

# Antipsychotic Prescribing to Children: An In-Depth Look at Foster Care and Medicaid Populations

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## OVERVIEW

Over the last two decades, the use of antipsychotic medications among children has significantly increased, particularly for children in foster care. Antipsychotics are one class of psychotropic medications, which are used to treat mental and behavioral health disorders. Other commonly used psychotropic classes include stimulants, antidepressants, mood stabilizers and alpha agonists.

Antipsychotic prescribing to children has grown at a greater rate than all other psychotropics.<sup>1,2</sup> Children enrolled in the Medicaid program have been disproportionately prescribed antipsychotics compared to children who are commercially insured, and children in foster care are prescribed antipsychotics at a rate three-fold higher than children in Medicaid overall.<sup>2</sup> At the same time, there is wide variation in the rates of antipsychotic prescribing to children across states, which differ in how they structure their child welfare agencies, administer and deliver their Medicaid mental health services and monitor antipsychotic prescribing.

Traditionally, antipsychotics, which act like powerful sedatives, have been prescribed only to children with major psychotic disorders, such as schizophrenia and bipolar disorder, and to a more limited extent, autism. Research supports the safe use of antipsychotics to treat psychoses as well as irritability and aggressive behaviors in children with autism.<sup>3-5</sup> However, much of the recent growth in antipsychotic use in children is attributable to treatment of disruptive behaviors associated with more prevalent behavioral conditions. For example, by the mid-2000s, half of all children prescribed antipsychotics had a diagnosis of attention deficit hyperactivity disorder (ADHD) – a common mental health disorder in children.<sup>6</sup>

## KEY TERMS

**Psychotropic medication** – A drug used to treat or manage mental health disorders or challenging behaviors.

**Antipsychotic medication** – A class of psychotropic drugs used primarily to manage psychosis.

**Class of medication** – A group of drugs that work in a similar way or treat the same condition (e.g., antidepressant, stimulant, mood stabilizer, alpha agonist).

**Polypharmacy** – The use of more than one prescription or class of psychotropic medication simultaneously.

**Foster care** – Children living in a substitute care out-of-home placement (e.g., kinship home, foster family home, group home, residential facility) away from their parent or guardian, and for whom the state has assumed placement and care responsibility. Children and youth in foster care are identified for this research using Medicaid enrollment information specific to foster care status.

Antipsychotics also are increasingly being prescribed to children alongside other psychotropic medications, a practice known as polypharmacy.

There is an absence of research to support the use of antipsychotics in children for other behavioral disorders, such as ADHD, that have not been approved by the U.S. Food and Drug Administration (FDA), the federal agency overseeing prescription drugs. Furthermore, neither the American Academy of Pediatrics (AAP) nor the American Academy of Child and Adolescent Psychiatry (AACAP)

recommend antipsychotic treatment for the management of ADHD.<sup>7,8</sup> In addition, little evidence supports the safety and efficacy of polypharmacy for most children.

The use of antipsychotics among children without psychotic disorders often occurs in response to aggressive behaviors, which can accompany conditions such as ADHD or result from trauma or stress exposure. Research shows that certain types of behavioral therapy are able to address the root causes of these behavioral challenges and do not carry the risk of negative side effects associated with antipsychotics including serious metabolic side effects such as significant weight gain and type 2 diabetes.<sup>9-15</sup> However, such evidence-based behavioral therapies are not available in most publicly funded mental health systems for a variety of reasons including barriers to reimbursement and an insufficiently trained provider workforce. Additionally, there are barriers to receipt of this treatment that are not present for receipt of medication treatment. Namely, providing therapy requires that insurance companies adequately pay for it, that the location and timing are convenient for families and foster caregivers to access, and that the therapy providers are well trained. These conditions require a substantial upfront investment of both time and money by all stakeholders involved. Therefore, the convenience of medication may outweigh the challenges of coordinating and maintaining a behavioral therapy program for children enrolled in Medicaid, especially children in foster care.

Since the mid-2000s, states and the federal government have become increasingly concerned about the high rates of antipsychotic prescribing to children, particularly those in foster care. In 2008, the federal *Fostering Connections to Success and Increasing Adoptions Act* required state child welfare agencies to take the lead in developing a state plan for overseeing and coordinating health care services for children in foster care, including mental health care.<sup>16</sup> The *Child and Family Services Improvement and Innovation Act* of 2011 called for further efforts by states to improve oversight of children in foster care who are prescribed psychotropic medications.<sup>17</sup> In addition, there have been numerous federal hearings and four commissioned Government Accountability Office (GAO) reports on various aspects of this issue.<sup>18-21</sup> President Barack Obama's FY2016 budget proposal included at least \$750 million for a five-year Centers for Medicare & Medicaid Services demonstration project in partnership with the federal Administration for Children and Families to address the over-prescription of psychotropic medications for children in foster care and to scale up evidence-based behavioral therapies for children with behavioral health issues.<sup>22</sup> Despite the enactment of many initiatives aimed to curb psychotropic prescribing to children in foster care, most states have only been able to slow the increase in prescribing, with very few states reporting overall decreases in rates of psychotropic medication prescribing.

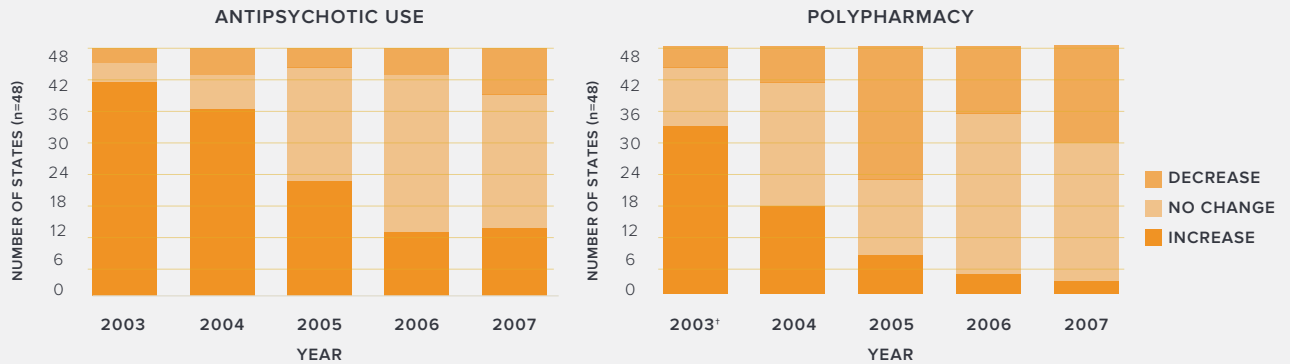
## WHAT WE LEARNED

At PolicyLab, our research portfolio on psychotropic medication prescribing grew from clinical concern that an increased number of children in foster care were being prescribed antipsychotics for behavioral challenges that likely stemmed from past traumatic experiences, which the medications themselves could not address. To unpack these trends, PolicyLab began a number of studies focusing on the use of antipsychotic medications by children enrolled in Medicaid – and specifically by children in foster care. This brief: (1) reviews what we’ve learned, (2) explains why it matters, and (3) provides suggestions about what can be done. Our hope is that policymakers can use our research to inform policy and practice change that will strengthen children’s behavioral health services.

PolicyLab was interested in examining national trends in antipsychotic use among Medicaid-enrolled children in foster care and variation in this use across states. Using a national Medicaid database, we found that 12% of children in foster care in 2007 were prescribed an antipsychotic – a rate three times higher than the rate for all children enrolled in Medicaid (see Figure 1).<sup>2</sup> The study found an increase in antipsychotic prescribing to children in foster care in most states from 2002 to 2007. But across states, there was wide variation in the prevalence of both antipsychotic use (from 3% to 22%, median 12.8%) and polypharmacy (from 0.5% to 13.6%).<sup>2</sup> These findings show that where children live can influence their chance of being prescribed a psychotropic medication, particularly an antipsychotic, more than whether the medication was appropriate given their diagnoses.

FIGURE 1

### STATE-LEVEL ANNUAL CHANGES IN PSYCHOTROPIC MEDICATION RATES AMONG MEDICAID-ENROLLED CHILDREN IN FOSTER CARE AGED 3-18 YEARS



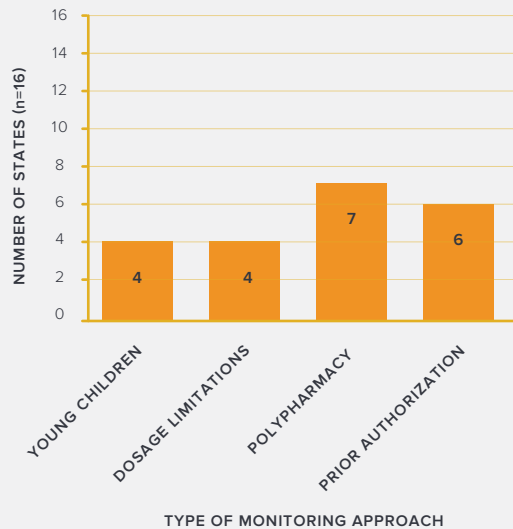
**NOTES**

1. Annual increase defined as relative change of  $\geq 5\%$ ; annual decrease defined as relative change of  $\geq 5\%$ ; annual no change defined as relative change of  $\leq 5\%$ .
2. Polypharmacy is defined as the concurrent use of  $\geq 3$  psychotropic medication classes during the year.
3. Tennessee is not included in the 2003 change bar for polypharmacy due to limited availability of data on stimulants in 2002; the number of states in 2003 is 47.
4. Connecticut, Massachusetts and Maine data were ineligible to be included in the study.

In order to understand this state-to-state variation, we examined differences in state psychotropic monitoring policies. We first examined a 16-state sample representing almost 70% of the children in foster care in the U.S., and reviewed the states' child welfare agency laws, policies and regulations from the 1990s through mid-2011 to assess what, if any, policy mechanisms are used to ensure oversight of the use of antipsychotics for children in foster care. The analysis revealed that few state child welfare agencies have policies in place to monitor psychotropic prescribing, particularly antipsychotics.<sup>23</sup> In the states that did have policies in place, various monitoring approaches were taken (see Figure 2). Some monitoring policies required physicians to obtain prior authorization before prescribing antipsychotics. Other monitoring approaches included “red flag” policies that trigger a secondary review when young children are prescribed antipsychotics, when the dosage level reaches a certain threshold, or when a child is prescribed multiple psychotropic medications simultaneously. However, our analysis revealed that only the prior authorization policies were formal legislative regulations that included recourse in the case of non-compliance. All other state monitoring approaches were informal and offered little, if any, redress if not followed.

FIGURE 2

**STATE POLICY APPROACHES TO MONITORING PSYCHOTROPIC PRESCRIBING TO CHILDREN IN FOSTER CARE**



**NOTES**

1. The 16 states included in the study were AZ, CA, FL, GA, IL, KY, MA, MD, MI, NC, NY, OH, PA, TN, TX and VA.
2. For the purposes of this study, polypharmacy was defined as the use of multiple psychotropic medications.
3. The monitoring policies surrounding the use of antipsychotics in young children, dosage limitations and polypharmacy were not promulgated through law or regulation, but rather were administrative policies, which do not have the force of law. However, states' pre-authorization policies were formal legislative regulations

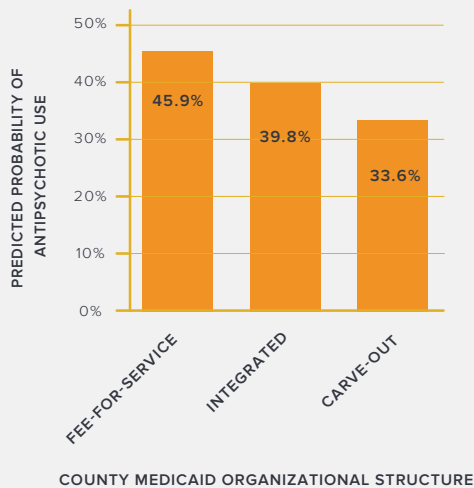
Following the review of variability in state-level policy, we sought to describe the variability in Medicaid service delivery structures at a county level and understand their impact on prescribing. Specifically, we examined whether the organization and delivery of Medicaid mental health services affected prescribing practices.

Using a national Medicaid database, we compared differences in antipsychotic utilization among Medicaid-enrolled children in 82 diverse counties in 34 states across three different Medicaid organizational structures: (1) fee-for-service, (2) integrated managed care, and (3) managed care behavioral health carve-out. These three organizational structures were identified as part of a comprehensive review of state and local Medicaid plans as the prevailing structures present for physical and behavioral health systems during the timeframe of our analysis (2004–2008). Fee-for-service Medicaid programs reimburse providers on a defined fee schedule. Integrated managed care Medicaid programs administer a capitated payment – a fixed monthly payment – to a managed care organization to provide both physical and mental health services. Managed behavioral health carve-out programs administer a separate capitated payment to a third-party managed behavioral health organization or local mental health authority to provide mental health services.

We focused the study on stimulant-using children because antipsychotic use in this population is controversial as it is most likely occurring in the context of an ADHD diagnosis. The study also looked at differences in the effect of organizational structure by three Medicaid eligibility categories: income-eligible, disability (Supplemental Security Income (SSI)) and foster care. The most notable effects were seen among children in foster care, for whom antipsychotic use was found to be 31% higher among children in fee-for-service counties compared to similar children in counties with carve-out programs (see Figure 3).<sup>24</sup> Antipsychotic use among children in foster care was also found to be 14% higher in counties with integrated managed care programs than in counties with carve-out programs. This study highlighted the potential benefit of behavioral health carve-out programs to reduce the overuse of antipsychotics. Future research should explore the effect of specific features of carve-out programs, such as better care coordination and tighter restriction of inpatient hospitalizations – a setting where antipsychotics are commonly initiated.

FIGURE 3

**DIFFERENCES IN PREDICTED USE OF ANTIPSYCHOTICS ACROSS MEDICAID ORGANIZATIONAL STRUCTURES**  
AMONG CHILDREN IN FOSTER CARE AGED 3-18 YEARS ALSO USING STIMULANTS



**NOTES**

1. The study reviewed antipsychotic use in 82 counties in 34 states in 2004, 2006 and 2008.
2. **Fee-for-service programs** reimburse providers on a defined fee schedule.  
**Integrated programs** administer a capitated payment to a managed care organization to provide physical and mental health services.  
**Carve-out programs** administer a capitated payment to a third-party managed behavioral health organization or local mental health authority to provide mental health services.
3. The predicted probabilities were adjusted for child-level variables (age, race, ethnicity, sex, year and pharmacy structure) and county-level variables (provider supply, urbanicity, poverty rate, uninsured rate, unemployment and proportion of the county that voted democrat in the 2008 election).

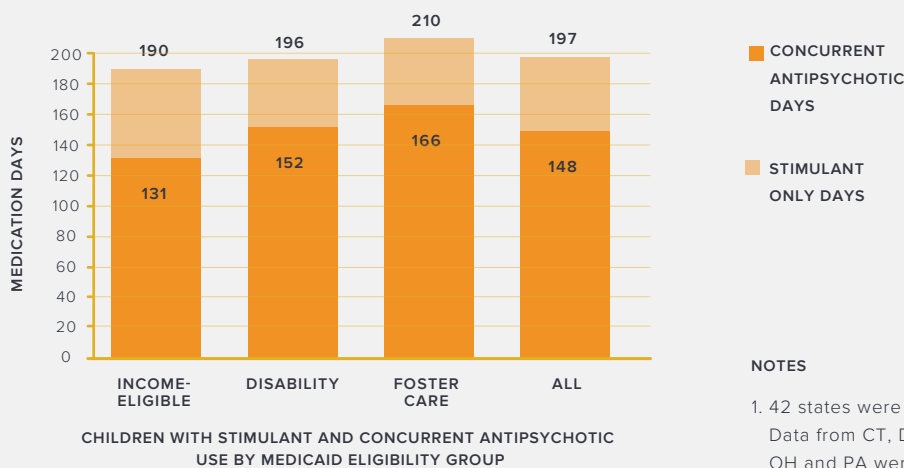
As national attention grew around the overprescribing of antipsychotics to children, we wanted to describe more explicitly the prescribing practices for antipsychotics across the country. Specifically, we examined how frequently antipsychotics were being prescribed concurrently with another psychotropic drug and to which specific types of children. Using a national Medicaid database, our analysis revealed that 85% of children prescribed antipsychotics were also simultaneously prescribed other psychotropic medications — including stimulants, antidepressants, mood stabilizers or alpha agonists.<sup>25</sup> This finding suggests that the increase in antipsychotic prescribing to children over the past decade has largely occurred within the context of concurrent psychotropic prescribing.

In addition to examining concurrent antipsychotic use among all Medicaid-enrolled children, the study looked at differences in the prescribing practice between three different Medicaid eligibility categories: income-eligible, disability (SSI) and foster care (see Figure 4). Nationally, 5% of children were eligible for Medicaid through foster care while 7% of children were eligible through a disability. The remaining children enrolled in

Medicaid – 88% – were eligible based on their income status. While the rates of concurrent antipsychotic use were highest among children in foster care and children with disabilities - two populations with high behavioral needs - children who were income-eligible experienced the largest growth in concurrent antipsychotic use between 2004 and 2008. Given that this population represents the overwhelming majority of youth in the Medicaid program, this finding indicates that concurrent antipsychotic prescribing may be a growing norm of clinical practice and reaching youth with lower severity impairments.

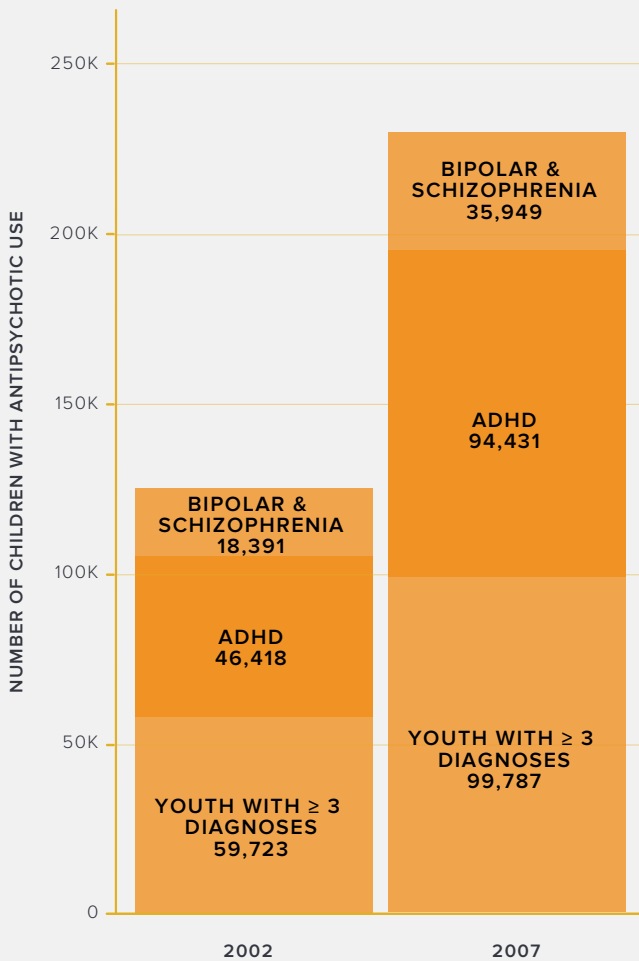
The analysis also showed that the duration of concurrent antipsychotic use is not short-term. Instead, antipsychotics are being prescribed for long durations – an average of four to five months in a given year – much like the stimulants and antidepressants with which they are often paired (see Figure 4). Our findings highlight the need to determine the safest combinations, doses and monitoring protocols for concurrent antipsychotic therapy as little safety and efficacy data exists.

**FIGURE 4** DURATION OF STIMULANT USE AND CONCURRENT ANTIPSYCHOTIC USE AMONG MEDICAID-ENROLLED CHILDREN AGED 6-18 YEARS BY MEDICAID ELIGIBILITY GROUP, 2008 (IN DAYS)



**FIGURE 5**

**LEADING MENTAL HEALTH DIAGNOSES RANKED BY ANTIPSYCHOTIC USE**  
 AMONG MEDICAID-ENROLLED CHILDREN AGED 3-18 YEARS, 2002 AND 2007



**NOTES**

1. 48 states and the District of Columbia were included in the study. Data from Connecticut and Maine was ineligible to be included in the study.
2. ≥ 3 Diagnoses disproportionately include ADHD, conduct disorder and miscellaneous mental health diagnoses.
3. Diagnostic categories are mutually exclusive. For example, youth in the ADHD category had less than 3 clinical diagnoses while youth with ADHD and at least two other clinical diagnoses are represented in the Youth with ≥3 diagnoses category.

The FDA has approved the use of antipsychotics for children to treat schizophrenia, bipolar disorder and disruptive behaviors associated with autism. However, antipsychotics are increasingly being prescribed for off-label diagnoses such as ADHD, conduct disorder, depression, anxiety and developmental delay. While prescribing off-label as a general practice is legal and is widely accepted within medicine, there is increasing concern around prescribing antipsychotics to children for off-label uses. Evidence of antipsychotics' efficacy for treating a number of mental and behavioral health disorders is lacking while at the same time there is growing evidence of antipsychotics' serious side effects in children including weight gain, type 2 diabetes and higher risk of cardiovascular disease.<sup>15,26-29</sup>

Using a national Medicaid database, we examined which mental health diagnoses were associated with antipsychotic use and how that use has grown over time (see Figure 5). Between 2002 and 2007, antipsychotic use among all Medicaid-enrolled children increased by 62%, and the increase was present across the majority of mental health diagnoses.<sup>6</sup> This increase in use persists even after accounting for a 28% rise in mental health diagnoses during the same time period.<sup>6</sup>

While children with schizophrenia, bipolar disorder and autism received antipsychotics at the highest rates, the majority of Medicaid-enrolled children prescribed antipsychotics did not have any of these diagnoses. For example, 50% of all children taking antipsychotics in 2007 had a diagnosis of ADHD, and 14% had ADHD as their only mental health diagnosis. This finding is concerning given the sheer number of children with a diagnosis of ADHD who are increasingly vulnerable to antipsychotic exposure as prescribing practice norms change. This finding also is consistent with



findings suggesting that concurrent antipsychotic use is increasingly reaching lesser-impaired children with income-eligibility in the Medicaid program.

As antipsychotic use in children has been linked in clinical trials to significant weight gain and other metabolic effects on the pathway to diabetes, PolicyLab researchers were interested in the population-level risk of developing type 2 diabetes among children exposed to antipsychotics. Using a national sample of Medicaid-enrolled children from 2003 to 2007, we longitudinally followed children initiating antipsychotics and similar children not initiating antipsychotics for the development of type 2 diabetes. We found that children who began using antipsychotics had a 50% increased risk of developing type 2 diabetes compared

to similar children who did not begin this treatment.<sup>15</sup> This increase represented an additional 13 per 10,000 children with type 2 diabetes following exposure to antipsychotics. Furthermore, risk of type 2 diabetes was nearly doubled for children exposed to antipsychotics while also receiving an antidepressant as compared to children who received neither drug.

Despite prior research indicating that certain newer antipsychotics might carry a lower risk for metabolic effects, such as weight gain, this finding was not supported in our study. These results highlight the need for further research into the effectiveness and safety of antipsychotics in pediatric populations as well as the identification and adoption of best prescribing and monitoring practices.

**Children who initiated antipsychotics were found to have a 50% increased risk of developing type 2 diabetes compared to similar children who did not initiate these medications.**



## WHAT WE CAN DO

Based on our extensive research, collaboration with key stakeholders, and state and local policy work, PolicyLab has identified several opportunities for action to curb the increased prescribing of antipsychotics to children and to better monitor prescribing practices.

1

### EXPAND THE AVAILABILITY OF NON-PHARMACOLOGICAL EVIDENCE-BASED BEHAVIORAL THERAPY

States should increase the use of evidence-based behavioral health services by developing partnerships between child welfare, mental health and primary care systems and creating cross-system payment mechanisms to reimburse primary care and mental health providers. Behavioral therapy can address the root causes of behavior problems by being responsive to the needs of children affected by trauma while not carrying the serious side effects associated with antipsychotics.

PolicyLab has worked with the City of Philadelphia's child welfare and behavioral health departments to implement a citywide evidence-based therapeutic intervention demonstrated to reduce behavioral concerns and improve parent-child attachment. To ensure long-term sustainability, PolicyLab and Philadelphia's child welfare and behavioral health departments identified a community behavioral health agency to provide the behavioral health services and determined how the services could be paid for through a blended funding stream of Medicaid and child welfare dollars. In addition to the therapeutic services, this funding provided transportation, child care, on-site behavioral health consultation and training. The services were embedded into two community-based child welfare agencies as a strategy to increase access to services and build the capacity of Philadelphia's child welfare workforce.

States also can create second opinion and telemedicine programs to increase primary care and nurse practitioner access to psychiatric consultation. By having access to mental health consultation, clinicians can receive assistance

in determining whether a child requires psychotropic medications or could benefit from behavioral therapy. Child psychiatrists and social workers from Seattle Children's Hospital staff Washington State's Partnership Access Line (PAL), and providers who call PAL to discuss the mental health management of a child who is covered by the state's Medicaid program are reimbursed for their time.<sup>30</sup> Massachusetts has a similar program, the Massachusetts Child Psychiatry Access Project (MCPAP), which in addition to its psychiatric consultative services, helps coordinate care for children who need mental health services.<sup>31</sup> Not only do these comprehensive programs create access to child and adolescent psychiatric expertise at the agency and case level, they improve provider satisfaction, reduce health care costs and strengthen prescribing practices.

2

### USE DATA TO SEGMENT AT-RISK POPULATIONS AND TARGET QUALITY IMPROVEMENT EFFORTS

While the prescribing of antipsychotics has increased throughout the Medicaid program, antipsychotics are being prescribed to sub-populations such as children in foster care at a disproportionate rate. States should use Medicaid claims data to identify which sub-populations are being disproportionately prescribed antipsychotics and whether prescribing patterns vary throughout the state. If it is determined that the identified sub-populations are being over prescribed antipsychotics, interventions can be targeted to providers, health care and mental health facilities, managed care organizations, and local child welfare and behavioral health agencies to improve behavioral health screenings and expand access to non-pharmacological behavioral health services.

In 2014, PolicyLab partnered with the Commonwealth of Pennsylvania's Department of Human Services (DHS) to identify sub-populations of children who are receiving psychotropic medications outside of the state's prescribing parameters.<sup>32</sup> Using the state's Medicaid data, PolicyLab examined the behavioral health diagnosis, age, race, gender,

foster care status and managed care organization of the children prescribed psychotropic medications. The data analysis revealed that the use of antipsychotics in Pennsylvania was four times higher among children in foster care compared to children in Medicaid overall. DHS is now working to target interventions and greater support to the sub-groups identified to be using the medications at the highest rate.

Through its Minds Matters initiative, the State of Ohio examines Medicaid claims data to identify providers with high volumes of children in foster care and providers with high antipsychotic prescribing rates.<sup>33</sup> The state then targets educational resources and interventions to these providers including a review of evidence-based behavioral therapies and recommended prescribing guidelines.

Ohio's and Pennsylvania's initiatives are part of a broader effort across states to systematically review data to inform antipsychotic medication oversight. A 16-state consortium of state Medicaid medical directors led this endeavor by sharing oversight strategies and jointly reviewing data.<sup>34</sup>

3

### DEVELOP AND CONTINUE TO STRENGTHEN STATE-LEVEL PRESCRIBING AND MONITORING GUIDELINES

States are required to develop and submit a plan to the federal Children's Bureau that includes protocols for the appropriate use and monitoring of psychotropic medications, including antipsychotics, for children in foster care. State oversight plans must address screening and treatment planning; informed consent and assent to treatment and shared decision-making; medication monitoring at both the individual child and agency level; availability of mental health expertise and consultation; and mechanisms for sharing current information and education materials regarding the use of psychotropic medications to clinicians, child welfare staff and consumers.<sup>35</sup> A Congressional Research Service review of FY2013 state oversight plans found that states' plans are wide ranging and oversight efforts are minimal in some states while robust in others.<sup>36</sup>

States should adopt strong policies that include requiring prior authorization for the use of certain psychotropic medications; identifying red flags that can trigger a second review of a child's diagnosis and treatment plan such as a child's age, dosage or number of medications; disclosing the psychotropic drug's potential side effects and both short- and long-term risks as well as available alternatives such as behavioral health therapies; requiring frequent check-ups with a caseworker or health care provider; and monitoring overall prescribing patterns. State child welfare agencies, Medicaid programs, health care and mental health agencies, and other stakeholders such as private and public payers should work collaboratively to develop and strengthen state oversight plans, which should be distributed broadly and available to the public.

To help strengthen Pennsylvania's oversight guidelines, DHS convened a Healthcare Workgroup of cross-discipline experts in 2013 and 2014 to develop a set of recommendations, which includes ensuring the completion of a comprehensive assessment prior to the initiation of mental or behavioral health treatment and conducting a trauma screening following a child's entry into foster care.<sup>37</sup> The Healthcare Workgroup also recommended that DHS develop statewide guidance on an informed consent process when psychotropic medications are prescribed; work with managed care organizations to implement psychotropic medication monitoring guidelines that trigger second reviews for children that meet specific red flags; review data on a semi-annual basis to guide ongoing policy development and implementation; and pilot a mental health consultation program based on models such as Washington State's PAL.

The State of Texas's Medicaid program for children in foster care, STAR Health, monitors the use of psychotropic drugs by reviewing the cases of all children who receive a psychotropic medication for 60 days or more and are under age four, meet polypharmacy criteria or lack a mental health diagnosis.<sup>38, 39</sup> If a medication regimen can be reduced or if there is risk

for or evidence of serious side effects, they contact the state's Department of Family and Protective Services, who works with the treating physician to resolve the situation. Physicians who consistently prescribe outside the parameters undergo an additional review and may be referred to a credentialing committee for further action.

Between 2004 and 2012, the proportion of Texas foster children receiving psychotropic drugs decreased by more than one-third, and the proportion taking multiple psychotropic medications concurrently decreased by more than two-thirds.<sup>40</sup>

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## CONCLUSION

Antipsychotics have increasingly been prescribed to children enrolled in Medicaid – particularly to children in foster care. While research supports the use of antipsychotics to treat psychoses like schizophrenia, evidence is lacking to support the use of antipsychotics to treat less severe mental health diagnoses like ADHD. However, much of the growth in antipsychotic prescribing is attributable to less severe diagnoses prescribed to manage aggressive behaviors. Use of these medications in an increasingly large population of children is concerning given the risk for serious side effects including weight gain and type 2 diabetes.

PolicyLab's research found wide variation in rates of antipsychotic prescribing among states and within Medicaid service delivery structures. Many states lack strong psychotropic monitoring policies, and there is a rising national trend of prescribing antipsychotics to children without a serious diagnosis. PolicyLab researchers also found a much greater risk of developing type 2 diabetes among children taking antipsychotics compared to similar children not taking antipsychotics.

A driver of antipsychotic overprescribing to Medicaid-enrolled children is the insufficiency of non-pharmacologic

behavioral therapy options in publicly funded mental health systems. Research has shown that certain types of behavioral therapy can address the underlying causes of behavioral problems, particularly trauma, which is especially important among the population of children in foster care, who have high rates of past traumatic experiences. However, most Medicaid programs do not adequately provide reimbursement for behavioral therapies, and the infrastructure to support the use of these therapies is often lacking. But even if behavioral therapy is available, children are often prescribed antipsychotics as an expedient solution to challenging behaviors. Furthermore, providers and case managers may be unaware that there are proven alternatives to medication.

As the evidence of antipsychotics' negative side effects in children continues to increase, now is the time for states to curb the overuse of antipsychotic prescribing to children. States should expand the availability of non-pharmacological evidence-based behavioral therapy, use data to segment at-risk populations to target quality improvement efforts and strengthen prescribing and monitoring guidelines.

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## ANTIPSYCHOTIC PRESCRIBING TO CHILDREN POLICYLAB RESOURCES

Kreider AR, Matone M, Bellonci C, et al. Growth in the concurrent use of antipsychotics with other psychotropic medications in Medicaid-enrolled children. *J Am Acad Child Adolesc Psychiatry*. 2014;53(9):960-970.e2.

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### FOR MORE INFORMATION ON OUR WORK IN THIS AREA, CHECK OUT THESE PROJECT PAGES ON OUR WEBSITE:

#### **Growing Use and Safety Concerns for Antipsychotic Medication among Medicaid-Enrolled Children.**

Available at:

<http://policylab.chop.edu/project/growing-use-and-safety-concerns-antipsychotic-medication-among-medicaid-enrolled-children>

#### **The Children’s Stability and Well-Being Study (CSAW): Evaluating an Evidence-Based Intervention Project.** Available at:

<http://policylab.chop.edu/project/children%E2%80%99s-stability-and-well-being-study-csaw-evaluating-evidence-based-intervention>

#### **The Children’s Stability and Well-Being Study (CSAW): Responding to the Needs of Youth in Foster Care.**

Available at:

<http://policylab.chop.edu/project/children%E2%80%99s-stability-and-well-being-study-csaw-responding-needs-youth-foster-care>

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The aim of PolicyLab at The Children’s Hospital of Philadelphia is to achieve optimal child health and well-being by informing program and policy changes through interdisciplinary research.

PolicyLab develops evidence-based solutions for the most challenging health-related issues affecting children. We partner with numerous stakeholders in traditional healthcare and other community locations to identify the programs, practices, and policies that support the best outcomes for children and their families. PolicyLab disseminates its findings beyond research and academic communities as part of its commitment to transform evidence to action.



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