



Prior Authorization Policies and Preferred Drug Lists in Medicaid Plans: Stakeholder Perspectives on the Implications for Youth with ADHD

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Abstract

This qualitative study describes how Medicaid policies create challenges for the delivery and receipt of mental health treatment for low-income youth in Georgia. We conducted focus groups with caregivers of Medicaid-enrolled children with ADHD and semi-structured interviews with providers and administrators at four safety net clinics that provided mental health care to these youth. Stakeholders reported that prior authorization policies for psychosocial services, restrictiveness of preferred drug lists, and changes in preferred drug lists in Medicaid plans created barriers to treatment continuity and quality for youth with ADHD and led to more administrative burden for safety-net clinics serving these youth.

Keywords ADHD treatment · Children's mental health services · Medicaid · Safety-net · Qualitative research

Introduction

Medicaid and the Children's Health Insurance Program (CHIP) are two public programs that serve as important sources of mental health care coverage for low-income and disabled children. Approximately 2.6 million children covered by Medicaid and CHIP reported having special health care needs including one or more behavioral health problems. Total Medicaid spending for children using behavioral health services has grown in recent years, from \$19.3 billion in 2005 to \$30.2 billion in 2011 (Kaiser Family Foundation (KFF) 2017).

Medicaid covers many mandatory mental health services, including prescription drugs, physician services, and

in-patient care. States may also opt to cover additional services, such as case management and psychotherapy services (Frank et al. 2003). Children's mental health services can be particularly comprehensive due to Medicaid's Early Periodic Screening, and Diagnosis and Treatment (EPSDT) benefit. Under EPSDT, states must provide coverage for behavioral health screenings and assessments. Children diagnosed with behavioral health conditions are entitled to coverage for services to treat the condition through Medicaid (Zur et al. 2017).

Historically, Medicaid mental health services were provided on a fee-for-service basis whereby providers were paid directly for each covered service. In the past few decades, however, nearly all state Medicaid programs have enrolled beneficiaries in private managed care plans as a strategy to contain costs, particularly for enrollees with complex health care needs (National Alliance on Mental Illness (NAMI) 2011; Sparer 2012). As of June 2017, 47 states and Washington D.C. enrolled some or all child and adult Medicaid beneficiaries in managed care plans; in 2016, more than four-fifths (81.1%) of Medicaid beneficiaries in the U.S. were enrolled in managed care (Kaiser Family Foundation (KFF) 2016; Honsberger and VanLandeghem 2017). Managed care organizations (MCOs) employ a combination of methods to monitor and control utilization of services and contain costs, including prior authorization, utilization review, provider profiling, and pharmaceutical management strategies (Raghavan et al. 2008; Sparer 2012; Lieberman et al. 2016;

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Young and Garfield 2018). For mental health services, these methods most often include controlling access to medications through preferred drug lists (PDLs) and requiring prior authorization of services (Shi and Singh 2014).

In states that implement Medicaid benefits through private MCOs, there may be variation in how benefits are implemented across plans and whether certain health plans require prior authorization, a common practice for mental health services. Prior authorization requires a clinician to provide additional information to the MCO for the purpose of ensuring eligibility, benefit coverage, medical necessity, location, and appropriateness of services (Centers for Medicare and Medicaid Services (CMS) 2016). Prior authorization may be required before commencing a specific type of service, or when the allowable number of services within a certain timeframe has already been received. Mental health services that may be subjected to prior authorization include case management, in-patient psychiatric care, outpatient psychotherapy, and services provided by paraprofessional providers (Hulkower et al. 2017).

Medicaid MCOs also have significant flexibility to control beneficiaries' access to prescription drugs, which they can do by imposing limits on the minimum or maximum quantities of a prescription or on the number of refills. Medicaid plans can also create preferred drug lists (PDLs), which identify drugs that are covered by the Medicaid plan without the need for prior authorization—thereby restricting access to certain types of drugs or drug classes (Ovsag et al. 2008; National Conference of State Legislatures (NCSL) 2011). Finally, states are permitted to impose cost-sharing and premiums on enrollees with incomes at 150% of the federal poverty level, including children and adults (Lilienfeld 2016; MACPAC 2017).

When examining the implications of managed care enrollment for mental health service utilization among Medicaid-enrolled youth with mental health problems, evidence has been mixed. Some studies have reported that shifts to managed care have been associated with increased utilization of specific mental health related services, including case management (Tai et al. 2018; Saunders and Heflinger 2003, 2004; Ruble et al. 2005), prescription psychiatric medication (Saloner et al. 2014; Ruble et al. 2005), and medication monitoring (Saunders and Heflinger 2003, 2004). In addition, there is evidence to suggest that Medicaid managed care enrollment of children has led to overall mental health care cost savings (Turner 2015; Hutchinson and Foster 2003; Norton et al. 1997; Catalano et al. 2000) as well as reductions of inpatient psychiatric care through shifts to outpatient and community based mental health services (Raghavan et al. 2006; Burns et al. 1999; Nicholson et al. 1996, 1998).

However, a number of studies have observed barriers to care for children in Medicaid managed care arrangements. Findings suggest that moving children from traditional

fee-for-service or primary care case management programs to managed care plans is associated with reduced access to psychiatric or prescription medications (Cook et al. 2004; Davidoff et al. 2007; Ruble et al. 2005; Ali et al. 2019; Turner 2015), traditional and day outpatient services (Brannan and Heflinger 2005; Heflinger et al. 2004), and care support services (Brannan and Heflinger 2005). Another negative consequence that has been observed from enrollment in Medicaid managed care programs for children with mental health needs is increased hospital readmission rates (Callahan et al. 1995).

Previous research has also revealed that shifting from FFS to managed care can have adverse effects on providers. Studies suggest that this change has decreased provider satisfaction while increasing administrative burden and financial costs for providers (Callahan, et al. 1995; Gordon et al. 2018). In response, providers may alter their treatment behavior, such as spending less time with capitated patients (Melichar 2009).

As noted, previous quantitative research has provided important insight into the complexities of delivering mental health services to children under Medicaid managed care arrangements. These studies have provided mixed findings regarding the impact of Medicaid managed care on access to and quality of child and adolescent mental health services. This current study uses qualitative data collected at four-safety net clinics in Georgia to examine in more detail the challenges created by Medicaid prior authorization requirements and formularies on the treatment seeking experiences for children receiving care for ADHD. We also describe the impact of these policies on the safety-net providers from whom they sought treatment.

Methods

Study Context

The findings from this analysis come from a qualitative study that was conducted as part of a larger mixed-methods research project aimed at understanding and improving care for Medicaid-enrolled children who seek mental health treatment at safety-net clinics. According to the Institute of Medicine (IOM), safety net providers are those that “organize and deliver a significant level of health care and other health-related services to uninsured, Medicaid, and other vulnerable patients” (Lewin and Altman 2000).

The broader project included a focus on youth with attention-deficit hyperactivity disorder (ADHD), which is prevalent among children and adolescents (Merikangas et al. 2010). The first (quantitative) research aim used Medicaid data from nine states to examine ADHD treatment continuity and quality among Medicaid-enrolled children (Cummings

et al. 2017; Ji et al. 2018). Findings indicated that care continuity for youth initiating ADHD medication is poor, as three-fifths of the youth discontinued medication and nearly half disengaged from treatment during the 10-month follow-up period. Furthermore, of those that initiated and continued medication, nearly two-fifths did not receive minimally adequate follow-up care (a performance measure assessed by the National Committee for Quality Assurance) (Cummins et al. 2017).

Following the quantitative analysis, the objective of the broader qualitative study was to explore in more depth the challenges highlighted by the quantitative study of treatment continuity and quality among children with ADHD who seek mental health treatment in safety-net clinics by including the perspectives of caregivers, providers, and safety-net administrators in Georgia. Georgia was selected as an important case for this study for several reasons. First, Georgia is a large state and has a high percentage of children living in poverty, with the eleventh highest percentage living in poverty among all 50 U.S. states (Children's Defense Fund 2018). Second, Georgia has a diverse population with respect to its racial and ethnic composition, and race/ethnicity was a construct that was a focus of other analyses from the main project. Lastly, almost all low-income youth served by Medicaid are enrolled in a managed care plan since Georgia instituted mandatory enrollment in 2006 (Centers for Medicare and Medicaid Services (CMS) 2014).

Using data from the qualitative study, this paper focuses on findings that emerged for two components of Medicaid-related policy—prior authorization of psychosocial services and formularies across Medicaid plans. We focused on these two issues because of the strength of the findings, as well as the salience of the findings for the overall objectives of the main project (i.e., elucidating correlates of treatment continuity and quality among children with ADHD who seek care in safety-net clinics; and identifying modifiable factors that can improve the quality of mental health (MH) services for this population).

Study Design

This study used a mix of qualitative methods including caregiver focus groups and provider and administrator interviews to explore barriers and facilitators of the provision and receipt of mental health treatment among youth with ADHD who seek care from safety net providers in Georgia.

Data Collection and Recruitment

This study received approval from the Emory University Institutional Review Board. We held five focus groups with parents and grandparents of children enrolled in Georgia's Medicaid and Children's Health Insurance Program

(CHIP) to obtain their input about barriers and facilitators for youth who seek ADHD treatment in safety-net clinics in Georgia. Semi-structured interviews were conducted with mental health care providers and clinic administrators from safety-net clinics who serve Medicaid-enrolled children with ADHD. These interviews captured informants' clinical and organizational perspectives about serving Medicaid-enrolled youth with mental health care needs.

Four safety-net clinics from three geographically diverse regions of Georgia participated in this study, including three specialty mental health clinics (public and private) and one federally qualified health center (FQHC). Several criteria were used to select the four clinics. First, we selected clinics that provide mental health treatment to the target population and for which the majority of clients were Medicaid-enrolled youth. Second, we selected clinics to obtain variation in service delivery (specialty mental health versus primary care). Third, we selected clinics to achieve racial/ethnic diversity in the study sample. Fourth, we wanted to obtain key stakeholder perspectives in urban and rural settings, and in multiple regions of Georgia. Finally, we selected clinics with sufficient patient volume (i.e., Medicaid-enrolled children receiving mental health services) to allow for successful recruitment of the caregiver focus groups. All four clinics provided psychotropic medication management services as well as psychosocial services for the youth they served. The specialty mental health clinics offered a greater array of psychosocial services and had more staffing to deliver these services than the FQHC.

Focus Groups

Recruitment for the focus groups was conducted with the assistance of staff from the participating safety-net clinics. Clinic staff posted fliers in their waiting rooms to advertise the focus groups and shared fliers with potential participants. Interested caregivers called or emailed research staff to be screened for eligibility. Study team members screened individuals using the following criteria: (1) take care of a child enrolled in Medicaid or CHIP who has received treatment for ADHD for at least 2 months at the safety-net clinic; (2) able to provide informed consent; and (3) able to understand and participate in a focus group in English. If the caregiver had more than one child that had received ADHD treatment at the clinic for at least 2 months, we asked them to provide us with information about their oldest child receiving ADHD treatment at the clinic. The focus groups took place at the clinics both during and after business hours, and two of the five focus groups were held at one safety-net clinic (including the pilot focus group and one additional focus group). Participants completed a brief demographic questionnaire

Table 1 Pre-interview survey results^a

Challenge	Mean score (SD)	Not at all challenging %	A little or somewhat challenging %	Very or extremely challenging %
Appointment no-shows and/or premature treatment termination	4.2 (0.8)	0.0	11.8	88.2
Medicaid/government policies	3.2 (1.1)	5.9	58.8	35.3
Insufficient resources	2.9 (1.4)	17.6	41.1	41.1
Referral and/or coordination of services with providers outside the clinic	2.5 (1.3)	29.4	47.1	23.5
Coordination of services with agencies outside the clinic	2.5 (1.1)	17.6	70.6	11.8
Staffing (i.e. turnover, recruitment)	2.4 (1.0)	17.6	64.7	17.6
Workplace climate (e.g. stress due to workload) ^b	2.4 (1.1)	25.0	50.0	25.0
Office Space	2.1 (0.9)	29.4	64.7	5.9
Coordination of care among providers within clinic	2.1 (0.9)	29.4	64.7	5.9
Computer Systems	1.8 (1.0)	52.9	41.2	5.9

^aOn a pre-interview survey, providers and administrators (N = 17) were each given a list of challenges and asked to rate their perception of the difficulty of each challenge in regards to providing treatment for children with ADHD on public insurance. Possible responses ranged from (1) “not at all challenging” to (5) “extremely challenging.” Higher scores indicate higher perceived difficulty of the challenge. This table provides the mean score of each challenge, along with the number and percent of participants that believed the challenge was either: (1) “not at all challenging,” (2) “a little challenging” or “somewhat challenging,” or (3) “very challenging” or “extremely challenging.”

^bAnswer provided by N = 16 respondents

and provided written consent prior to the start of the focus groups.

The questions and constructs in the data collection instruments were informed by our conceptual model for the broader mixed methods project that drew on components of the Behavioral Model of Healthcare Utilization and the MacArthur model described below (Andersen and Davidson 2001; Schoenwald et al. 2008). Focus group discussions addressed the following major topics: (1) barriers and facilitators of ADHD treatment for the child and family at multiple levels (i.e., child, caregiver, provider, clinic, and policy levels); (2) experience with school-based mental health treatment; and (3) perspectives on mobile technology use for ADHD treatment. Each focus group lasted approximately 2 h and was facilitated by one of two senior researchers trained in focus group methodology (JC and SB). Participants received a \$40 gift card at the end of each focus group.

Interviews

Recruitment for the interviews was conducted with the assistance of administrators from each of the four participating safety-net clinics. To ensure a broad range of experiences and expertise, we sought participation from physicians (psychiatry and primary care), nurses, therapists, and other clinic support staff (i.e., paraprofessional provider and social worker). Administrators provided the research team with the contact information for at least one physician and at least three other providers at each clinic. Recruitment for these informants occurred primarily by email.

Informants completed a pre-interview survey that was emailed to them approximately 1 week prior to the interview. The survey included questions about their perspectives on the challenges associated with delivering treatment to this population. Each provider was given a list of challenges and asked to rate their perception of the difficulty of each challenge in regards to providing treatment for children with ADHD on public insurance. This list was generated by drawing on the preliminary conceptual framework for the overarching mixed methods study described above, as well as prior literature (Palinkas et al. 2008; Hurlburt et al. 2004; Schoenwald et al. 2008). Possible responses ranged from (1) “not at all challenging” to (5) “extremely challenging.” Higher scores indicate higher perceived difficulty of the challenge. Table 1 provides the mean score of each challenge, along with the number and percent of participants that believed the challenge was either: (1) “not at all challenging,” (2) “a little challenging” or “somewhat challenging,” or (3) “very challenging” or “extremely challenging.” Based on these results, Medicaid/government policies was designated as the second most difficult challenge, with a mean score of 3.2.

Before each interview began, informants provided verbal informed consent and completed a written questionnaire that addressed their demographics, professional background, education, current work responsibilities, and experience serving low-income publicly insured youth. Interviews were conducted by telephone and lasted between 30 min and 1 h. Participants were emailed a \$50 electronic gift card after the completion of each interview. Interviews addressed several major topics, including (1) perceived barriers and facilitators

for caregivers helping their child receive ADHD treatment; (2) providers' challenges to providing high quality MH services (informed by the pre-interview questionnaire), strategies for overcoming these challenges, and suggestions for policy changes; (3) school-based mental health treatment; and (4) mobile technology use and preference for ADHD treatment. We used information from the pre-interview questionnaire to inform which challenges for the provision mental health services to this population we discussed during the in-depth interview (prioritizing those challenges with the highest scores). We discussed between three and five of the topics included in the questionnaire (time-permitting). We asked about challenges, strategies, and recommendations related to Medicaid/government policies in all 17 semi-structured interviews, as it was one of the most highly ranked challenges by participants.

Participants

A total of 37 caregivers participated in the five focus groups. Four administrators and 13 health care providers at the four safety-net clinics participated in key informant interviews. Table 2 illustrates the characteristics of all study participants.

A majority (91.9%) of caregivers were mothers or grandmothers. Most participants were over the age of 40 (59.4%) and were African American (56.7%). About one third had a high school degree or less (37.8%). About half of the parents or grandparents (48.6%) had children under the age of 12 who sought treatment for ADHD at one of the four safety-net clinics. Participants reported a range in age of their oldest children/grandchildren who sought ADHD treatment (from ages 4 to 17), and most reported that their children also had various co-morbidities, including depression, bipolar disorder, autism, and obsessive compulsive disorder. Approximately 35.1% of caregivers reported that their child had one co-morbid MH condition, and 37.8% reported that their child had two or more MH co-morbid conditions. Nearly nine-tenths of the caregivers' children were receiving medication, and 78.4% were receiving some type of individual psychotherapy services at the clinic for their mental health problems. For the children represented in this study, approximately 73.0% were covered by one of three Medicaid managed care plans, known in Georgia as Care Management Organizations, or CMOs, while 10.8% were covered under fee-for-service (FFS) Medicaid due to disability. We were unable to confirm the type of Medicaid coverage of approximately 16.2% of the children.

The key informants included physicians (primary care and psychiatry), nurses, therapists, and other clinic staff (social worker and paraprofessional). A majority (82.4%) were women, non-Hispanic white (58.8%), and had a master's or doctorate degree (76.4%). Almost half of the

informants (47%) were over the age of 40, and one-third (35.3%) had been in their current position for at least 3 years.

Data Analysis

All focus groups and informant interviews were audio recorded and transcribed to ensure that the information was complete and accurate. We removed all identifying information from the transcripts including participant names, clinics, and health care providers. Detailed notes taken from each focus group and informant interview were used to augment the analysis. Transcripts were coded using MAXQDA, a software program that facilitates qualitative data and management (MAXQDA 2018).

We used a directed content approach (Hsieh and Shannon 2005) whereby the research questions and conceptual frameworks guided our analysis. To inform our analysis, we drew upon the preliminary conceptual frameworks that had been created for the broader mixed methods study. First, we drew upon several components of the Behavioral Model of Healthcare Utilization when analyzing the data. More specifically, this conceptual framework describes how two components of health behaviors—including the *process of medical care* and the *use of personal health services*—are a function of predisposing, enabling, and need-related factors at the individual- and contextual-levels. It is worth noting that we leveraged a more recent iteration of the Behavioral Model of Healthcare Utilization (published in 2001), which includes *process of medical care* as a sub-construct under “*health behaviors*”; this sub-construct is defined as the behaviors of providers who interact with clients, which can include clinical assessment, treatment recommendations, and prescribing patterns (Andersen and Davidson 2001). Our analysis also leveraged several *enabling characteristics* defined in this framework at the contextual level, including health policies and the organization of care delivery, as well as individual-level characteristics including insurance coverage, and family financial resources (Andersen and Davidson 2001). These *enabling characteristics* interact with *need characteristics*, identified largely as high mental health care needs and ADHD health symptoms, which influence *health behaviors* (including the process of medical care and the use of health services) of low-income youth with ADHD. In addition, we also drew upon the conceptual framework from MacArthur research network on youth mental health child system and treatment enhancement projects (ChildSTEPs). This conceptual model highlights how a clinic is influenced by the broader child mental health service system, which includes health policies related to financing structures and regulations at multiple levels. Within a clinic, characteristics of the organization, providers, and child and family influence the treatment offered to clients (Schoenwald et al. 2008).

Table 2 Participant characteristics

	Administrators and providers (N=17)	Caregivers (N=37)
Participant characteristics		
Female (%)	82.4	91.9
Age of participant \geq 40 years old (%) ^a	47.1	59.4
Race (%)		
White	58.8	43.2
African American	29.4	56.7
Asian	11.8	–
Education (%)		
High school degree or less	–	37.8
Some college	5.9	35.1
College degree	17.6	27.0
Master's or doctorate degree	76.4	–
Length of time in position (%)		
< 1 year	35.3	–
1 to < 3 years	29.4	–
3+ years	35.3	–
Child characteristics		
Number of children in household who receive ADHD treatment (%)		
1 child	–	83.8
2+ children	–	16.2
Age of oldest child receiving ADHD treatment (%)		
< 12	–	48.6
12–17	–	51.4
Medicaid plan enrollment (%)		
Managed care	–	73.0
Fee-for-service (FFS)	–	10.8
Unknown	–	16.2
Comorbidities reported (%)		
None	–	27.0
1 co-morbid MH condition	–	35.1
2+ co-morbid MH conditions	–	37.8
Types of treatment received by oldest child (%) ^b		
Medication	–	89.2
Individual therapy	–	78.4
Family therapy	–	27.0
Group therapy	–	13.5

^a52.9% of administrators and providers were < 40 years of age; 32.4% of caregivers reported that they were < 40 years of age, and 8.1% of caregivers had missing information on age

^bThese categories are not mutually exclusive

Using a team-based strategy, two research team members applied codes to the transcript line by line. (MacQueen et al. 1998). Coded lines were grouped to form inductively derived themes. The coders met regularly with a lead analyst to review emerging themes for the development of a codebook each for the focus groups and informant interviews. Coding discrepancies were discussed among the team and

modifications were made to the codebook. This iterative process helped enhance intercoder reliability and led to a well-defined codebook (Guest and MacQueen 2008). The dependability of the findings in the study were established by the transparent coding process and intercoder verification of 90%.

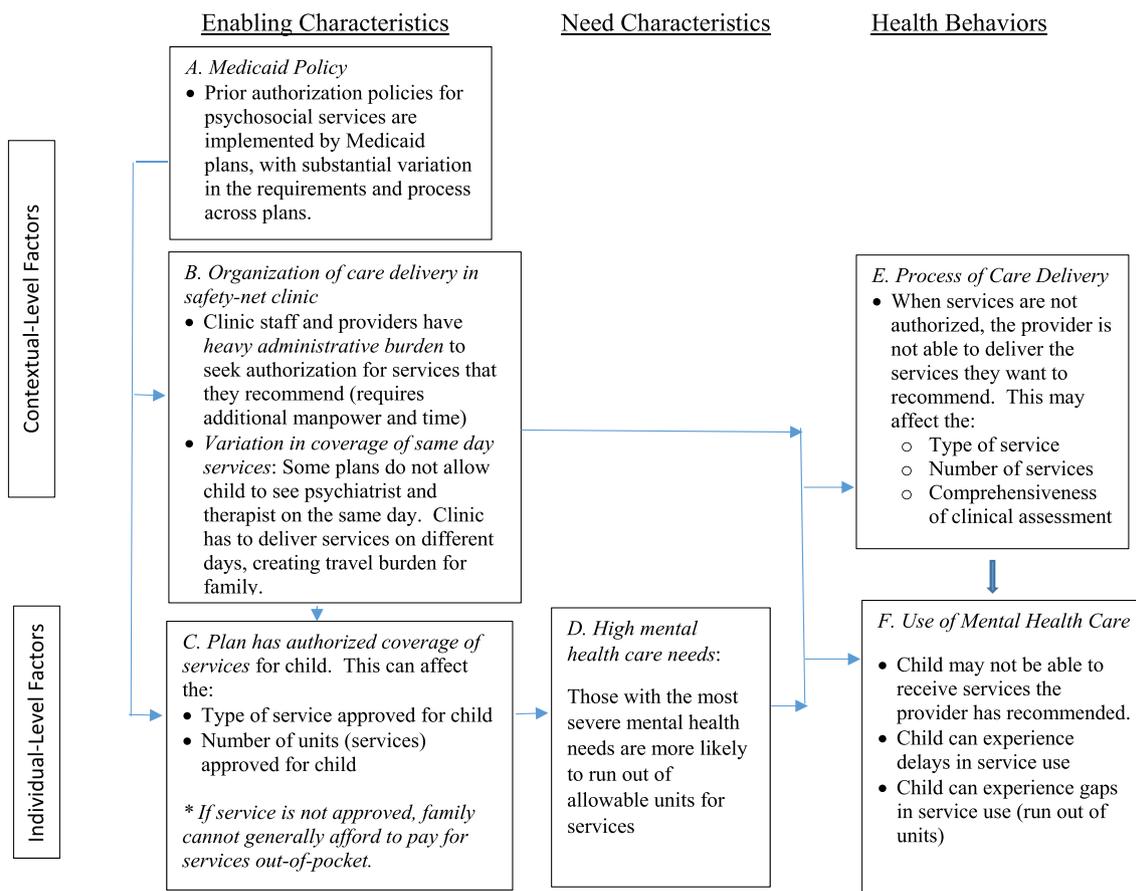


Fig. 1 Prior authorization policies in Medicaid plans creates challenges for the delivery and receipt of psychosocial services among youth with ADHD

Results

Two major themes emerged from our analysis of the focus group and interview data. The first theme addresses how prior authorization policies create challenges for the delivery and receipt of psychotherapy services to children, as well as challenges for health care clinics related to administrative burden. The second theme addresses how the restrictiveness and changes in PDLs over time in Medicaid plans create challenges for the delivery and receipt of ADHD medication and additional challenges for safety-net clinics. These themes build upon our previous quantitative work by helping to explain how Medicaid managed care policies create challenges in the receipt of and continuity of mental health treatment for low-income youth with ADHD.

Theme 1: Prior Authorization Processes Create Challenges for the Delivery and Receipt of Psychosocial Services for Children, As Well As Challenges for Safety-net Clinics

In Georgia’s Medicaid program, prior authorization requirements differ across managed care organizations (MCOs) and the fee-for-service program and by type of services (e.g., individual psychotherapy versus paraprofessional services). A provider seeking prior authorization for a child who is enrolled in fee-for-service Medicaid must submit requests directly to the Georgia Department of Community Health (DCH). A provider seeking prior authorization for a child enrolled in an MCO must submit requests directly to the health plan. In addition, each of these organizations have unique standards for service authorization, which in turn can affect care, the frequency or number of therapy units authorized, and even whether psychiatrist visits and therapy services can be provided on the same day.

Challenges for the Delivery and Receipt of Psychosocial Services for Children

Key informants reported how challenges related to the *prior authorization process* (a contextual-level enabling factor) have implications for the *process of service delivery* and the *use of psychosocial services* by the child (See Fig. 1, boxes a, e, and f). When a recommended psychosocial service requires prior authorization and has not yet been authorized (either due to the length of time of the prior authorization process or a denial of the prior authorization request), this creates a disconnect between the psychosocial service the clinician has recommended and the services that can be received by the child. This disconnect is especially pronounced for children insured through the Medicaid program because their caregivers typically do not have the financial resources to pay for services out-of-pocket if the *service is not covered by their Medicaid plan* (an individual-level enabling factor; See Fig. 1, box c). Potential consequences of this disconnect are explained by an administrator:

Really what I mean by that is sometimes just the authorizations process. There are services that we'd like to put in place for a child. The process can be rigorous at times where we have to go through prior authorization or approval for a service. Sometimes we receive very few units or allowable sessions for those services to take place. Other times we're flat out denied. (Administrator)

Several key informants also described how treatment delays could arise from difficulties with the prior authorization process. An administrator at another clinic explained:

Some of these authorizations—[Plan X] has up to two weeks. I mean, two weeks of work days. That's actually three weeks before I can get approval on you, to see you... (Administrator)

A few key informants described how challenges related to the authorization of clinical assessments created a disconnect between the quality of care they wanted to deliver to the child and what they were actually able to provide. These individuals spoke about how a limited number of "units" allocated to conduct clinical assessments, and/or restrictions on the frequency with which comprehensive assessments could occur in a given year created challenges for the development a treatment plan for the child. One provider explained:

[Plan X] doesn't provide enough units for us to do a comprehensive assessment, which then doesn't allow us to make effective recommendations. (Provider 1)

Focus group participants described their role as an advocate for their child when navigating the prior authorization

process, as they worked to bridge the disconnect between the services they *perceived* their child needed and the services that had been *authorized* for coverage by the plan. One caregiver described:

That's basically, I guess, my main thing is getting Medicaid to approve things that me, as his grandmother, I know he needs. They don't live with him every day. I know when a problem's coming up, and it's like they're sittin' up there—and I guess, probably, everybody says this—they don't know you. You're just a piece of paper..... This is my child. I have to live with him every day, and I just feel like Medicaid probably needs to work on some stuff, not just transportation. They need to work on the services that they offer children because these children are going out in the world, and they're gonna be unprepared, and then the world's not gonna treat them the way that we do. (Caregiver)

Several key informants described how the prior authorization process was especially problematic for children with *high mental health care needs* (i.e., individual-level need related factor; See Fig. 1, box d). In some instances, youth with more severe needs may "run out" of the allotted units for psychosocial services more quickly. As explained by one administrator:

Unfortunately, if we have a high-intensity kid, which definitely happens, we go through the allowed units for therapy or doctor or whatever we've received. We go through those units faster than six months, because of the high-intensity kid. We have to see them sometimes twice a week. We go through them, let's say, in four months, and we can't go any further until we do the whole process again and get it re-authorized. (Administrator)

Another issue that was discussed for youth with *high mental health care needs* is that providers may want to put in place services provided by a community support individual (CSI). In Georgia, CSIs are paraprofessional providers that provide support and resource coordination between the family and mental health providers (GCPSP, nd). However, several key informants described how the prior authorization process for these services can be especially challenging. One provider described the challenges with the prior authorization of CSI services, and the implications for treatment progress and continuity for a child that needs these services:

If we could apply for our CSI units at the beginning and do therapy and CSI immediately, like if I saw them one day and then the CSI could go out and see them the next day, we could most likely keep them in therapy and hopefully get them on medication and get them back in school and help them. We can't do that

because it's a process. It takes weeks sometimes before we know if they are even eligible for CSI, if they're gonna have enough units for them to be able to be seen by the CSI. Usually by that time we may not even have them in our system anymore. They may have already dropped out. (Provider)

Additional Challenges for Safety-net Clinics

In addition to the disconnect between the services the providers recommend for a child and what the child can receive, our findings also indicate that the prior authorization requirements in Georgia during the study period had additional consequences for mental health clinics and their providers. Each of the four clinic administrators described the heavy workload their clinic faces when complying with managed care plans' prior authorization requirements. This administrative burden is amplified by the variation in requirements and processes to obtain prior authorization across the Medicaid plans. This administrative burden has a direct impact on the *organization of care delivery at the health care clinic* (Fig. 1, box b)—due to the manpower and time required to complete these requirements. One administrator explained:

I have a clinician who part of her job duties and responsibilities is dedicated to the completion of all the authorizations for this department. We had to put that in place because it was just simply something that became a problem with denials not being worked and those kinds of things. We put a procedure in place which has helped tremendously. We now have a fairly smooth flowing system. (Administrator)

An administrator at a different clinic described how challenges with the administrative burden have downstream implications with care delivery, due to mistakes leading to prior authorization denials and subsequent delays in treatment.

It's a state process, but every CMO has their own little rules. They all have rules. [...] That holds up the process, too. Let's face it, you get therapists who are supposed to be doing therapy, and here they are magnets for paperwork. They're having to try to figure out which one is it, which one do I do, did I do this one right, did I not do the right—and they're wrong a lot of the time, because there's too much paperwork to try to keep up with. Then they get sent back to us, which is holding up treatment that much further. (Administrator)

Several providers echoed the administrators' concerns about the amount of paperwork and other documentation requirements they must follow to adhere to the processes

for authorization of services. One therapist explained the difference between the documentation requirements for private and public insurance, and how time spent on paperwork requirements for public insurance is not reimbursed by the managed care plan or Medicaid.

My private insurance clients, I can document on them in five minutes... If my clients have public insurance, after they leave, during assessment after they leave, it probably takes me three hours to complete all the necessary documentation. Every so many weeks I have to spend a couple hours doing all the requesting more authorizations, updating information that's already been given to the insurance provider. It's a huge time commitment difference, none of which is paid for. (Provider)

A couple of participants provided an example as to how variation in another dimension of *service authorization* had implications for the *organization of care delivery* at the clinic. A provider explained that there were plans that did not allow physician visits and psychotherapy sessions to be billed on the same day (Fig. 1, box b). This requirement created logistical challenges for caregivers to make separate office visits for their child. One caregiver explained:

We had an appointment to see the therapist and the doctor the same day. Then they said, "Oh, we made a mistake." Because you can't bill insurance for both on the same day. My daughter was really upset. They figured out somethin' so they could still see her cuz she was about to spaz out up there. I thought oh Jesus. (Caregiver)

Theme 2: PDL Restrictiveness and Changes in PDLs Over Time Create Challenges for the Delivery and Receipt of ADHD Medication, and Additional Challenges for Safety-net Clinics

In Georgia's Medicaid program, there is a preferred drug list (i.e., formulary) for Medicaid FFS beneficiaries, which is updated monthly (Georgia Department of Community Health (GDCH) 2018). All three of Georgia's Medicaid managed care plans in operation at the time of the study established their own formulary processes and criteria (Georgia Department of Community Health (GDCH) 2013). Prior authorization policies for mental health prescription drugs also differ between FFS and managed care enrollees. Our findings suggest that PDL restrictiveness and changes in PDLs over time can have serious implications for the child's mental health treatment, as well as for the safety-net clinics and providers serving these children.

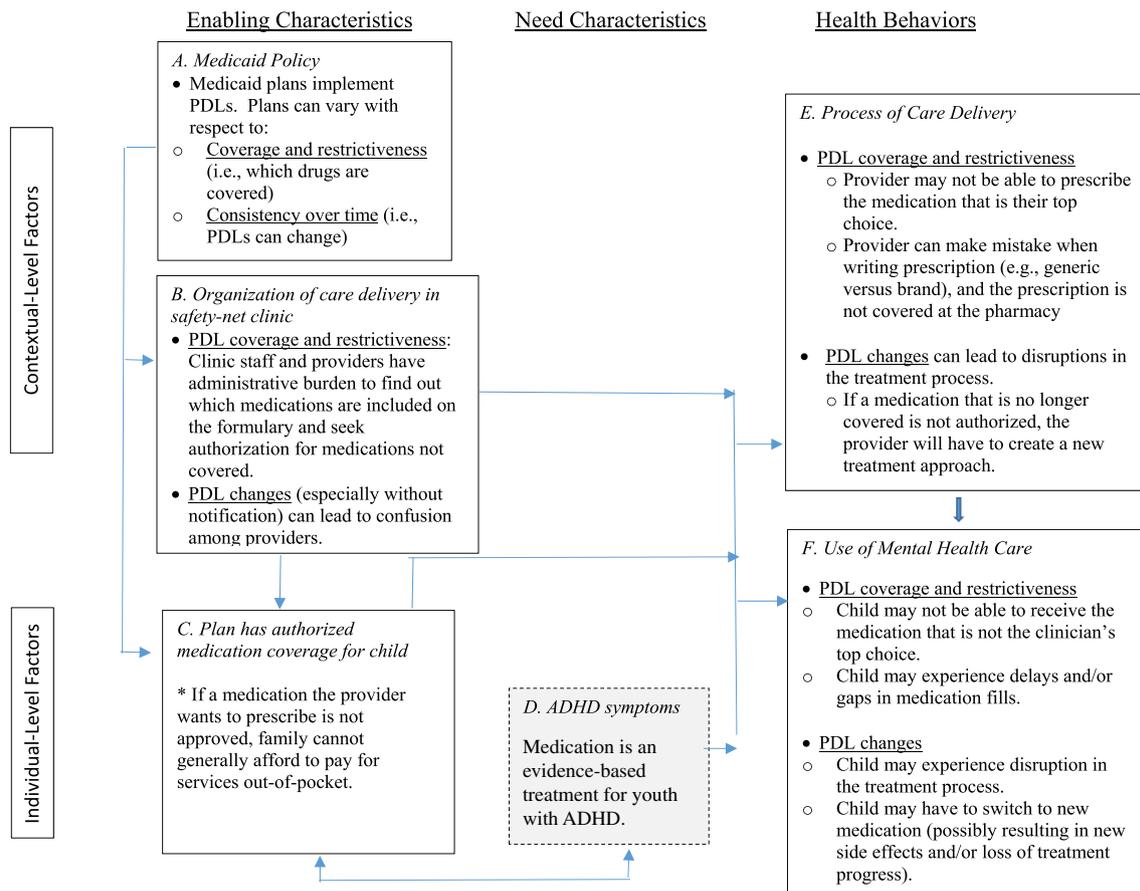


Fig. 2 Use of PDLs in Medicaid plans creates challenges for the delivery and receipt of medication among youth with ADHD

Challenges for the Process of Care Delivery and Receipt of Medication for Children with ADHD

PDL Coverage and Restrictiveness The restrictiveness of health plan PDLs (contextual-enabling factor; See Fig. 2, box a) has implications for children's mental health care treatment. Notably, medication is an evidence-based treatment for youth with ADHD (need-related factor; Fig. 2, box d) (American Academy of Pediatrics (AAP) 2011). Several caregivers across three focus groups and more than half of key informants discussed challenges associated with PDL restrictiveness. If a medication is not covered on the PDL (Fig. 2, box c), the provider must seek authorization from the plan to have it covered. If, however, a medication is not included on a PDL and it is not authorized for coverage, the child will typically have to use a different medication because families cannot afford the out-of-pocket costs of a medication that is not covered by the plan. Several providers and one caregiver described the financial burden for families if a preferred medication was not covered on the formulary.

When I went to get my son's Vyvanse the other day, insurance wouldn't pay for it. Every so often, they have to do a recertification. [...] Then to pay out of pocket, it's ridiculous. I work six days a week just to make ends meet and barely have enough left over for anything else, certainly can't pay for a \$300.00 prescription. (Caregiver)

A major consequence of PDL coverage and restrictiveness for the *process of care delivery* and the *use of mental health care* (Fig. 2, box e and f) is that the child may not be able to receive the medication the provider wants to prescribe given the child's clinical indications and/or family circumstances. One provider offered an example:

Another challenge is that they don't pay for the non-stimulant option unless you fail two other medications and then do a prior authorization, which is, again, arduous and doesn't make much sense, considering there is some patients you don't wanna put on stimulants for either physical reasons, or the parent may be a substance abuser. There's only one non-stimulant that

is shown to really help with attention, and they don't wanna pay for it. (Provider)

Two caregivers from one focus group described another potential consequence of PDL coverage and restrictiveness for the *process of care delivery* (Fig. 2, box e): providers can make a mistake and write a prescription for a medication that is not covered by the plan.

Oh, I have had a problem with all. My daughter medicine—she, the doctor always write her a prescription that her insurance don't cover. I have to keep comin' back, keep comin' back get another prescription from the doctor. (Caregiver 1)

Sometimes it's the way that they write it. If they write the generic name or if they write the brand name then the pharmacy won't fill it unless it's one or the other. (Caregiver 2)

A provider provided some perspective on trying to navigate the differences across the PDLs.

There are formulary medications, but it is different for each insurance company, so it's hard to remember which one does—covers which. And then you've got them all sitting in front of you and you've got a 30 or 45, 50 min appointment based on whether they're new or follow up or whatever, to be able to take that time to go back and look and see which insurance company they are and then what their coverages are, can provide some challenges. (Provider)

Several caregivers described another consequence for the *use of mental health care* (Fig. 2, box f) associated with PDL restrictiveness: delays in having prescriptions filled. Caregivers offered several reasons for these delays, including challenges coordinating with the clinic and pharmacy if a child's medication needed to be re-authorized as well challenges that occur when providers write prescriptions for medications that were not included on the formulary (resulting in extra trips to the pharmacy). One caregiver explained:

I just think it's a problem just the system, how it actually works. If they could come up with a better way for us to call and be able to get our medication for our kids [...] the process that they got going on, as far as us getting the medicine in a timely manner. (Caregiver)

Clinic staff also observed certain challenges that caregivers face when trying to get medications filled in a timely manner for their child. One administrator attributed these difficulties to authorization processes as well as parents' inability to make timely medical appointments.

Sometimes it's a prior authorization problem which really comes down to a disconnect between the doctor

and the pharmacy and the insurance company. Other times it's just a lack of consistency on the parents' end to ensure that they have scheduled follow-up medical appointments and that they're keeping those appointments and that they're actually giving their child the medication. Those are probably the two barriers that we see the most. (Administrator)

PDL Changes Several caregivers, providers, and an administrator also explained how frequent *changes to the PDLs* (Fig. 2, box a), often without notification, were especially challenging for the *process of care delivery* (Fig. 2, box e) and the *use of mental health care* (Fig. 2, box f) for children receiving ADHD medication. As plans change their PDLs, the provider may have to change the treatment plan if the former medication is not included on the new PDL and is not authorized for coverage. The child may have to switch to a new medication, which can result in a setback in treatment progress and/or new side effects. Changes in medications can be especially difficult for families that have started to see improvements in their child's ADHD symptoms after they have become stable on a medication. One provider explained:

We see PDL changes all the time. [...] That's really hard to disrupt what's finally been successful, especially in the school setting. Their grades may have gone up. They're finally sitting still and learning. Just having to go back to the drawing board to find out if these other medicines would work. (Provider)

This same provider further explained challenges related to side effects:

That's a big issue for children to have to switch because these are pretty big meds that we're using, and so to have to switch from one stimulant med to another is often a big deal and may cause some side-effect issues as well. (Provider)

Additional Challenges for Safety-net Clinics: Administrative Burden (Fig. 2, box b)

The restrictions imposed by Medicaid and MCOs on children's ADHD medications have additional consequences for safety-net mental health clinics and their providers. First, prior authorization requirements for medications impose a major administrative burden on providers and administrators. One administrator discussed the challenge their clinic faces when seeking prior authorization for a medication when children's coverage changes.

It takes a substantial amount of time to actually go through the process of doing the prior authoriza-

tion, and after that there's likely to be a second set of follow-up questions that comes after the prior authorization. It's just the time that it takes to get the required documentation to a lot of the insurance companies, Medicaid and CMO insurance companies. I think that's probably the biggest challenge that we have here, cuz that's huge chunk of time that providers can't see patients, that dedicated to getting paperwork done. (Administrator)

Safety-net clinics and providers also face challenges when Medicaid formularies change, especially without notice. Plans can modify their PDLs and providers may be unaware or confused by the changes. One provider notes:

There's really no consistency. There is nothing that you could follow. It changes so fast. Sometimes in other facilities where I see they also do Medicare, Medicaid, this month this medication is approved. Next month they say, "No it's not approved." [...] Sometimes I don't know what to do. (Provider)

Strategies and Recommendations

Several key informants described two strategies their organization had used to address challenges resulting from processes related to prior authorization of services and formularies including: (1) the use of dedicated staff to handle paperwork and procedures and (2) the cultivation of personal relationships with leaders at one or more of the managed care organizations. As described by one provider:

Yes. Like I said [...] before each therapist did their own authorizations, we had a lot of unauthorized services. I took on that position where I do it one day a week, where I do everybody's CSI therapy, whatever group, whatever they need. I've established contacts within all the different CMOs, so a lot of the issues I had with them were a year ago or a year and a half ago. As of this year, they have been wonderful to work with. (Provider)

An administrator at a different clinic further explained the importance of personal relationships with individuals at the managed care organizations.

I can call Plan X, the director, clinical director at any moment and say, "[Director's Name], we need some help. This kid is high acuity. It's gonna be two weeks before you approve him. You need to get in there and approve him today." [Director] always comes through and approves them the same day. (Administrator)

In addition to these strategies that had already been implemented, several key informants also offered additional recommendations that would help alleviate some

of the challenges related to prior authorization of services and formularies. These suggestions included the implementation of policies and procedures to promote: greater standardization of formularies across the plans, improved access to information about formularies and changes in formularies across plans, and greater standardization of forms/paperwork across plans. A couple of key informants also suggested that the Medicaid program may consider implementing a policy that allows a child to receive coverage for a medication if it was previously included in the formulary and if the medication has been shown to be effective for the child. One provider explained:

I think if across the board if they have proven success on a certain stimulant medication, even if the PDL changes or the type of CMO changes, they could remain on that one, I think that would be very beneficial for the patient. (Provider)

Discussion

This study used qualitative data gathered from caregivers and safety-net administrators and providers in Georgia to provide insight into the mental health treatment experiences of low-income children with ADHD. Findings revealed that the implementation of prior authorization policies and PDLs among the Medicaid plans in Georgia can create barriers to mental health treatment for children, and unintended consequences for the safety-net clinics that serve them.

Policies related to prior authorization for psychosocial services and PDLs can delay and/or limit children's access to psychosocial services and ADHD medications. These problems were experienced most by children in our study who were enrolled in a managed care plan. Participants in our sample described how these policies can create a disconnect between the services and/or medications a provider would like the child to receive and what the child is able to receive. While these processes are in place to ensure proper utilization of health care services and help contain the growth in health care costs (Stroul et al. 1998; Brannon and Heflinger 2006), participants in our study provided specific examples as to how these policies can adversely affect clinical care. For example, formularies that are very restrictive can limit the physician's options to help a child find a well-tolerated medication that is effective at symptom reduction. As another example, formularies that change frequently or without notification can disrupt care for youth with ADHD. These findings add richness and nuance to a growing body of quantitative evidence that has identified low rates of ADHD medication persistence and high rates of discontinuities in ADHD medication among Medicaid-enrolled youth with ADHD (Marcus et al. 2005; Cummings et al. 2017; Ji et al.

2018). Future quantitative research should assess the extent to which restrictive formularies and formulary changes contribute to extended breaks in medication among Medicaid-enrolled youth with ADHD.

The variation and changes in prior authorization policies and prescription drug formularies over time also had unintended consequences at the organization level. More specifically, these policies created challenges for the safety-net providers and clinics that serve Medicaid-enrolled youth, including high administrative burden, costs, confusion, and difficulties keeping up with the policy changes. It is worth noting that at the time of the study, the Georgia Medicaid program only had three private insurance plans that served the population enrolled in managed care; since this time, a fourth managed care plan has entered the market. Nationally, the average number of private managed care plans that operate within state programs (that have any managed care plan) is 7, with a maximum of 23 (New York) (Kaiser Family Foundation (KFF) 2018). Thus, the salience of this finding is particularly noteworthy given that there were only *three* private Medicaid managed care plans at the time of the study. Future research may consider exploring the extent to which an increase in the number of private Medicaid managed care plans can exacerbate these challenges for safety-net providers, as well as the effectiveness of any state policies and procedures that have been implemented to mitigate these challenges.

Several providers and clinic administrators offered suggestions about policies and procedures that could reduce the administrative burden associated with implementation of prior authorization policies and formularies. Many of these suggestions centered on establishing standardized policies and procedures across managed care plans including: standardizing paperwork for prior authorizations; providing accessible, up-to-date information about formularies and changes in formularies; standardizing formularies across plans; and implementing requirements for medications to be covered if they were previously included in a formulary, had been shown to be effective for a child, and were no longer covered after a change in formulary. While these types of policies and procedures may, in fact, reduce the administrative burden for safety-net providers associated with navigating variation in prior authorization and formularies, there is an inherent tension between greater standardization of plan features and allowing private plans to have the autonomy to design benefit plans that achieve competing objectives—including cost containment. Nevertheless, state policymakers may consider, at a minimum, establishing guidelines to standardize and clarify information about each of the plans' policies and outline procedures as to how providers and clinic administrators will be notified when policies and formularies change.

Limitations and Future Directions

Several limitations warrant consideration when interpreting the results of this study. First, the study took place in Georgia and as such reflects a specific case study of mental health care for low-income children in that state. Many of the barriers to ADHD treatment identified by the informants reflect state-specific Medicaid policies. In addition, our findings that children often face particular difficulties accessing ADHD treatment through Medicaid managed care arrangements could likely be limited to the policies of the three MCOs contracted by Georgia's Medicaid program at the time of the study. It is also important to note that caregivers, administrators, and providers were recruited from four select safety-net clinics in Georgia that provide mental health care to low-income children. Thus, the four safety-net clinics may not represent the diversity or complexity of experiences of other safety-net providers in serving low-income children with mental health care needs. Also, the caregivers recruited for the focus groups volunteered to participate and therefore, it is important to acknowledge the possibility of selection bias. Future research is needed to assess how widespread these issues are for children seeking mental health treatment in safety-net settings, and for the organizations and providers that serve them. Finally, our study did not include interviews with state Medicaid agency representatives or representatives from managed care organizations who may have provided further insight into the policy-level factors that shape Medicaid managed care delivery of mental health treatment for low-income youth in Georgia. We hope to explore these perspectives in future work.

Conclusion

We present findings from a qualitative study that documents the challenges that Medicaid prior authorization and PDL policies create for the delivery and receipt of MH treatment for low-income youth in Georgia with ADHD. By including the perspectives of caregivers and safety-net providers and administrators, we were able to explore how these policies (i.e., contextual-level enabling factors) influence care delivery through their impact on a child's coverage for medication and services (i.e., individual-level enabling factor) as well as the organization of care delivery at safety-net clinics (i.e., contextual-level enabling factor). While Medicaid managed care aims to control costs and achieve efficiency through prior authorization policies and PDLs, our study suggests that these policies can have serious implications for children's clinical care and for their caregivers, providers, and the administrators of safety-net clinics.

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Compliance with Ethical Standards

Conflict of interest Dr. Blake declares that she has no conflict of interest. Ms. Song declares that she has no conflict of interest. Dr. Gaydos declares that she has no conflict of interest. Dr. Cummings declares that she has no conflict of interest.

Ethical Approval All procedures performed in this study involving human participants were in accordance with the ethical standards of the Emory University Institutional Review Board and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

References

- Ali, M. M., Sherman, L. J., Lynch, S., Teich, J., & Mutter, R. (2019). Differences in utilization of mental health treatment among children and adolescents with Medicaid or private insurance. *Psychiatry Online*. <https://doi.org/10.1176/appi.ps.201800428>.
- American Academy of Pediatrics (AAP). (2011). ADHD: Clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents subcommittee on attention-deficit/hyperactivity disorder, steering committee on quality improvement and management. *Pediatrics*, *128*(5), 1007–1022.
- Andersen, R., & Davidson, P. (2001). Improving access to care in America. In R. Andersen, T. Rice, & G. Kominsky (Eds.), *Changing the US Health Care System* (2nd ed., pp. 3–30). San Francisco: Jossey-Bass.
- Brannan, A., & Heflinger, C. A. (2005). Child behavioral health service use and caregiver strain: comparison of managed care and fee-for-service Medicaid systems. *Mental Health Services Research*, *7*(4), 197–211. <https://doi.org/10.1007/s11020-005-7452-z>.
- Brannon, A. M., & Heflinger, C. A. (2006). Caregiver, child, family, and service system contributors to caregiver strain in two child mental health service systems. *The Journal of Behavioral Health Services & Research*, *33*(4), 408–422. <https://doi.org/10.1007/s11414-006-9035-1>.
- Burns, B. J., Teagle, S. E., Schwartz, M., Angold, A., & Holtzman, A. (1999). Managed behavioral health care: A Medicaid carve-out for youth. *Health Affairs*, *18*(5), 214–225.
- Callahan, J. J., Shepard, D. S., Beinecke, R. H., Larson, M. J., & Cavanaugh, D. (1995). Mental health/substance abuse treatment in managed care: The Massachusetts Medicaid experience. *Health Affairs*, *14*(3), 173–184. <https://doi.org/10.1377/hlthaff.14.3.173>.
- Catalano, R., Libby, A., Snowden, L., & Cuellar, A. E. (2000). The effect of capitated financing on mental health services for children and youth: The Colorado experience. *American Journal of Public Health*, *90*(12), 1861–1865.
- Centers for Medicare and Medicaid Services (CMS) (2014). *Managed care in Georgia*. Retrieved from <https://www.medicaid.gov/medicaid-chip-program-information/by-topics/delivery-systems/managed-care/downloads/georgia-mcp.pdf>.
- Centers for Medicare and Medicaid Services (CMS) (2016). *Covered outpatients drugs final rule with comment (CMS-2345-FC) Fact Sheet*. Retrieved from <https://www.medicaid.gov/medicaid-chip-program-information/by-topics/prescription-drugs/downloads/drug-fact-sheet.pdf>.
- Children's Defense Fund (2018). *Child poverty in America 2017: State analysis*. Retrieved from <https://www.childrensdefense.org/wp-content/uploads/2018/09/Child-Poverty-in-America-2017-State-Fact-Sheet.pdf>.
- Cook, J. A., Heflinger, C. A., Hoven, C. W., Kelleher, K. J., Mulkern, V., Paulson, R. I., et al. (2004). A multi-site study of Medicaid-funded managed care versus fee-for-service utilization of children with severe emotional disturbance. *The Journal of Behavioral Health Services & Research*, *31*(4), 384–402. <https://doi.org/10.1007/BF02287691>.
- Cummings, J. R., Ji, X., Allen, L., Lally, C., & Druss, B. G. (2017). Racial and ethnic differences in ADHD treatment quality among Medicaid-enrolled youth. *Pediatrics*, *139*(6), e2016244. <https://doi.org/10.1542/peds.2016-2444>.
- Davidoff, A., Hill, I., Courtot, B., & Adams, E. (2007). Effects of managed care on service use and access for publicly insured children with chronic health conditions. *Pediatrics*, *119*(5), 956–964. <https://doi.org/10.1542/peds.2006-2222>.
- Frank, R. G., Goldman, H. H., & Hogan, M. (2003). Medicaid and mental health: Be careful what you ask for. *Health Affairs*, *22*(1), 101–113. <https://doi.org/10.1377/hlthaff.22.1.101>.
- Georgia Certified Peer Specialist Project (GCPSP). CPS Job Description, Responsibilities, Standards, and Qualifications. Retrieved from <http://www.gacps.org/JobDescription.html>.
- Georgia Department of Community Health (GDCH). (2013). Georgia Department of Community Health Medicaid fee-for-service pharmacy prior authorization request process guide. Retrieved July 20, 2018 from https://dch.georgia.gov/sites/dch.georgia.gov/files/related_files/document/PA_process_guidelines-04-15-13.pdf.
- Georgia Department of Community Health (GDCH) (2018). Preferred drug lists. Retrieved from <https://dch.georgia.gov/preferred-drug-lists>.
- Gordon, S. H., Gadbois, E. A., Shield, R. R., Vivier, P. M., Ndumele, C. D., & Trivedi, A. N. (2018). Qualitative perspectives of primary care providers to treat medicaid managed care patients. *BMC Health Services Research*, *18*(1), 728. <https://doi.org/10.1186/s12913-018-3516-9>.
- Guest, G., & MacQueen, K. M. (Eds.). (2008). *Handbook for team-based qualitative research*. Lanham, MD: AltaMira Press.
- Heflinger, C. A., Simpkins, C. G., Scholle, S. H., & Kelleher, K. J. (2004). Parent/caregiver satisfaction with their child's Medicaid plan and behavioral health providers. *Mental Health Services Research*, *6*(1), 23–32. <https://doi.org/10.1023/B:MHSR.0000011254.95227.c3>.
- Honsberger, K., & Van Landeghem, K. (2017). State Medicaid managed care enrollment and design for children and youth with special health care needs. National Academy for State and Health Policy. October 2017. Retrieved from <https://nashp.org/wp-content/uploads/2017/09/50-State-Scan-Issue-Brief.pdf>.
- Hsieh, S. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277–1288.
- Hulkower, R. L., Kelly, M., Cloud, L. K., & Visser, S. N. (2017). Medicaid prior authorization policies for medication treatment of attention-deficit/hyperactivity disorder in young children, United States, 2015. *Public Health Reports*, *132*(6), 654–659.

- Hurlburt, M. S., Leslie, L. K., Landsverk, J., Barth, R. P., Burns, B. J., Gibbons, R. D., et al. (2004). Contextual predictors of mental health service use among children open to child welfare. *Archives of General Psychiatry*, 61(12), 1217–1224.
- Hutchinson, A. B., & Foster, E. M. (2003). The effect of Medicaid managed care on mental care for children: A review of the literature. *Mental Health Services Research*, 5, 39–53.
- Ji, X., Druss, B., Lally, C., & Cummings, J. (2018). Racial/ethnic differences in patterns of discontinuous medication treatment among Medicaid-insured youths with ADHD. *Psychiatric Services*, 69(3), 322–331.
- Kaiser Family Foundation (KFF) (2016). Total Medicaid managed care enrollment. Retrieved from <https://www.kff.org/medicaid/state-indicator/total-medicaid-mc-enrollment/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>.
- Kaiser Family Foundation (KFF). (2017). Ten things to know about Medicaid's role for children with behavioral health needs. June 2017 Fact Sheet. Retrieved from <http://files.kff.org/attachment/Fact-Sheet-10-Things-to-Know-About-Medicoids-Role-for-Children-with-Behavioral-Health-Needs>.
- Kaiser Family Foundation (KFF) (2018). Total Medicaid MCOs. Retrieved from <https://www.kff.org/other/state-indicator/medicaid-enrollment-by-mco/?currentTimeframe=0&sortModel=%7B%22colId%22:%22State%22,%22sort%22:%22asc%22%7D>.
- Lewin, M. E., & Altman, S. (Eds.). (2000). *America's Health Care Safety Net: Intact but endangered*. Washington D.C.: Institute of Medicine. National Academy Press.
- Lieberman, D. A., Polinski, J. M., Choudry, N. K., Avorn, J., & Fischer, M. A. (2016). Medicaid prescription limits: Policy trends and comparative impact on utilization. *BMC Health Services Research*, 16(1), 15. <https://doi.org/10.1186/s12913-016-1258-0>.
- Lilienfeld, M. (2016). Medicaid outpatient prescription drugs. November 30, 2016. Retrieved from <http://www.healthlaw.org/component/jfsfsubmit/showAttachment?tmpl=raw&id=00Pd000000fidCaEAI>.
- MACPAC (2017). Medicaid payment for outpatient prescription drugs: Issue Brief. March 2017. Retrieved from <https://www.macpac.gov/wp-content/uploads/2015/09/Medicaid-Payment-for-Outpatient-Prescription-Drugs.pdf>.
- MacQueen, K. M., McLellan, E., Kay, K., & Milstein, B. (1998). Codebook development for team-based qualitative analysis. *Cultural Anthropology Methods*, 10(2), 31–36. <https://doi.org/10.1177/1525822X980100020301>.
- Marcus, S. C., Wan, G. J., Kemner, J. E., & Olfson, M. (2005). Continuity of methylphenidate treatment for attention-deficit/hyperactivity disorder. *Archives of Pediatrics and Adolescent Medicine*, 159(6), 572–578. <https://doi.org/10.1001/archpedi.159.6.572>.
- MAXQDA (2018). *Software for qualitative data analysis, 1989-2018*, VERBI Software—Consult—Sozialforschung GmbH, Berlin, Germany.
- Melichar, L. (2009). The effect of reimbursement on medical decision making: Do physicians alter treatment in response to a managed care incentive? *Journal of Health Economics*, 28(4), 902–907.
- Merikangas, K. R., He, J. P., Brody, D., Fisher, P. W., Bourdon, K., & Koretz, D. S. (2010). Prevalence and treatment of mental disorders among US children in the 2001-2004 NHANES. *Pediatrics*, 125(1), 75–81. <https://doi.org/10.1542/peds.2008-2598>.
- National Alliance on Mental Illness (NAMI). (2011). Managed care, Medicaid, and mental health: Resource guide. Retrieved from <https://www.nasmhpd.org/sites/default/files/ResourceGuideWhatIsMC.pdf>.
- National Conference of State Legislatures (NCSL) (2011). Health cost containment and efficiencies: NCSL briefs for state legislators. Retrieved from <http://www.ncsl.org/documents/health/IntroandBriefsCC-16.pdf>.
- Nicholson, J., Young, S. D., Simon, L. J., Bateman, A., & Fisher, W. H. (1996). Impact of Medicaid managed care on child and adolescent emergency mental health screening in Massachusetts. *Psychiatric Services (Washington, D. C.)*, 47(12), 1344–1350.
- Nicholson, J., Young, S. D., Simon, L. J., Fisher, W. H., & Bateman, A. (1998). Privatized Medicaid managed care in Massachusetts: Disposition in child and adolescent mental health emergencies. *The Journal of Behavioral Health Services & Research*, 25(3), 279–292.
- Norton, E. C., Lindrooth, R. C., & Dickey, B. (1997). Cost shifting in a mental health carve-out for the AFDC population. *Health Care Financing Review*, 18(3), 95–108.
- Ovsag, K., Hydery, S., & Mousa, S. A. (2008). Preferred drug lists: Potential impact on healthcare economics. *Vascular Health and Risk Management*, 4(2), 403–413. <https://doi.org/10.2147/VHRM.S926>.
- Palinkas, L. A., Schoenwald, S. K., Hoagwood, K., Landsverk, J., Chorpita, B. F., & Weisz, J. R. (2008). An Ethnographic study of implementation of evidence-based treatments in child mental health: First steps. *Psychiatric Services (Washington, D. C.)*, 59(7), 738–746.
- Raghavan, R., Bright, C. L., & Shadoin, A. L. (2008). Toward a policy ecology of implementation of evidence based practices in public mental health settings. *Implementation Science*, 3, 26. <https://doi.org/10.1186/1748-5908-3-26>.
- Raghavan, R., Leibowitz, A. A., Andersen, R. M., Zima, B. T., Schuster, M. A., & Landsverk, J. (2006). Effects of Medicaid managed care policies on mental health service use among a national probability sample of children in the child welfare system. *Children and Youth Services Review*, 28(12), 1482–1496.
- Ruble, L. A., Heflinger, C. A., Renfrew, J. W., & Saunders, R. C. (2005). Access and service use by children with autism spectrum disorders in Medicaid managed care. *Journal of Autism and Developmental Disorders*, 35(1), 3–13. <https://doi.org/10.1007/s10803-004-1026-6>.
- Saloner, B., Matone, M., Kreider, A., Budeir, S., Miller, D., Hung, Y., et al. (2014). Medicaid mental health organization and second-generation antipsychotic use among stimulant-using children. *Psychiatric Services (Washington, D. C.)*, 65(12), 1458–1464.
- Saunders, R. C., & Heflinger, C. A. (2003). Access to and patterns of use of behavioral health services among children and adolescents in TennCare. *Psychiatric Services*, 54, 1364–1371.
- Saunders, R. C., & Heflinger, C. A. (2004). Effects of Medicaid managed behavioral healthcare in the south. *Health Care Financing Review*, 26, 23–41.
- Schoenwald, S. K., Chapman, J. E., Kelleher, K., Hoagwood, K. E., Landsverk, J., Stevens, J., et al. (2008). A survey of the infrastructure for children's mental health services: Implications for the implementation of empirically supported treatments (ESTs). *Administration and Policy in Mental Health and Mental Health*, 35(1–2), 84–97.
- Shi, L., & Singh, D. A. (2014). *Delivering Health Care in America: A systems approach* (6th ed.). Burlington: Jones and Barlett Publishers.
- Sparer, M. (2012). Medicaid managed care: costs, access, and quality of care. Research Synthesis Report, no. 23. Robert Wood Johnson Foundation.
- Stroul, B. A., Pires, S. A., Armstrong, M. I., & Meyers, J. C. (1998). The impact of managed care on mental health services for children and their families. *Future of Children*, 8(2), 119–133. <https://doi.org/10.2307/1602678>.
- Tai, M. H., Lee, B., Onukwughu, E., Ziot, J. M., Reeves, G. M., & dosReis, S. (2018). Impact of a care management entity on use of psychiatric services among youths with severe mental or

- behavioral disorders. *Psychiatric Services (Washington, D. C.)*, 69(11), 1167–1174.
- Turner, J. L. (2015). The effect of Medicaid policies on the diagnosis and treatment of children's mental health problems in primary care. *Health Economics*, 24(2), 142–157.
- Young, K., & Garfield, R. (2018). Snapshots of recent state initiatives in Medicaid prescription drug cost control. Issue Brief. The Henry J. Kaiser Family Foundation. Retrieved at <http://files.kff.org/attachment/Issue-Brief-Snapshots-of-Recent-State-Initiatives-in-Medicaid-Prescription-Drug-Cost-Control>.
- Zur, J., Musumerci, M., Garfield, R. (2017). Medicaid's role in financing behavioral health services for low-income individuals. June 2017 Issue Brief. The Henry J. Kaiser Family Foundation.

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