting empowerment interventions to improve families' self-efficacy about making a positive impact on students' MH (Barrett et al., 2017; Kratochwill & Hoagwood, 2005; Weist et al., 2019).

Clinic administrators also reported that challenges with the logistics of delivering services on school grounds—such as obtaining private space for therapy and scheduling appointments—can occur. One proactive strategy highlighted in the Interconnected Systems Framework to address issues related to logistics is to establish a memorandum of understanding (MOU) for these partnerships (Barrett et al., 2017). MOUs define the terms of the partnership and can specify details about funding, the services that the MH clinic will provide, and other roles and responsibilities of each partner (e.g., logistics related to space, scheduling, and data security) (Barrett et al., 2017). As an example, a standardized MOU for clinic-school partnerships was developed in Mississippi that can be used statewide, which includes language addressing key logistical issues such as private and confidential space, referral protocol, and internet access for therapists ("Memorandum of Understanding between School Districts and Mental Health Providers," 2020).

Notably, these data were collected in 2018 and the mix of services that were offered by the MH clinics on school grounds at this time focused most heavily on MH screening (76.3%) and individual psychotherapy (84.2%). In contrast, just over one-eighth (13.2%) of respondents reported that their facility offered medication management services on school grounds. In a model where the provider travels to the school to deliver services, it may be more cost-effective for the clinic to send therapists than prescribers (i.e., psychiatrists); prescribers typically bill Medicaid at a higher rate, and thus their time spent in transit traveling to community schools would have a greater opportunity cost (time when they cannot bill for services). During the COVID-19 pandemic, however, there was a significant increase in the use of telemental health services among youth (Racine et al., 2020; Tolou-Shams et al., 2021), which was facilitated by changes in Medicaid reimbursement policies in many states (including Georgia) (American Psychological Association, 2021; Center for Connected Health Policy, n.d.). With the option of delivering services via telehealth, it is possible that more MH clinics may have begun offering medication management services at schools. If Medicaid reimbursement for telemental health services continues, future research will be needed to understand to what extent this has affected the types of services offered at school as well as the extent to which services delivered via telehealth can substitute for or complement services delivered in-person by providers at school.

This study has several additional limitations. First, the survey was conducted using a sample of clinic administrators in Georgia, and findings may not necessarily generalize to other states. Nevertheless, investment in school MH in the three years prior to data collection helped accelerate the development of clinic-school partnerships in Georgia; thus, findings from this study may be of interest to other states that have more recently or are currently considering investments to expand this model of care delivery. A second limitation is that the small sample size does not allow for multivariable regression analysis to control for clinic- or community-level factors that may influence the estimated relationship between the provision of services in a school setting and outcome measures of interest, such as the no-show rate for appointments. A third limitation is that this survey did not include measures to assess the complexities of how the school MH services were funded (e.g., fee-for-service reimbursement from Medicaid exclusively versus the availability of other funding streams), whether clinicians provided additional services beyond those funded by Medicaid (e.g., non-reimbursable services focused on prevention or early

identification), or the extent to which the clinicians were integrated into activities and plans in the school building (e.g., co-located versus integrated MH care delivery). Lastly, caregiver, child, and school administrator perspectives are not captured in this study. These additional measures and perspectives should be explored in future work.

Notwithstanding limitations, this study provides the first known empirical data to describe MH clinic administrators' perceptions of the advantages and challenges associated with clinic-school partnerships and the delivery of services on school grounds. Our data provide insight into why administrators in the MH sector may be incentivized to seek out and enter into partnerships with schools to deliver services on school grounds—including the ability to improve continuity and quality of care for the youth they serve. However, MH clinics may experience a number of challenges to implement effective partnerships, especially pertaining to family engagement. As MH clinics continue to enter into and expand partnerships with school districts and schools, stakeholders should plan to invest the time and resources to implement evidence-based strategies to address these challenges and maximize the potential of this model of care delivery to improve continuity and quality of care for youth in need of MH services.

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Declarations

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