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## State oversight of polypharmacy and psychotropic medication use among individuals with intellectual and developmental disabilities: a three state case study

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## State oversight of polypharmacy and psychotropic medication use among individuals with intellectual and developmental disabilities: a three state case study

### Cover Page Footnote

State oversight of polypharmacy and psychotropic medication use among individuals with intellectual and developmental disabilities: a three state case study James Houseworth, PhD\* House119@umn.edu Institute on Community Integration, University of Minnesota 2025 E River Pkwy, (MIDB - 2-509b), Minneapolis, MN, 55414 Kami L. Gallus, PhD kami.gallus@okstate.edu Institute for Developmental Disabilities, Oklahoma State University 233 Nancy Randolph Davis, Stillwater, OK, 74078 Tiffany Greene, DPh Tiffany.Greene@okdhs.org Clinical Pharmacy Services, Developmental Disabilities Services, State of Oklahoma Department of Human Services 2400 N. Lincoln Blvd., Oklahoma City, OK 73105 Steven R. Erickson, PharmD serick@med.umich.edu University of Michigan, College of Pharmacy 428 Church Street, Ann Arbor, MI 48109-1065 Jennifer Jones, PhD jennifer.jones@okstate.edu Institute for Developmental Disabilities, Oklahoma State University 233 Nancy Randolph Davis, Stillwater, OK, 74078 Laura Vegas, MPS lvegas@nasddds.org National Association of State Directors of Developmental Disability Services 301 North Fairfax Street, Suite 101 Alexandria, VA 22314 Acknowledgements We would like to thank Tia Claybrook for coordinating and documenting our initial contact with state officials. \*Corresponding author

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# State Oversight of Polypharmacy and Psychotropic Medication Use Among Individuals with Intellectual and Developmental Disabilities: A Three-State Case Study

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## Plain Language Summary

*Adults with intellectual and developmental disabilities (I/DD) are given more medications than people without I/DD. Taking many medications can sometimes cause problems. There are currently no clear national rules about medication for this group. This report explores how three states try to make sure medications are safe. This report focuses on medications used to make people with I/DD who get services feel and behave better (psychotropics). The article discusses current efforts to reduce problems because of medication use for people with I/DD in three states and also explores the similarities and differences across those states. This report is a beginning conversation to help make better rules for keeping better track of medication use that can cause problems for people with I/DD.*

## Abstract

*Adults with intellectual and developmental disabilities (I/DD) are prescribed more medications than the general population, placing them at significantly higher risk for issues because they take multiple medications (polypharmacy). There are currently no clear national standards for the administration of medications given this risk. The following policy analysis explores state policies related to prescription medication oversight. This analysis pays particular attention to the use of medications that alter one's mental state (psychotropics) among people with I/DD who receive home- and community-based services (HCBS) in the U.S. The article outlines current efforts implemented to reduce medication-related risks for people with I/DD in three states and explores the similarities*

We would like to thank Tia Claybrook for coordinating and documenting our initial contact with state officials.

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*and differences across strategies. This policy analysis aims to initiate conversation and encourage further consideration and deliberation necessary to move toward clear and concrete guidelines for the oversight of medication regimens.*

## Introduction

Adults with intellectual and developmental disabilities (I/DD) are prescribed more medications than the general population (Hobden et al., 2013; McMahon et al., 2020). In addition to addressing greater health needs, medications are commonly prescribed to people with I/DD to manage challenging behaviors and co-occurring mental health diagnoses with the goal of improved functioning (Aman et al., 2005; Doan et al., 2013; Holden & Gitlesen, 2004; Morgan et al., 2008). However, the high rate of prescription medication use places adults with I/DD at significantly higher risk for polypharmacy and polypharmacy-related adverse effects.

*Polypharmacy* is defined as the simultaneous use of multiple medications by one individual, with the most commonly reported numerical definition of polypharmacy characterized as five or more medications taken daily (Masnoon et al., 2017). Polypharmacy rates among persons with I/DD vary depending on the definition of polypharmacy and the sample studied. For example, rates reported vary from 20.9% taking 5 or more medications, 55% taking 10 or more medications, 31.5% taking from 5 to 9 more medications, 20.1% taking 10 or more medications, and 29.8% taking 12 or more medications (Erickson et al., 2017, 2021; Haider, 2014; O'Dwyer et al., 2018). The term polypharmacy used throughout the current policy article refers to the concurrent use of multiple medications. In recent years the principle focus within medication research with individuals with I/DD has placed particular attention on the high levels of psychotropic medication prescriptions. *Psychotropic medications* include those that affect the mind, emotions, and behaviors (e.g., anti-anxiety, anti-depressants, antipsychotics, mood stabilizers, simulants). Studies report that anywhere between 20% to 85% of adults with I/DD who live in the community are taking psychotropic medications (Deb et al., 2015; Doan et al., 2013; Holden & Gitlesen, 2004) with many taking more than one type of medication class or multiple medications from the same class (McGillivray & McCabe, 2004). The concurrent usage of psychotropic medications is commonly referred to as psychotropic polypharmacy.

Both polypharmacy and psychotropic polypharmacy come with the potential risk of adverse drug reactions and interactions and are related to poorer outcomes in the general population (O'Dwyer et al., 2018). Still, the prevalence and severity of polypharmacy-related adverse events are greater among patients with I/DD compared to those without I/DD. According to the data from the 2021-2022 [National Core Indicators Intellectual and Developmental Disabilities survey](#), 56% of the respondents ( $n = 13,096$ ) surveyed used at least one psychotropic medication on a regular basis. Most concerning is that 66% of those people took one to two medications and 27% took three to four medications for mood anxiety and psychotic disorders.

A recent study found that hospitalizations associated with adverse medication events are more common in adults with I/DD compared to the general population (Erickson et al., 2020). The concurrent use of multiple psychotropic medications among adults with I/DD is further

complicated by concerns related to the prescribing of psychotropic medications for non-FDA approved indications (Deb & Unwin, 2007). Research indicates that people with I/DD who took one or more psychotropic medications reported lower quality of life in physical health, psychological health, and environmental domains (e.g., housing, finances) than people with I/DD who were not taking medication (Koch et al., 2015). Further, polypharmacy with psychotropic medication can increase adverse events associated with therapy such as memory loss, sleeping problems, and weight gain, also negatively affecting quality of life (Scheifes et al., 2016).

### **Purpose Statement and Research Question**

Given the high risks associated with polypharmacy and psychotropic polypharmacy, clear and concrete guidelines for effective medication management and oversight among adults with I/DD are warranted. In absence of such guidelines, the following policy analysis explores state policies and protocols related to prescription medication oversight among people with I/DD who receive home- and community-based services (HCBS) in the U.S. In line with many issues related to the provision of state supports and services for adults with I/DD, state developmental disabilities agencies handle issues related to polypharmacy uniquely based on the state's existing policies, legal requirements, goals, and experiences. This article outlines current efforts implemented to reduce such medication-related risks for people with I/DD in three states and explores the similarities and differences in strategies. By highlighting potentially promising strategies and practices related to the oversight of polypharmacy among adults with I/DD, the current analysis aims to begin the conversation and encourage further consideration and deliberation necessary to move toward the clear and concrete guidelines that are needed to reduce the risks associated with polypharmacy.

States are the primary unit of distribution for the largely federally based Medicaid financing that supports services, both medical and nonmedical, for people with I/DD. Within the guardrails of federal guidance and framework, each state has a large degree of flexibility and responsibility in determining rules for pre-approval and reimbursement for services and oversight of ethical practices related to these services. This analysis reviews current practices related to monitoring and/or improving prescription medication use among adults with I/DD in three states—Oklahoma, Connecticut, and Georgia. Similarities and differences across state policies and practices and implications for future research and policy are discussed. We address the following research questions.

1. What monitoring systems are in place within each state in regard to medication utilization by adults with I/DD (e.g., medical/pharmacological or other reviews, required documentations)?
2. What is the primary purpose(s) of the monitoring systems in place?
3. What are the similarities and differences between how each state is monitoring medication utilization among adults with I/DD?

## Method

### Multiple Case Study Design

This study utilized a qualitative, multiple case design in which representatives of three states with policy related to medication usage among adults with I/DD reported on their state's policy and protocols. According to Yin (2009), case studies can be used to *explain, describe, or explore* events or phenomena in the everyday contexts in which they occur.

### State Selection

This policy analysis was developed as part of an academic collaboration between faculty, staff, and graduate students at the Institute on Community Integration at the University of Minnesota, the University of Michigan College of Pharmacy, and the Institute for Developmental Disabilities at Oklahoma State University (OSU). Oklahoma was initially identified as a state of interest because of the existing collaboration with the state's Developmental Disabilities Services pharmacy services staff. Five other states were contacted for inclusion based on recommendations from the co-authors and members of the National Association of State Developmental Disability Directors (NASDDDS). These five states were noted to be engaged in some form of review of client cases when potential or real medication-related problems were identified. Because of the lack of response from representatives in one state and the lack of formal policy or practices indicated by representatives from the other state, three states were included in the final review.

## Procedures

### Questions for States

A trained interviewer, a graduate research assistant with the Institute for Developmental Disabilities at OSU, informally met with representatives from each state's Developmental Disabilities Services division and asked the following questions.

1. What monitoring systems are in place within your state in regard to medication utilization by adults with I/DD (e.g., medical/pharmacological or other reviews, required documentations)?
  - a. Does this differ by waiver?
2. Are there any limits on who can prescribe psychotropic drugs for HCBS service recipients with I/DD in your state (i.e., specialist in clinical psychology/psychiatry)?
3. What has been the history of the development of these practices in your state (e.g., did practices stem from lawsuits or legislation)?

4. Have there been any efforts to determine best practices related to these issues in your state?

### **Data Analysis**

Data were collected in two phases that took place between April 2021 and February 2022. We note that information (e.g., state policies) could have changed since this data were collected.

### **Coding of Results from States**

The interviewer, and when possible, a senior research team member, took notes during the interview with each state. These notes were transformed into distinct units of information for each state. One member of the research team began assessing these units within and between states. The *within* state notes were transformed into brief narratives about each state's monitoring programs. The *between* state information was transformed into a series of similarity and differences statements after confirmation from each state regarding their narrative.

### **Refinement of State Information**

In collaboration with state officials, we then refined our initial conclusions about each state by allowing state officials to review our narratives. We took this step to ensure the accuracy of the information in this report and in order to allow states a chance to approve any published information about their policy. In an iterative process, the statement about each state was discussed and revised with follow-up communication when confusion or misunderstandings occurred until both parties agreed the information was accurate.

## **Results**

### **Key Findings by State**

#### ***Connecticut***

In Connecticut, a Program Review Committee within the Connecticut Department of Disability Services was developed based on a consent decree issued because of several lawsuits that led to the closing of the Mansfield training school (a residential and training setting for people with I/DD) in 1993. The Review Committee largely includes employees of the Department of Disability Services, alongside outside members, such as human rights advocates, nurses, and psychiatrists. The Review Committee attempts to review all cases of polypharmacy and psychotropic medication use, as well as any aversive methods involving restraints, either annually or every 3 years based on need. The Connecticut Department of Disability Services defines polypharmacy as 3 or more medications, including concurrent prescribing of medications within the same class of drug or from different drug classes. Psychotropic medications are specifically targeted as they come under a larger effort to review the use of restraints. Any time a new

psychotropic medication is added, a recipient's case is targeted for review. While there is no formal organizational framework guiding polypharmacy policy in the state of Connecticut, attempts to include best practices medically and more holistically (e.g., the use of positive behavior supports) guide action. On average, 3,500 of the approximate 10,000 adults receiving services are reviewed at least once each year. The committee reviews records of persons experiencing polypharmacy and makes recommendations that are voluntarily considered by prescribers. The committee can ask for more rationale and/or can disagree with a medication prescribed but has no authority to override prescribers. However, the committee can encourage change, such as recommending new prescribers to work with a particular service recipient. The primary purpose of reviews is to ensure the health and safety of service recipients when it comes to medication use, particularly when additional psychotropic agents are added to an existing psychotropic medication regimen.

While the state maintains a long-term database of medication use among I/DD service recipients, the state representative interviewed suspects the database overrepresents usage. This overrepresentation is likely because of new medications being added to a person's medication regimen in the database without updates as to whether current medications were discontinued or reduced. Therefore, accurate, real-time data regarding polypharmacy is lacking.

### **Georgia**

Polypharmacy justification for individuals with I/DD receiving HCBS is monitored by policy and oversight within the Georgia Department of Behavioral Health and Developmental Disabilities. Georgia's policy set forth a new definition of polypharmacy specific for prescribing psychotropic medications. Intra-class polypharmacy is defined as prescribing more than one medication in a single class of medications (two or more antipsychotics, antidepressants, mood stabilizers, and anxiolytics). Examples of polypharmacy (among others) are:

- Use of two antipsychotic medications to treat psychosis or symptoms of schizophrenia.
- Use of two antidepressants to treat depression.

Interclass polypharmacy includes prescribing three or more different classes of medication (antipsychotics, antidepressants, mood stabilizers, and anxiolytics). Examples of such polypharmacy include:

- Prescribing an antipsychotic, a mood stabilizer, and an antidepressant.
- Prescribing an antipsychotic, an antidepressant, and a benzodiazepine.
- Prescribing an antihistamine, antidepressant, and a benzodiazepine.

These definitions include medications taken chronically (i.e., every day) or those taken when needed (i.e., Pro re nata or "as needed" drugs, in this case for behavioral management).

Georgia's Developmental Disability regional field offices integrated these new definitions into standardized assessment to identify interclass and intra-class polypharmacy. When prescribed medications for one individual meet the definitions for either inter- or intra-class



polypharmacy, a review is triggered. The result of these revised definitions of polypharmacy also led to required review and surveillance for polypharmacy by multiple entities responsible for the oversight and provision of supports and services. Parties responsible for surveillance may include registered nurses responsible for intake and evaluation assessment for level of care and clinical support determination, registered nurses providing direct clinical oversight of individuals in service, staff trained to complete risk screening, and prescribing providers. Additionally, for individuals at risk for loss of community placement because of medical and behavioral acuity, the agency convenes clinical review groups consisting of physicians, nurses, behavioral experts, case management entities, and administrators to review clinical history, to include, but are not limited to prescribed medications to offer clinical recommendations. Annual screenings for polypharmacy are conducted by providers and state agency nurses for individuals receiving skilled nursing supports. This process generates recommendations and development of plans to mitigate risks caused by polypharmacy. While there are no processes for mandating adherence to recommended changes when the clinical review group has concerns about prescribing practices associated with polypharmacy, pharmacists, physicians, or other health care professionals may be contacted to further review medications and check for potentially dangerous drug interactions. In some cases, changes such as deprescribing (eliminating one or more medications) or dosage reductions are made as a result of the review. Although approximately 14,000 available cases qualify for review, only a subset are reviewed by the state agency. All cases receive an annual screening for risks including but not limited to polypharmacy. The screening is completed by an assigned provider or clinician in local field offices. Screenings resulting in health scores above an established threshold require a clinical review by a registered nurse. The goal of a clinical review is heightened clinical oversight and mitigation of identified risks to health, to include but not limited to risks caused by polypharmacy.

Another change related to polypharmacy included the expansion of state behavior support policy, training, and the network of behavioral support providers. Initial, annual, and as-needed behavioral assessments inform authorization of in-home behavioral support services and additional direct support staffing. Individuals receiving skilled nursing require a nursing and behavioral assessment at which time polypharmacy is also assessed.

Further, Georgia has implemented expanded reporting requirements through the development of an incident management system. This system tracks key incidents such as hospitalizations, outstanding assessments needed, outstanding support needs, and psychologically based incidents. The system also includes other indicators of clinical acuity to conduct clinical oversight of medically and behaviorally complex individuals.

### **Oklahoma**

In the state of Oklahoma, clinical pharmacy services described stemmed from the *Homeward Bound v. Hissom Memorial Center* lawsuit (for more information see <https://www.pubintlaw.org/cases-and-projects/deinstitutionalization-nationwide-oklahoma/>). Settlement agreements included the provision of medical services with the component of clinical pharmacy services identified in Oklahoma Developmental Disability Services (DDS) Health and

## Wellness Policy.

Individuals receiving HCBS community residential supports or group home services receive clinical pharmacy services as part of the Health and Wellness policy. One aspect of these services includes written pharmacy consultations (also referred to as pharmacy reviews), which are provided to the service recipient's interdisciplinary medical team and personal support team. A clinical pharmacist reviews an individual's medication regimen when any of the following criteria apply.

- Receives 3 or more anticonvulsants
- Receives 2 or more psychotropic medications
- Receives 5 or more routine medications
- Is experiencing a potential medication-related issue not resolved with other medical intervention
- Receives an as-needed (PRN) medication routinely for more than 3 months
- Receives a PRN medication for behavioral control

At any one time, there are approximately 3,700 DDS service recipients in Oklahoma receiving HCBS residential supports or group home services who may meet criteria for medication review by a clinical pharmacist according to Health and Wellness Policy. However, a clinical pharmacist will complete a medication review for any of the approximately 6,700 individuals currently receiving DDS services in Oklahoma when a team member or the pharmacist feels a need exists. The above criteria serves as a guide to prompt a DDS Case Manager to submit a request for a pharmacy review when it is required according to policy; however, it should be noted that a Case Manager is always able to ask for the assistance of pharmacy services anytime a drug-therapy question arises. The average number of pharmacy reviews completed each month varies between 35 to 45, depending on the complexity of the review and other pharmacy services provided.

The purpose of the pharmacy review process is to identify and address potential concerns and improve outcomes with medication therapy. Some examples include therapeutic duplications, drug-disease interactions, untreated medical conditions, errors in medication administration, adverse effects, drug interactions, inappropriate dose/formulation, recommendations for de-prescribing, pain management, and disease state prevention. Recommendations are provided in written format for both healthcare providers and the service recipient's personal support team (direct care staff, case management, and nursing). A letter explaining DDS policy regarding the pharmacy review process, as well as any team concerns prompting completion of the review, is included with a written copy of the review, and then sent to each of the service recipient's healthcare providers for consideration of recommendations. The case manager and DDS nurse also receive a copy, which is followed with a discussion with direct care staff of recommendations made for the team to consider as well as a plan for implementation. In rare situations when an as-needed (PRN) medication is ordered for behavioral control (identified as a highly restrictive procedure), policy requires a clinical pharmacy review by the Director of Pharmacy Services. The Case Manager for the service recipient must request

the review within 5 days of the date a PRN medication for behavior is ordered. These pharmacy reviews look specifically to assess whether there may be any unidentified sources of discomfort or pain that may be manifesting behaviorally, whether less restrictive measures have been and will continue to be tried prior to administering a PRN medication for behavioral control, notify healthcare prescribers of any precautions or contraindications to PRN medication use, and request a very specific protocol that eliminates subjective criteria for administration. The review also reminds the team to ensure the protocol is incorporated into the service recipient's protective intervention plan. The policy for the submission of critical incident reports is followed anytime a medication is administered on a PRN basis for behavioral control.

## Discussion

This policy analysis highlights current policy and practices related to monitoring and/or improving prescription medication use among adults with I/DD in three states (Oklahoma, Connecticut, and Georgia). In reviewing the policies and practices across the three states, it is notable that legal proceedings (e.g., lawsuits, consent decrees) stemming from legal precedent set by the Supreme Court decision in *Olmstead* and the ADA enacted by Congress, were cited as primary drivers of state policy related to polypharmacy and the use of psychotropic medications among individuals with I/DD who receive state HCBS waived services in two of the three states studied. As a result, the often unstated, yet common purpose of polypharmacy reviews across the three states focused on *enhancing the safety and health of service recipients in the state*.

While the catalyst for policies and practices varied among states, representatives from all three states mentioned, at least informally, the limitations in review volume and processing time because of the limited resource capacity. These resource limitations are related to the complexity of each case requiring careful pharmacological analysis, the large number of persons with I/DD experiencing polypharmacy, and the small number of staff dedicated to this process.

In the present study, all three states attempt to regulate/ensure more rigorous consideration of polypharmacy via the use of review boards. In all three states, review boards make recommendations to prescribers (or medical teams including prescribers), an important role in oversight of prescribing practices to ensure the safe and effective use of medications taken by people with I/DD. However, it is important to note the autonomy of accredited medical professionals is not usurped. A recent scoping review provides an overview of the extent, range, and nature of the available research on medication use and practices and medication management among people with intellectual disability taking psychotropic medications for challenging behaviors (Costello et al., 2022). Psychotropic medications are commonly prescribed for adults with intellectual disability, often in the absence of a psychiatric diagnosis. The primary recommendations were that patient cases should have access to multidisciplinary teams, guidelines, medication reviews, staff training, and enhanced roles for caregivers in decision-making were warranted to optimize psychotropic use.

While each state has slightly different definitions of polypharmacy that trigger review processes, all three states' policies and processes are particularly sensitive to the role

psychotropic medications play in polypharmacy and enacted review practices that are particularly sensitive to triggering review when multiple psychotropic medications are prescribed. It is worth noting that Oklahoma is unique in that it utilizes a clinical pharmacist to review cases. A systematic review of multidisciplinary interventions to optimize medications for persons with I/DD noted the value of including pharmacists on the review teams (Nabhanizadeh et al., 2019).

Initiatives to optimize medication prescribing for persons with I/DD have been enacted in other countries. The process of evaluating the necessity of psychotropic medication use for persons with I/DD is an active, ongoing initiative in the United Kingdom (UK; Flood, 2018). Pharmacists, for example, are involved in efforts to reduce the rate of psychotropic medication prescribing in this vulnerable population. A nationwide initiative in the UK known as STOMP (Stopping Over-Medication of People with a Learning Disability) is one such effort (Branford et al., 2018). The program recommends that medication regimens are regularly reviewed, and that patients and caregivers are included in the assessment and decision-making process when prescribing or deprescribing, or optimizing therapy, are considered.

In the U.S., a group of researchers had developed the *Integrated Mental Health Treatment Guidelines for Prescribers in Intellectual and Developmental Disabilities* (Caoili et al., 2022), which began with input for various stakeholders, including advocates with I/DD, on an initial draft of the guidelines. Stakeholders emphasized five themes when considering prescription of medication that informed the guidelines: (1) relationships, communication, and openness; (2) understanding the person, their environment, and culture; (3) importance of an integrated care and wellness approach; (4) consideration of treatment modifications; and (5) recommendations from focus group participants regarding the guidelines. This input was considered along with feedback from 43 prescribers to develop an updated version of the guidelines. Such guidelines can inform future state and federal policy on this issue.

An important finding from the current assessment was that state representatives across all three states reviewed the suggested changes. Each state acknowledged the willingness of many prescribers to carefully consider the recommendations of the reviewers and to make meaningful changes to medication regimens. Representatives for each state indicated that many prescribers welcomed a “second pair of eyes” and took the recommendations as valuable collegial advice.

### Future Directions and Limitations

Future research should seek to expand this effort to include review of more states’ policies and practices related to polypharmacy review. Further review would assist with providing a better understanding of how polypharmacy and the use of psychotropics within the I/DD population is being addressed on a national level across states. Having a larger national picture of how states handle the issues of polypharmacy will allow states to share potentially more effective practices. Studying the outcomes associated with individual states’ policies will also provide evidence to support translation of successful programs from one state to another and

support the development of clear and concrete guidelines for prescription medication management and oversight. Further, the federal government (namely the Centers for Medicare and Medicaid) can take best practices into consideration in crafting the rules and regulations placed on states to create some national standards to encourage more effective medication management for people with I/DD. At the federal level, the Centers for Medicare and Medicaid Services (CMS) mandates that pharmacists review medication regimens of persons living in Intermittent Care Facilities on a quarterly time frame. These are not individuals supported by HCBS waivers, but rather state-run institutions. The reviews are mandatory, much like medication reviews mandated by CMS for nursing home residents. The same policies are not stated for individuals living in the community supported by HCBS waivers.

Future research can also be informed by national datasets, such as the National Core Indicators – Intellectual and Developmental Disabilities (NCI-I/DD). The NCI-I/DD is a collaboration between NASDDDS, Human Services Research Institute (HSRI), and state Developmental Disability Systems. The aim of the NCI-I/DD is to provide valid reliable measures and data collection protocol for participating states to collect information regarding the quality of the state service delivery system. This dataset has already been used to explore psychotropic medicine use (e.g., Erickson et al., 2021) and it and other similar data can be used to monitor both national and state-level use of such medications.

Next, the extent to which training regarding the medical needs and the vulnerability of the I/DD population for health care professionals (e.g., doctors, nurses, prescribers) is available, required, and effective in addressing polypharmacy is a key consideration at both the national and state level. Heretofore, it appears such training is lacking, and many stakeholders are indicating it is needed.

Finally, care coordination and how it is supported and encouraged within each state system is important. Better collaboration among behavioral, mental health, and medical service systems could serve to ensure medication use is maximally safe and effective. Such coordination would better address the holistic needs of adults with I/DD, balancing safety with behavioral support needs and self-determination.

We note that the following case study was focused primarily on people receiving waived (HCBS) services. However, it is not only individuals with I/DD receiving such services who are at risk for polypharmacy. Children with I/DD and adults with I/DD not receiving services are also at risk, thus the issue is more widespread. Similarly, efforts at oversight are also not the only factors influencing prescription in this population. Issues with access to mental health services, primary care service, and other services can contribute to polypharmacy among people with I/DD as it can to all people.

## Conclusion

The current policy analysis is an initial step in advancing understanding of state monitoring practices utilized with polypharmacy among adults with I/DD. By exploring state

policies and protocols of three state agencies related to prescription medication oversight, the current manuscript initiates conversation and encourages further consideration of policies and practices at the national level. Ultimately, the current findings highlight that polypharmacy has been identified as an important indicator of quality of care among individuals with I/DD that requires state oversight. The current analysis further highlights the need for more research exploring current policies and practices and the effectiveness of state-implemented safeguards in reducing the negative health risks associated with polypharmacy.

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