

## Psychotropic Use in Youth Enrolled in the Oregon Health Plan and Youth in Foster Care with an Emphasis on Antipsychotic Prescriptions – \* Correction to Previous Posting

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An estimated 11-20% of children in the United States have a mental health condition.<sup>1</sup> Given a national pediatric psychiatrist shortage, more non-psychiatrists are prescribing psychotropic medications to children. The implications of this may include increased rates of polypharmacy, more prescriptions without an FDA-approved indication, inadequate treatment, and increased side effect risks. Research has shown that although there has been a decline in the use of antipsychotics in the general pediatric population, the rate of antipsychotic use among youth in foster care has increased in the past decade.<sup>1,2</sup>

The purpose of this newsletter is to (a) describe the prescribing of psychotropic medications to youth in foster care within the Oregon Health Plan (OHP), the programs available to support non-psychiatric providers who prescribe psychotropic drugs, and (b) review the *Antipsychotics in Children* safety edit policy recently implemented in the OHP population.

### Background

Few antipsychotics have been studied in young children, and the efficacy and safety has not been established for any antipsychotic in children less than 5 years of age. The FDA has approved the use of some antipsychotics for irritability associated with autistic disorder (including symptoms of aggression towards others, deliberate self-injuriousness, temper tantrums, and quickly changing moods). Both risperidone and aripiprazole have approved indications for irritability associated with autism for patients at least 5 and 6 years of age, respectively.<sup>3,4</sup> Bipolar I disorder and schizophrenia are also approved for use in adolescents, but not in young children (**Table 1**). Clinical practice guidelines recommend non-pharmacological therapy (e.g., cognitive behavioral therapy) as first-line therapy for children before an antipsychotic is prescribed.<sup>5-7</sup>

**Table 1. FDA-Approved Indications and Ages for Oral Second-generation Antipsychotics in Children<sup>8</sup>**

FDA-Approved Indications and Ages			
Drug	Schizophrenia	Bipolar I disorder	Major depressive disorder (adjunct)
aripiprazole*	≥ 13 yrs	≥ 10 yrs	≥ 18 yrs
asenapine maleate	≥ 18 yrs	≥ 10 yrs	
brexpiprazole	≥ 13 yrs		
lurasidone HCl	≥ 13 yrs	≥ 10 yrs	
olanzapine	≥ 13 yrs	≥ 10 yrs	≥ 18 yrs

paliperidone†	≥ 12 yrs		
quetiapine fumarate∞	≥ 13 yrs	≥ 10 yrs	
risperidone‡	≥ 13 yrs	≥ 10 yrs	
Key: * Aripiprazole is also approved for irritability associated with Autistic Disorder for ages ≥6 yrs and Tourette's Disorder for ages ≥6 yrs; † Paliperidone is also approved for schizoaffective disorder ≥18 yrs; ∞ Quetiapine is also approved for Bipolar depression ≥18 yrs; ‡ Risperidone is also approved for irritability associated with Autistic Disorder for ages ≥ 5 yrs			

Use of antipsychotics in children can be associated with significant risk of long-term adverse events (AE).<sup>9</sup>

- Weight gain is common and increases with longer treatment exposure.
- Prolactin levels are often increased from risperidone and paliperidone treatment, which may result in unwanted conditions, such as gynecomastia and galactorrhea.
- Risk of akathisia and extrapyramidal symptoms (EPS) are increased with virtually all SGAs, clozapine having the lowest risk and risperidone have the highest.
- Potential effects on total cholesterol, low-density lipoprotein (LDL), triglycerides, and fasting glucose should be monitored with use of any SGA, but particularly with olanzapine and quetiapine.
- Elevated liver enzymes may necessitate discontinuation for some individuals.

### Prescribing Psychotropics to Oregon Youth in Foster Care

In 2022, Oregon had over 5,000 youth in foster care. National data from 2021 estimated 391,000 youth were in foster care nationwide.<sup>10,11</sup> The Children's Bureau reported that nationally 80% of youth in foster care have serious mental health needs.<sup>11</sup> In Oregon, under 13% of youth in foster care statewide used one or more psychotropic medications to assist in managing their mental health conditions.<sup>12</sup>

Youth in Oregon foster care programs are comprised of a diverse population with some requiring complex care. In Oregon, youth in foster care prescribed psychotropics receive comprehensive oversight (Figure 1). In 2010, a law

went into effect that requires Oregon Department of Human Services (ODHS) and coordinated care organizations (CCOs) to provide a mental health assessment before a child in foster care receives more than one psychotropic medication or any antipsychotic, unless there is an urgent medical need.<sup>12</sup> Further expansion of oversight followed with engagement in the Center for Health Care Strategies 6 state collaborative.<sup>13</sup>

In 2010, a registered nurse authorization process for psychotropic medication administration (with physician consultation) was implemented and centralized in 2019. ODHS staff provide oversight in two pathways. They complete annual reviews based on reports generated by *Oregon State University Drug Use Research and Management Group*, which identify diagnosis history, prescribing history and prescribing and metabolic monitoring flags (potential concerns). Moreover, all new prescriptions require completion of an authorization form by the provider, and these requests receive same day reviews by ODHS nursing staff prior to authorization.

When annual reviews raise potential concerns, chart notes are requested and reviewed by ODHS nursing staff. In both pathways of oversight, nurses and providers have access to the expertise of the Oregon Psychiatric Access Line about Kids (OPAL-K) for clinical review. OPAL-K is a state-funded program whose mission is to provide prescribing primary care clinicians in Oregon with child psychiatry phone consultations. OPAL-K evaluates prescriptions and associated chart notes and makes recommendations for ODHS to either approve or not authorize the prescription after consultation with the prescribing provider. If a case is flagged for OPAL-K review, primary care clinicians are scheduled to have a consultation. These consultants will review the case with the provider. Providers may provide more clinical data that will reverse a recommendation for changing the present flagged psychotropic regimen. If changes are needed, the OPAL-K consulting child psychiatrist will review more appropriate treatment options to consider.

#### **Figure 1. Psychotropic Prescribing for Foster Care Youth in Oregon**

1. All new prescriptions for psychotropics require authorization by a Psychotropic Oversight nurse at ODHS.
2. Every child receives (at a minimum) an annual psychotropic medication authorization by a Psychotropic Oversight nurse using Medicaid pharmacy claims data reports generated by OSU.
3. OPAL-K child psychiatrists are available for nurse consultation if needed.
4. Consults with OPAL-K psychiatrists are available to support any provider in Oregon who has prescriptive authority.

#### **Oregon Fee-for-Service Policy**

The OHP has a long-standing program to review all mental health drugs prescribed to youth in foster care. Moreover, several programs exist to ensure appropriate prescribing for Medicaid members who are not enrolled in foster care. An overview of prescribing patterns and interventions are outlined in Figure 2. These policies were developed with input from experts in mental health and child psychiatry and are intended to support safe and appropriate use of psychotropics in children. In October 2022, policies were expanded to include prior authorization for use of antipsychotics *for all children younger than 5 years of age enrolled in OHP*. These additional safety measures apply to both youth in foster care and members not enrolled in foster care.<sup>8</sup> The policy targets children after their first prescription to accommodate prescribing for urgent or acute symptoms and to avoid interruptions in therapy during transitions of care for patients newly enrolled in OHP. A prior authorization is required for continued therapy with documentation of clinical rationale, metabolic monitoring, use of first-line non-pharmacologic therapy, and consultation with a child psychiatrist.

As part of this new PA policy, OHA performs outreach to the prescribing providers to notify them of the PA requirement, provide education on evidence-based use of non-pharmacological therapy, and facilitate access to services for appropriate patients (as previously described).

#### **Figure 2. Medicaid Programs to Improve Prescribing Practices for Mental Health Drugs in Youth**

1. Prior authorization and provider notification for all antipsychotics prescribed for >30 days in members ≤5 years of age.
2. Provider referral for OPAL-K review for patients less than 10 years of age prescribed antipsychotics without FDA indication for more than 90 days. Members are prioritized for referral based on duration of therapy, glucose testing, diagnoses, and specialist involvement.
3. Pharmacy profile reviews and provider notification (by fax) for youth < 5 years of age, with prescriptions for ≥4 or more psychotropics, or with recent psychotropic prescriptions from 3 or more providers.

## Retrospective Study of Psychotropic Prescribing in Oregon Foster Care Youth

A descriptive, retrospective study of the psychotropic prescribing patterns in a small subset of Oregon youth in foster care evaluated 110 psychotropic medication authorization forms for *newly* prescribed therapy. Youth included for review were identified through screening and flagged by an ODHS nurse, trained and authorized to approve therapy, for psychiatrist review. These profiles represent some of the most complex cases in the foster care program. Of interest were off-label prescriptions, polypharmacy, and other factors that may influence psychotropic medication authorization by OPAL-K psychiatrists.

Medication reviews were flagged from psychotropic medication authorization (PMA) forms labeled for urgent review by a Psychotropic Oversight nurse at ODHS. The study included PMAs that were approved and denied in the timeframe from 12/02/2020 to 6/10/2022. ODHS labels the forms as “urgent” to expedite the review process and shorten the length of time that children are waiting for their prescriptions. Youth under 18 years of age ( $N = 110$ ) who were in foster care when the PMA form was sent to OPAL-K were included in the analyses. Data on demographics, working diagnoses, medications, off-label prescribing, polypharmacy, prescribing clinician clinical degrees, and prescription approval status were de-identified and evaluated with univariate and bivariate statistics. Logistic regression models were used to examine factors associated with psychotropic medication prescription authorization. This study was approved by the Oregon Health and Science University Institutional Review Board.

The prescribed medications were categorized into eight classes: antipsychotics, antidepressants, stimulants, alpha agonists, benzodiazepines, non-benzodiazepine anxiolytics, mood stabilizers, and other. Primary diagnoses were categorized into nine disorders according to DMS-5 classification: trauma-related, attention deficit hyperactive, depressive, attachment, adjustment, autism spectrum, anxiety, neurodevelopmental, psychotic, and disruptive.<sup>5</sup> Autism spectrum disorder was separated from the other neurodevelopmental disorders because FDA approves certain antipsychotics to treat specific symptoms associated with autism.

The sample included 57 males assigned at birth (51.8%) and 53 females assigned at birth (48.2%). The age range for this sample was 4-18 years (mean: 11 years) (**Table 2**). Psychiatric mental health nurse practitioners prescribed 41.8% of new medications, psychiatrists prescribed 33.6%, and physician assistants prescribed 10.0%. The three most prescribed medications were aripiprazole (20.9%), risperidone (14.5%), and clonidine (7.3%). The three most prescribed medication classes were antipsychotics (46.4%), antidepressants (15.5%),

and alpha agonists (11.8%). 80.9% percent of the prescriptions had no FDA-approved indication, although 30.0% of off-label prescribing were supported by evidence in the psychiatric literature. Fifty-three percent of the study participants were prescribed 4 or more psychotropic medications or 2 psychotropic medications in the same drug class (polypharmacy).

Medications were most frequently prescribed for agitation (31.8%), anxiety (15.5%), and sleep disruption (14.5%). The 3 most frequent primary diagnoses were trauma-related disorders (30%), attention-deficit/hyperactivity disorder (ADHD) (27.3%), and depressive disorders (18.2%). Sixty percent of the study participants had either a trauma-related disorder or documented trauma. Eighty-four percent of children had 2 or more psychiatric disorders. Sixty-four percent of the sample were screened for review because the prescribed medication was off-label, 41.8% were screened for review because of polypharmacy, and 10.9% were neither off-label nor had polypharmacy. An OPAL-K psychiatrist authorized 53.6% of the medications, and 46.4% were not approved. Most denials were because the medication was off-label (64.5%) or polypharmacy (41.8%). Denials would result in scheduling an appointment with an OPAL-K psychiatrist.

**Table 2. Characteristics of Youth in Oregon Foster Care Prescribed a New Psychotropic Medication between 12/02/2020 and 6/10/2022**

	Not Authorized ( $n=51$ )	Approved ( $n=59$ )	Total ( $N=110$ )
<b>Age</b>			
Mean (SD)	12.2 (3.69)	10.8 (4.32)	11.4 (4.09)
Median [Min, Max]	13.0 [4.00, 17.0]	11.0 [4.00, 18.0]	13.0 [4.00, 18.0]
<b>Off-label</b>			
No	4 (7.8%)	17 (28.8%)	21 (19.1%)
Yes	47 (92.2%)	42 (71.2%)	89 (80.9%)
<b>Polypharmacy</b>			
No	26 (51.0%)	26 (44.1%)	52 (47.3%)
Yes	25 (49.0%)	33 (55.9%)	58 (52.7%)
<b>Trauma Present</b>			
No	19 (37.3%)	25 (42.4%)	44 (40.0%)
Yes	32 (62.7%)	34 (57.6%)	66 (60.0%)
<b>Prescribing Clinician</b>			
Non-psychiatrist	43 (84.3%)	30 (50.8%)	73 (66.4%)
Psychiatrist	8 (15.7%)	29 (49.2%)	37 (33.6%)
<b>Mental Health Comorbidities</b>			
No	8 (15.7%)	9 (15.3%)	17 (15.5%)
Yes	43 (84.3%)	50 (84.7%)	93 (84.5%)
<b>Prescribed Medication</b>			
Antipsychotic	31 (60.8%)	20 (33.9%)	51 (46.4%)



Non-antipsychotic	20 (39.2%)	39 (66.1%)	59 (53.6%)
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SD = standard deviation

Findings from the retrospective review of youth in this sub-group found that Oregon's system identifies youth with potential prescribing flags (polypharmacy, antipsychotic use, and off-label psychotropic medications). Identification led to meaningful oversight and reductions in practices unsupported by evidence or clinical reasoning. OPAL-K's psychotropic medication review system is a valuable asset in mitigating inappropriate prescriptions. Continuing support for educating and assisting non-psychiatrist prescribing clinicians, increasing access to non-pharmacological therapy, and improving oversight of medications is a necessary practice to ensure appropriate use of psychotropic medications for youth in foster care. A collaborative and consultative practice is effective in changing provider prescribing. Non-psychiatric providers are encouraged to use consultation services like OPAL-K, and especially prior to prescribing antipsychotic medications, escalating polypharmacy, or prescribing without an FDA-approved indication.

## Conclusion

The prescription of psychotropics for foster care children needs to be carefully balanced between benefit and harms, and substantiated by evidence. Oregon has a robust program to optimize medication use for foster care children. Providers are encouraged to confer with OPAL-K to facilitate appropriate prescribing of medications used to treat mental health disorders in children via a collaborative consultation experience. Moreover, OHP policies can assist providers to optimize treatment for children who are prescribed psychotropics.

*Peer reviewed by: Andrew Gibler, PharmD, RPh, Clinical Pharmacy Policy & Programs Manager, Oregon Health Authority, Health Policy & Analytics Division and Amanda Parish, LCSW, Clinical Coordinator, Mental Health Clinical Advisory Group.*

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