Children's Hospital of Philadelphia
PolicyLab

Understanding and Addressing Antipsychotic Prescribing Practices for Medicaid-enrolled Children

Statement of Problem

Children enrolled in Medicaid, and particularly those in foster care, are more likely to be prescribed psychotropic medications than privately insured children.

In 2016, the Pennsylvania Department of Human Services (DHS) announced several new initiatives to reduce the use of psychotropic medications among Medicaid-enrolled youth in the state, including the release of new prescribing guidelines for physicians. These initiatives were informed by research PolicyLab did in collaboration with DHS to review psychotropic prescribing in the Pennsylvania Medicaid program, with a focus on antipsychotic medications and prescribing trends to youth in foster care.

While interim reporting from Pennsylvania's Medicaid program shows initial declines in prescription rates of antipsychotics, we lack a nuanced understanding of how prescribing practices and diagnoses shifted following implementation of these state initiatives and the impacts of the COVID-19 pandemic on mental/behavioral health care access.

Description

PolicyLab's foundational research on this topic aimed to understand the scope of the problem. Researchers used national Medicaid data from the Centers for Medicare and Medicaid Services to respond to four primary research aims related to psychotropic prescribing to Medicaid-enrolled children between 2002 and 2009:

- Describe trends over time in the use of antipsychotics and polypharmacy at both the national and state levels, with particular focus on youth in foster care
  - Key Findings: Between 2002 and 2007, the number of Medicaid-enrolled children ages 3-18 using antipsychotics increased 62%, reaching 354,000 children by 2007. Additionally, wide variation in state level prescribing of antipsychotics was observed.
- ?Identify the mental and behavioral health diagnoses associated with antipsychotic use across the United States
  - Key Findings: Growth in antipsychotic use was evident across almost every diagnosis; however, most children taking antipsychotics (65%) were receiving them for diagnoses lacking regulatory approval for use, such as ADHD and conduct disorder.
- Examine how antipsychotics are prescribed with other psychotropic medication classes to Medicaid-enrolled youth
  - Key Findings: In general, children did not receive antipsychotics as their only medication; an analysis of children ages 6-18 found that most youth (85%) with antipsychotic use during a year received them concurrently with another psychotropic medication class. Such concurrent use of antipsychotics with all other psychotropic medication classes increased over time, and the duration of this use was not short-

term, accounting for 35% to 40% of annual calendar days.
- Assess the association between antipsychotic use and incident type 2 diabetes
  - Key Findings: This analysis of children and adolescents ages 10-18 found that antipsychotic use was associated with a 50% increase in the risk of developing type 2 diabetes. The risk for diabetes was even higher for youth who used antidepressants and antipsychotics at the same time. Finally, the study demonstrated that newer antipsychotic medications may not have a lower side effect profile than risperidone, an older and frequently prescribed antipsychotic.

Additionally, to address policy questions raised by observed trends in antipsychotic prescribing across the country, the team conducted two policy-focused studies:

- A 16-state policy review to explore existing oversight measures for psychotropic medication use
  - Key Findings: Few state child welfare agencies had formal policies in place to monitor the prescribing of psychotropic medications to children in foster care. In states that did have policies in place, policies were informal and had little, if any, opportunities for redress if not followed. There is a great need for the state policymaking process to become more transparent to ensure broad public input and recourse in the case of noncompliance.
- A policy review and Medicaid data analysis to assess the relationship between Medicaid behavioral health payment structure and antipsychotic prescribing within U.S. counties
  - Key Findings: Rates of antipsychotic use varied by county-level Medicaid behavioral health payment structure, with some evidence of lower antipsychotic prescribing in counties with carved out behavioral health arrangements than in counties with fee-for-service arrangements and counties with integrated managed care arrangements for both physical and behavioral health.

With an understanding of the prescribing and policy trends, we then undertook a project in 2015, with funding from the WT Grant Foundation, to develop and test communications strategies intended to educate providers who care for Medicaid-enrolled youth on concerns about the misuse of antipsychotics and, ultimately, change their prescribing practices. We conducted a statewide mixed-methods randomized control trial in Pennsylvania to test an innovative provider education strategy using clinician-generated narratives.

Developed from in-depth interviews and focus groups with a diverse set of clinicians, the narratives took the form of short videos—shared through a newsletter and a website—by which clinicians explained evidence-based prescribing guidelines for antipsychotic prescribing to their peers. We compared the use of these narratives to traditional didactic presentation of guidelines and are working to analyze and publish our findings.

We had strong partners in the development and execution of this project, including the Pennsylvania chapter of the American Academy of Pediatrics, Pennsylvania's Office of Medical Assistance Programs, the Pennsylvania Psychiatric Society and the Pennsylvania Society of Family Medical Physicians.

Next Steps

We continue to share findings from our foundational work with stakeholders at the city, state, and federal levels, and we're also undertaking new projects with our Medicaid partners in the Commonwealth to understand how 2015 changes to Pennsylvania's prescribing guidelines and the COVID-19 pandemic impacted trends in psychotropic prescribing, mental/behavioral health diagnoses, and mental/behavioral health care utilization among Medicaid-enrolled youth in the state.

In our current work, we aim to describe 2016-2021 trends in:

- Psychotropic medication prescription rates by medication class, as well as trends in cross-class polypharmacy

- The average number of annual and monthly mental/behavioral health care encounters by setting (outpatient, inpatient, ED, telehealth) across patient demographic groups (age, race/ethnicity, sex, and Medicaid payor region)
- High-risk opioid use metrics and substance use disorder diagnoses among children with comorbid mental health diagnoses and/or psychotropic prescriptions

The findings from these studies will inform targeted quality improvement efforts to strengthen prescribing and monitoring guidelines within the Pennsylvania Medicaid program, with a focus on improving equity in mental health care access and outcomes for youth in Pennsylvania.

This project page was last updated in October 2022.

Suggested Citation

Children's Hospital of Philadelphia, PolicyLab. *Understanding and Addressing Antipsychotic Prescribing Practices for Medicaid-enrolled Children* [Online]. http://www.policylab.chop.edu [Accessed: plug in date accessed here].

PolicyLab Leads

Meredith Matone
Meredith Matone
DrPH, MHS
Director

Team

Asiya Validova
Katie Wu
Katie Wu
MPH
Clinical Research Project Manager
Doug Strane
Doug Strane
MPH
Research Scientist
Katherine Kellom
Katherine Kellom
Administrative Manager
Cynthia Mollen
Cynthia Mollen
MD, MSCE
Faculty Director of Affiliate Trainee Program
Xi Wang
Zachary Meisel
Zachary Meisel
MD, MPH, MSHP
Faculty Scholar

Funders

Funders
Pennsylvania Department of Human Services
PolicyLab
Clinical Futures

Project Contact

Meredith Matone

MatoneM@chop.edu

Related Tools & Publications

Antipsychotic Prescribing to Children: An In-Depth Look at Foster Care and Medicaid Populations
Evidence to Action Briefs
May 2015

Policy and Practice Innovations to Improve Prescribing of Psychoactive Medications for Children
Article
Mar 2020

Psychotropic Medication Use by Pennsylvania Children in Foster Care and Enrolled in Medicaid
Tools and Memos
Jun 2015