

Psychotropic Medication Monitoring of Youth in Maryland Foster Care

Background

The use of psychotropic medication among youth in foster care has been a topic of national concern given inadequate oversight for safety or effectiveness. Several studies have shown that use is much higher, singly and concomitantly (with one or more other class), among youth in foster care relative to other Medicaid-insured or privately insured youth. Recent federal reports bring the urgency of inter-agency collaboration (i.e., child welfare, mental health, Medicaid) to the top of the national child health agenda and have generated federal mandates to that end.

Initiation of Antipsychotic Monitoring and Oversight in Maryland

The antipsychotic class of psychotropic medications has had the largest increase in use, singly or concomitantly, in the past decade. These agents are associated with serious cardiovascular, neurologic, and metabolic side effects that can impact current and possibly future health risks. From 2011 through 2014, Maryland rolled out an antipsychotic pre-authorization program that affected all youth insured through the state Medical Assistance program. This program required that all youth who were prescribed an antipsychotic medication must undergo a clinical review and approval as part of the oversight and monitoring of this class of medications. Youth in foster care are one specific sub-group that was affected by this statewide policy.

Psychotropic Monitoring Activities for Youth in Foster Care

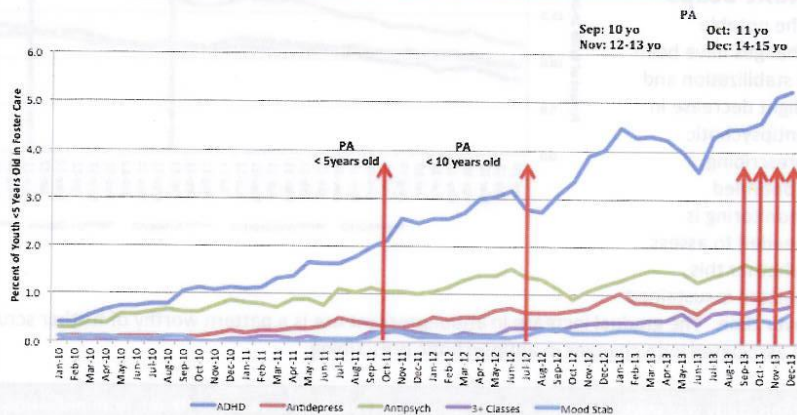
In the state of Maryland, two child serving agencies have partnered with the University of Maryland to support an effort to merge administrative records from the Child Welfare Agency with the mental health service encounter and pharmacy claims from the Behavioral Health Administration. Data linkage has been conducted in a de-identified manner to protect the anonymity and confidentiality of the children and adolescents. The data have been collected over a four-year period (2010-2013) to enable a time trend analysis of the rates of use by psychotropic class. This summary describes the trends in use both before and after the implementation of the pre-authorization program. Data were collected as part of the overarching psychotropic monitoring activities for youth in foster care. The information presented here is intended to provide the state agencies with data that can be used for future program planning and policy initiatives.

Psychotropic Prescribing Trends for Youth in Foster Care

The series of graphs reflect utilization across three age strata. The arrow bars illustrate when the antipsychotic pre-authorization program was implemented and the age group targeted with each roll out. The data show the gradual impact that the pre-authorization had on stabilizing and reducing utilization.

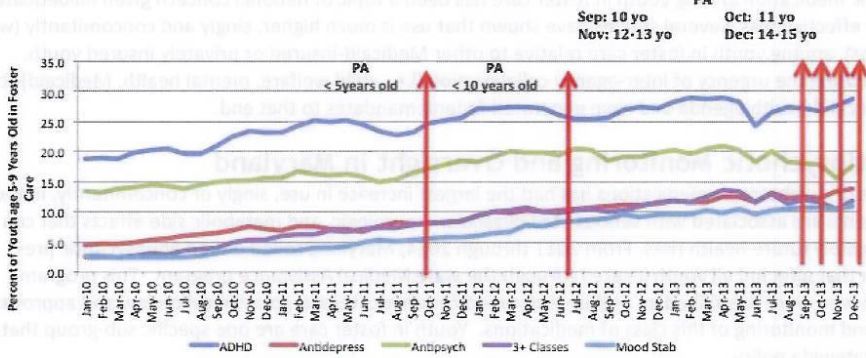
Figure 1 shows that not until youth aged into the <10 years old pre-

Figure 1. Psychotropic Trends for Youth <5 Years Old in January 2010 and Followed Through December 2013



authorization roll out was there an observable decrease in antipsychotic use. Prior to that the youth who were <5 years old as of January 2010 were too old to meet the criteria when the program was initiated in October 2011.

Figure 2. Psychotropic Trends for Youth Aged 5-9 Years Old in January 2010 and Followed Through December 2013

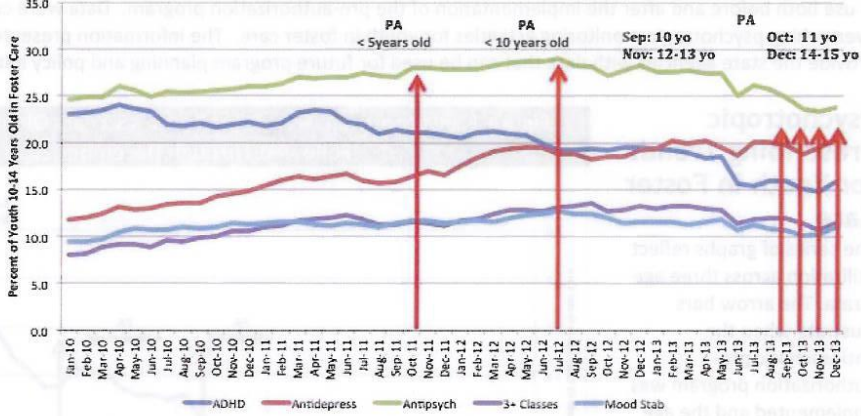


In Figure 2, psychotropic prescribing trends for youth who were aged 5-9 years old at the beginning of the observation period decreased slightly after the July 2012 roll out. An additional drop was seen as these youth aged into the

older age groups that were targeted in 2013.

In Figure 3, the older youth, aged 10-14 at the beginning of the observation period in January 2010 were too old to meet the review criteria for the initial roll out of the antipsychotic pre-authorization program. However, by 2013 there is a clear drop in use.

Figure 3. Psychotropic Trends for Youth Aged 10-14 Years Old in January 2010 and Followed Through December 2013



Next Steps

The notable changes have been a stabilization and slight decrease in antipsychotic prescribing. Continued monitoring is needed to assess whether this pattern is sustained

over time. The gradual increase in antidepressant use is a pattern worthy of further scrutiny to assess whether such use is associated with changes in antipsychotic prescribing.

This study was made possible with the support of the state Behavioral Health Administration (OPASS 13-10954G/M00B3400369 1915 Community Alternatives to Psychiatric and Residential Treatment Facilities Demonstration Waiver). For more information please contact: Susan dosReis, Ph.D. Email: sdosreis@rx.umaryland.edu

Antipsychotic Prior Authorization: The Impact on Antipsychotic Use for Youth in Foster Care: January 2010 - September 2014

Background

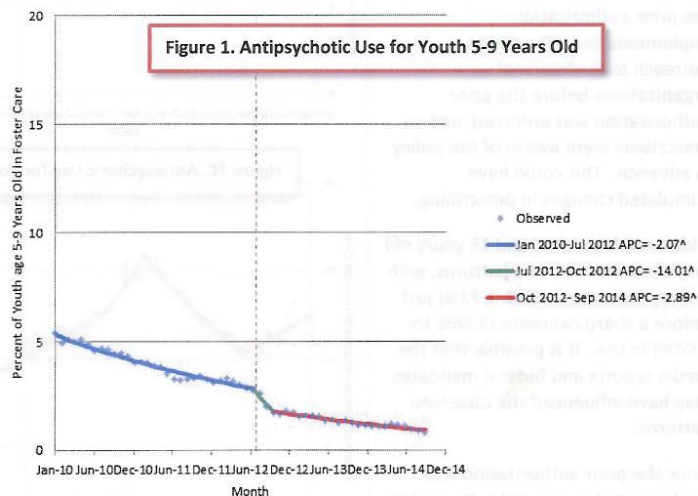
Psychotropic medication use among youth in foster care continues to be a topic of national concern. Monitoring for safe and effective use motivated federal mandates to implement and review psychotropic use among youth in Medicaid and foster care. These reports encourage inter-agency collaboration (i.e., child welfare, mental health, Medicaid). This brief is provided as a result of the inter-agency collaboration between the Maryland Behavioral Health Administration and the Department of Human Resources as part of the State of Maryland's process for satisfying this national mandate. The intent is to provide state agencies with data that can be used for future program planning and policy initiatives.

Through a partnership with the University of Maryland, administrative records from the Department of Human Resources and the Behavioral Health Administration have been linked to conduct a statewide evaluation of psychotropic use among children in out-of-home placement. Data on inpatient and outpatient mental health services, psychotropic medications dispensed in outpatient pharmacies, and foster placement have been merged in a de-identified manner to protect the anonymity and confidentiality of the youth.

This brief reflects data that were assembled from January 2010 through September 2014. Here we illustrate trends in antipsychotic use before and after the antipsychotic prior authorization program. The program was implemented over a series of years from 2011 to 2014. The program started with the youngest children in October 2011 and was rolled out incrementally up through age 17 in January 2014. The graphs are organized by the age or age group to show the period age effect of the program rollout.

Antipsychotic Use for Children Less than 10 Years Old in Foster Care

Figure 1 reflects trends in antipsychotic use for children aged 5-9 years old. The prior authorization for this age group was implemented in July 2012, which is depicted by the dotted vertical line. Along the y-axis is the percent of youth aged 5-9 years old who received an antipsychotic. The x-axis is the timeline in months from January 2010 through December 2014 (although the last observation was in September 2014). The round dots are the observed estimates and the lines represent the linear trend and average percent change (APC). The three colors represent three distinct time points where a change was observed. The first segment from January 2010 to July 2012, when the prior authorization was implemented, reflects an average 2.07% decrease in antipsychotic use. July 2012 to October 2012 is associated with an average 14.01% drop in antipsychotic use in the three months following implementation. A more modest average percent decrease of 2.89% October 2012 to September 2014.



Antipsychotic Trends for Older Children and Early Adolescent Youth in Foster Care

Figures 2A, 2B, 2C, and 2D reflect the implementation of antipsychotic prior authorization in September, October, November, and December 2013 for youth aged 10-11 years old, 12-13 years old, 14 years old, and 15 years old, respectively. The graphs are annotated with a vertical dotted line to designate prior authorization implementation. The different colors in the trend line denote distinct changes in antipsychotic use.

In all figures, there is a dramatic drop in antipsychotic use just prior to and following implementation of prior authorization. The average percent change in antipsychotic use is greatest for youth aged 10-11 years old (7.87% decrease).

Also of note, the drop in antipsychotic use started to occur before the prior authorization was implemented, suggesting a bleed over effect from the earlier phases of the prior authorization implementation. There was outreach to professional organizations before the prior authorization was enforced, and so prescribers were aware of the policy in advance. This could have stimulated changes in prescribing.

Older youth aged 14 and 15 years old displayed more erratic patterns, with a sharp increase (1.72%-2.72%) just before a sharp decrease (3.56% to 5.04%) in use. It is possible that the media reports and federal mandates may have influenced the observed patterns.

Since the prior authorization was implemented in late 2013, these data reflect less than one year of follow-up for meaningful interpretation.

Figure 2A. Antipsychotic Use for Youth 10-11 Years Old

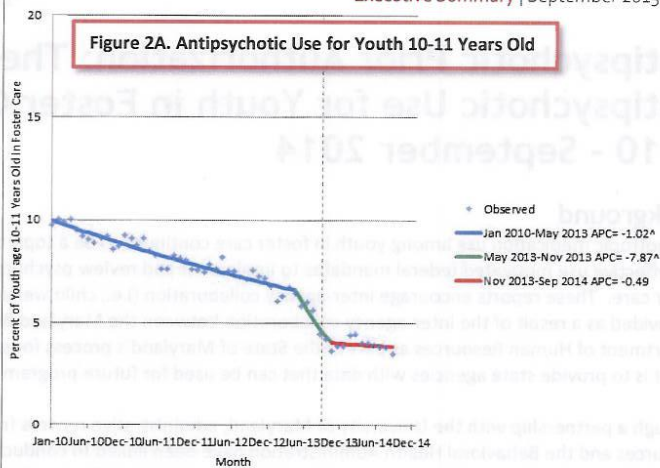


Figure 2B. Antipsychotic Use for Youth 12-13 Years Old

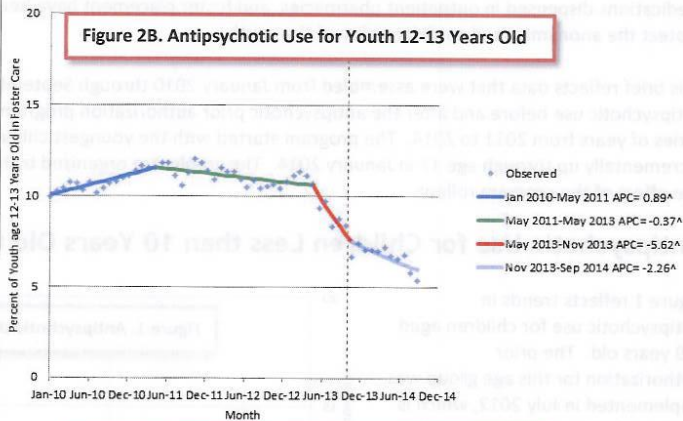
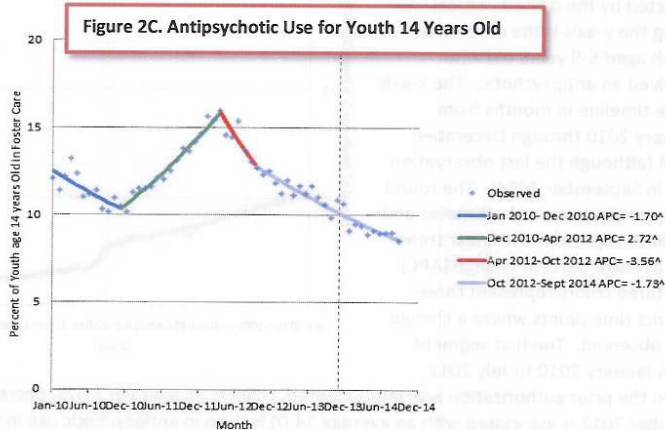


Figure 2C. Antipsychotic Use for Youth 14 Years Old



Antipsychotic Trends for Older Adolescent Youth in Foster Care

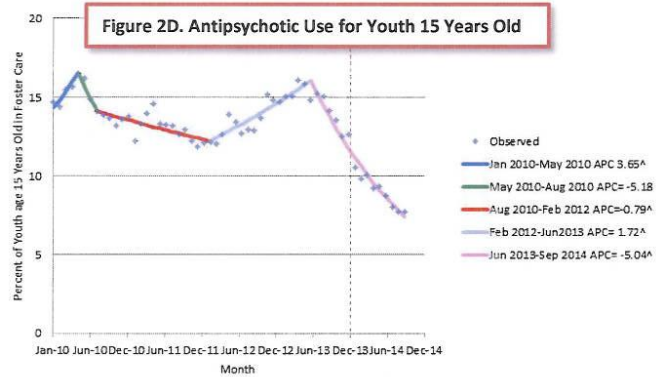
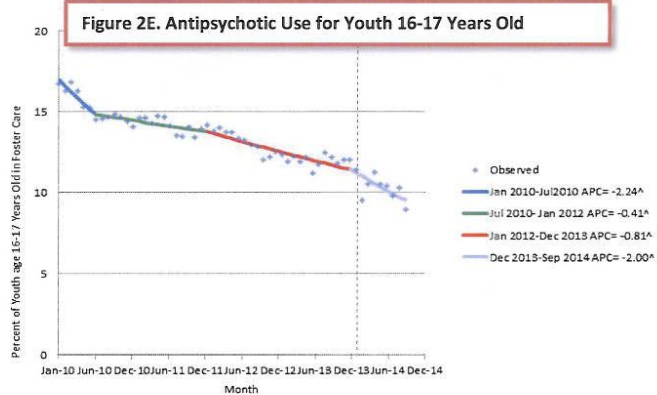


Figure 2E illustrates the change in antipsychotic use for youth aged 16 to 17 years old. Prior authorization for this group was implemented in January 2014. There is limited data for follow-up after implementation to make any meaningful interpretations. One can see that the largest decrease occurred in the first six months of 2010. This coincided with the emergence of reports on the increased use of antipsychotic medication for youth in foster care. The growing national attention on this topic may have influenced prescribing.

Notably, the average percent decrease in antipsychotic use smaller as age increased. This can be explained, in part, by the clinical indications for antipsychotic use. Namely, bipolar disorder and first episode schizophrenia, both of which are approved indications for antipsychotic use, are more prevalent among older youth.

Important to note is that prior authorization did not limit access to antipsychotic medication for all youth. The criteria for review acknowledge that antipsychotic medications have an important role in the treatment of youth with mental illness. Programs that provide a balance between judicious use of these medications for youth in need while balancing the safety oversight are likely to be the most successful in managing the health and well-being of youth in foster care.



Next Steps

The changes in antipsychotic use provide an overall population view of the impact of policy. A follow-up to this analysis will be to examine the changes in antipsychotic use relative to the use of other psychotropic medications, such as antidepressants, mood stabilizers, and stimulants. It will be important to obtain a more complete picture of changes in all psychotropic use as part of a more comprehensive evaluation. This work leads naturally to a more specific evaluation of the patterns of psychotropic use that may be indicative of more or less stable mental illness. The correlation between psychotropic patterns and hospitalizations, emergency department visits, and placement in residential treatment facilities will shed light on youth mental health outcomes. Finally, state agencies and policy makers could benefit from a more comprehensive understanding of how psychotropic patterns are associated with more or less stable foster placement.

This study was made possible with the support of the state Behavioral Health Administration and the Department of Human Resources. For more information please contact: Susan dosReis, Ph.D. Email: sdosreis@rx.umaryland.edu