



Public Health Law

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Centers for Disease Control and Prevention

Treating Attention-Deficit/Hyperactivity Disorders in Children Under Age Six Years: A Research Anthology

Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder that affects 6.4 million children aged 4–17 years.¹ Children with ADHD demonstrate persistent behavioral symptoms, such as inattention, hyperactivity, and impulsivity in various environmental settings.² ADHD is a serious public health concern because of its high prevalence; chronic nature; significant impact on school performance, family life, and peer relationships; and estimated annual cross-sector costs of \$38–72 billion.³ A number of effective treatment options are available for children with ADHD, including parent behavior therapy, teacher-delivered child behavior therapy, medication, or combinations of these treatment options.⁴

In 2007, the American Academy of Child and Adolescent Psychiatry (AACAP) published guidelines for the pharmacological treatment of children under age 6 years with various psychiatric disorders.⁵ In these guidelines, the AACAP recommended that clinicians try behavioral therapy before prescribing medication to treat preschool aged children with ADHD.⁶ In 2011, the American Academy of Pediatrics (AAP) updated their previously published clinical practice guidelines with recommendations for the

¹ Susanna N. Visser et al., *Trends in the Parent-Report of Health Care Provider-Diagnosed and Medicated Attention-Deficit/Hyperactivity Disorder: United States, 2003–2011*, 53 J. AM. ACAD. OF CHILD & ADOLESCENT PSYCHIATRY 34, 36 (2014).

² Heidi M. Feldman & Michael I. Reiff, *Attention Deficit–Hyperactivity Disorder in Children and Adolescents*, 370 N. ENG. J. MED. 838, 838 (2014); AM. PSYCHIATRIC ASS'N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS (5th ed. 2013).

³ Jalpa A. Doshi et al., [Economic Impact of Childhood and Adult Attention-Deficit/Hyperactivity Disorder in the United States](#), 51 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 990, 1000 (2012).

⁴ CTRS. FOR DISEASE CONTROL & PREVENTION, [Treatment, Attention-Deficit/Hyperactivity Disorder \(ADHD\)](#) (last updated Jan. 27, 2016).

⁵ Mary M. Gleason et al., [Psychopharmacological Treatment for Very Young children: Contexts and Guidelines](#), 46 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 1532 (2007).

⁶ *Id.* at 1536, 1541.



diagnosis and treatment of pediatric ADHD.⁷ Those treatment recommendations vary by age.⁸ “For preschool-aged children (4–5 years of age), the primary care clinician should prescribe evidence-based parent and/or teacher-administered behavior therapy as the first line of treatment,” followed by medication only if behavioral therapy fails to provide significant improvement in the child’s functioning.⁹ For children aged 6–11 years, the AAP recommends a combination of FDA-approved ADHD medication and behavioral therapy.¹⁰ For children aged 12–18 years, the AAP recommends prescribing psychotropic medications, “preferably” in combination with behavior therapy.¹¹

Data from the 2009–2010 National Survey of Children with Special Health Care Needs show, however, that fewer than half of children under age 6 with diagnosed ADHD receive any behavioral therapy, and 25.4% of these children are being treated exclusively with medication.¹² States have used various measures to guide physicians toward best practices for ADHD treatment, including prescription prior authorization policies, informed consent requirements, and programs that expand access to and use of telemedicine. The following readings and resources describe and discuss these strategies. The resources were identified in June and September 2015 using online databases.¹³

⁷ Am. Acad. of Pediatrics, Subcomm. on Attention-Deficit/Hyperactivity Disorder, Steering Comm. on Quality Improvement & Mgmt., [ADHD: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents](#), 128 PEDIATRICS 1 (2011).

⁸ *Id.* at 9–13.

⁹ *Id.* The Guidelines also recommend that, where behavior therapy is not available, the medical provider “weigh the risks of starting medication at an early age against the harm of delaying diagnosis and treatment.” *Id.* at 9.

¹⁰ Am. Acad. of Pediatrics, *supra* note 7, at 9. The AAP describes behavioral therapy as “evidence-based parent- and/or teacher-administered” therapy. *Id.*

¹¹ *Id.*

¹² Susanna N. Visser et al., *Treatment of Attention Deficit/Hyperactivity Disorder among Children with Special Health Care Needs*, 166 J. PEDIATRICS 1423 (2015).

¹³ PHLP searched in Google and PubMed for the terms “ADHD medication preschool policy policies law”; “ADHD medication medicaid insurance policy law”; “ADHD psychotropic Medicaid prior authorization”; “ADHD medication child policy policies law”; “ADHD ADD policy law ‘fail first’”; “ADHD ADD child therapy”; and “ADHD therapy access issue policy law” between June 10–17, 2015; and the terms “Health Center Reimbursement for Behavioral Health Services in Medicaid” and “behavioral health services reimbursement ADHD policy policies” on September 10, 2015. PHLP also searched for the terms “adv: psychotropic & medicat! & child!” on WestLawNext. PHLP used WestlawNext to conduct searches for legal publications and Google and PubMed for additional resources.

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Recent Recommendations and Guidelines for Treatment of ADHD in Children

These resources describe clinical recommendations and guidelines as well as calls for policy development for treating children under age 6 years with ADHD.

Clinical Recommendations for Treating Children Under Age 6 Years with ADHD

- [Practice Parameter for the Assessment and Treatment of Children and Adolescents with Attention-Deficit/Hyperactivity Disorder](#)
Steven Pliszka et al., 46 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 894 (2007).
- [Psychopharmacological Treatment for Very Young Children: Contexts and Guidelines](#)
Mary M. Gleason et al., 46 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 1532 (2007).
- [ADHD: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents](#)
Am. Acad. of Pediatrics Subcomm. on Attention-Deficit/Hyperactivity Disorder, Steering Comm. on Quality Improvement & Mgmt., 128 PEDIATRICS 1007 (2011).
- [A GUIDE FOR COMMUNITY CHILD SERVING AGENCIES ON PSYCHOTROPIC MEDICATIONS FOR CHILDREN AND ADOLESCENTS](#)
COMM. ON CMTY.-BASED SYS. OF CARE, AM. ACAD. OF CHILD & ADOLESCENT PSYCHIATRY (2012).
- [STIMULANT AND RELATED MEDICATIONS: US FOOD AND DRUG ADMINISTRATION-APPROVED INDICATIONS AND DOSAGES FOR USE IN PEDIATRIC PATIENTS](#)
CT. FOR MEDICARE & MEDICAID SERVS., DEP'T OF HEALTH & HUMAN SERVS. (2013).
- [Evidence-based Guidelines for the Pharmacological Management of Attention Deficit Hyperactivity Disorder: Update on Recommendations from the British Association for Psychopharmacology](#)
Blanca Bolea-Alamañac et al., 28 J. PSYCHOPHARMACOLOGY 179 (2014).

Policy Development for Treating Children Under Age 6 Years with ADHD

- [Centers for Disease Control and Prevention Agency Priority: Behavioral Therapy First for Children under 6 years of age with ADHD](#)
CENTERS FOR DISEASE CONTROL AND PREVENTION (2015).
- [Foster Children: HHS Guidance Could Help States Improve Oversight of Psychotropic Prescriptions](#)
UNITED STATES GOVERNMENT ACCOUNTABILITY OFFICE (2011).

Resources on Prior Authorization Insurance Policies

Prior authorization policies refer to public (e.g., Medicaid) and private insurance policies that require additional medical provider involvement, typically from the insuring entity, before prescribing or filling a prescription for certain medications, healthcare services, and medical equipment.¹⁴ Prior authorization policies are also referred to as preauthorization, prior approval, or precertification policies.¹⁵ The following resources are divided into two subsections: 1) resources on prior authorization policies for antipsychotic prescriptions written for children, which can serve as an example of the effects these policies might have on ADHD medication prescriptions; and 2) resources on prior authorization policies for the entire class of psychotropic medications, including both antipsychotic medications and stimulant and non-stimulant ADHD medications.¹⁶

Prior Authorization Policies for Antipsychotic Medication Prescriptions for Children

Although antipsychotic medications are not FDA-approved to treat ADHD (but are typically prescribed to treat disorders such as schizophrenia),¹⁷ prior authorization policies regarding coverage of antipsychotic medications offer insight into the legal and policy issues that can arise when analyzing prior authorization policies for ADHD stimulant medications.

- [The Effects of Prior Authorization Policies on Medicaid-Enrolled Children’s Use of Antipsychotic Medications: Evidence from Two Mid-Atlantic States](#)
Bradley D. Stein et al., 24 J. CHILD & ADOLESCENT PSYCHOPHARMACOLOGY 374 (2014), doi:10.1089/cap.2014.0008.
Compares the number of antipsychotic medication prescriptions filled in a state with a Medicaid prior authorization policy with the number of prescriptions filled in a state without a Medicaid prior authorization policy.
- [Impact of the Florida Medicaid Prior-Authorization Program on Use of Antipsychotics by Children Under Age Six](#)
Robert Constantine et al., 63 PSYCHIATRY SERVS. 1257 (2012).
Examines the number of applications to prescribe antipsychotic medication to children under age 6 years in Florida before and after implementation of Florida’s Medicaid prior authorization process.

¹⁴ [Preauthorization](#), HEALTHCARE.GOV (last visited June 29, 2015).

¹⁵ *Id.*

¹⁶ [Mental Health Medications](#), NAT’L INSTS. OF MENTAL HEALTH (last updated Apr. 2015).

¹⁷ *Id.*

- [Association Between Prior Authorization For Medications and Health Service Use by Medicaid Patients with Bipolar Disorder](#)
Christine Y Lu et al., 62 PSYCHIATRY SERV. 186 (2011).
Examines the effect of antipsychotic medication prior authorization policies in Maine on bipolar disorder patients' use of prescription medications, emergency and hospital services, and alternatives to medication.
- [Assessment of Changes in Utilization of Health-Care Services After Implementation of a Prior Authorization Policy for Atypical Antipsychotic Agents](#)
Amy Walthour et al., 44 ANNALS PHARMACOTHERAPY 809 (2010), doi: 10.1345/aph.1M620.
Analyzes the health outcomes of patients with schizophrenia, including emergency department visits and prescriptions, after Georgia's implementation of an antipsychotic medication prior authorization policy.

Prior Authorization Policies for Psychotropic Medication Prescriptions for Children

The following resources identify and discuss prior authorization policies employed by insurers to control the rate of prescribing psychotropic medications, including both antipsychotic and stimulant medications.

- [Management of Newer Medications for Attention-Deficit/Hyperactivity Disorder in Commercial Health Plans](#)
Dominic Hodgkin et al., 36 CLINICAL THERAPEUTICS 2034 (2014).
Describes approaches that commercial health plans are using to control the prescription rate of ADHD medications.
- [Fostering Transparency: A Preliminary Review of "Policy" Governing Psychotropic Medications in Foster Care](#)
Kathleen Noonan & Dorothy Miller, 65 HASTINGS L.J. 1515 (2014).
Reviews monitoring policies, including prior authorization and "red flag" monitoring, enacted by several states to control prescription of psychotropic drugs to children.
- [Psychotropic Medication Management for Youth in State Care: Consent, Oversight, and Policy Considerations](#)
Michael W. Naylor et al., 86 CHILD WELFARE LEAGUE AM. 175 (2007).
Examines approaches taken by state child welfare agencies to oversee prescription of psychotropic medication to children in foster care, including a prior authorization policies.
- [Medicaid Policies to Contain Psychiatric Drug Costs](#)
Chris Koyanagi et al., 24 HEALTH AFF. 536 (2005).
Reviews Medicaid policies enacted to control access to psychiatric medications, including prior authorization policies, preferred drug lists, limitations on the number of prescriptions, and fail-first requirements.
- [Pharmaceutical Cost Management and Access to Psychotropic Drugs: The US Context](#)
Haiden A. Huskamp, INT'L J.L. & PSYCHIATRY (2005).
Discusses strategies used by insurance entities to control the rate at which psychotropic drugs are prescribed, including prior authorization policies.

Resources on Informed Consent Requirements

Informed consent is a process by which a medical provider discusses a recommended procedure or treatment with a patient.¹⁸ Informed consent includes providing “available information regarding not only the risks of taking the recommended medication, but also the availability of alternative treatment options, and the risks and benefits of choosing such alternative treatment option,” so that the patient can make a voluntary decision to accept or refuse the treatment.¹⁹ The following resources discuss informed consent requirements as prerequisites for prescribing psychotropic medication to children and negligence-based liability for medical providers who fail to obtain informed consent first.

- [Informed Consent, Psychotropic Medications, and a Prescribing Physician’s Duty to Disclose Safer Alternative Treatments](#)
Rita Barnett-Rose, 16 DEPAUL J. HEALTH CARE L. 67 (2014).
Proposes that states adopt “dignitary-based informed consent”²⁰ provisions to ensure adequate disclosure of alternative treatment options and provide mental health patients with a cause of action against medical providers who do not disclose alternatives to psychotropic medications.
- [A Federal Solution to Foster Care’s Psychotropic Drug Crisis](#)
Maureen Howley, 69 N.Y.U. ANN. SURV. AM. L. 837 (2014).
Reviews approaches taken by five states to curb the rate at which medical providers are prescribing psychotropic drugs to children in foster care and proposes that the federal government condition state access to federal funds on the use of preconsent review strategies.
- [The Dangers of Psychotropic Medication for Mentally Ill Children: Where Is the Child’s Voice in Consenting to Medication? An Empirical Study](#)
Donald H. Stone, 23 TEMP. POL. & CIV. RTS. L. REV. 121 (2013).
Discusses states’ responses to issues of consent and refusal of psychotropic medication prescriptions among children in foster care.
- [Parity at a Price: The Emerging Professional Liability of Mental Health Providers](#)
Thomas L. Hafemeister et al., 50 SAN DIEGO L. REV. 29 (2013).
Examines the issues of informed consent and medical malpractice in the context of the increasing number of psychotropic medication prescriptions written for mental health patients.
- [The Crisis of Over-Medicating Children in Foster Care: Legal Reform Recommendations for New York](#)
Jessica Setless, 19 CARDOZO J.L. & GENDER 609 (2013).
Reviews current policy from various federal and state jurisdictions enacted in attempt to control over-medication of children in foster care. Recommends codifying informed consent requirements and additional medical education for prescribers.

¹⁸ See Rita Barnett-Rose, *Informed Consent, Psychotropic Medications, and a Prescribing Physician’s Duty to Disclose Safer Alternative Treatments*, 16 DEPAUL J. HEALTH CARE L. 67, 71–82 (2014).

¹⁹ *Id.* at 68; see also [Informed Consent—Adults](#), MEDLINEPLUS (last visited June 29, 2015).

²⁰ “A dignitary-based model would provide protection for a patient’s bodily dignity and allow patients to sue for violations of informed consent that do not result in any injury other than the denial of the information itself.” Barnett-Rose, *supra* note 18, at 70 n.10.

- [A Mistreated Epidemic: State and Federal Failure to Adequately Regulate Psychotropic Medications Prescribed to Children in Foster Care](#)
A. Rachel Camp, 83 TEMP. L. REV. 369 (2011).
Calls for clearly defined consent requirements to control the administration of psychotropic medications to children in foster care.
- [The Children Are Crying: The Need for Change in Florida’s Management of Psychotropic Medication to Foster Children](#)
Kimber E. Strawbridge, 15 U.C. DAVIS J. JUV. L. & POL’Y 247 (2011).
Compares consent requirements for prescribing psychotropic medications for foster care children in three states.

Resources on State Law Requirements for Medical Licensing Boards

Every state has a medical licensure board that regulates the medical licenses obtained by doctors in that state.²¹ The following article discusses legislative attempts to regulate physician prescribing of psychotropic medications for children by requiring state medical boards to promulgate guidelines and training procedures for medical providers.

- [Prescribing a Legislative Response: Educators, Physicians and Psychotropic Medication for Children](#)
Connie Lenz, 22 J. CONTEMP. HEALTH L. & POL’Y 72 (2006).
Provides an overview of medical practice guidelines for medical providers for treating children with ADHD.

Resources on Telemedicine

“Telemedicine” refers to “[t]he use of long distance communications for medical purposes.”²² The following articles discuss state-based telemedicine policies as well as the legal and ethical considerations that accompany access to health services through the use of telemedicine, which can include physical, mental, psychological, psychiatric, and behavioral services for children with ADHD.

- [Delivering an Evidence-Based Mental Health Treatment to Underserved Populations Using Telemedicine: The Case of a Trauma-Affected Adolescent in a Rural Setting](#)
Kristen M. Shealy et al., 22 COGNITIVE & BEHAVIORAL PRAC. 331 (2015), doi: 10.1016/j.cbpra.2014.04.007.
Discusses the provision of mental health telemedicine to patients in remote locations.
- [Telemedicine: Pediatric Applications](#)
Bryan L. Burke Jr. et al., 136 PEDIATRICS e293 (2015).
Discusses provider liability issues and provisions of the Patient Protection and Affordable Care Act and Health Insurance Portability and Accountability Act that promote or prevent access to and use of telemedicine for pediatric healthcare.

²¹ See [Medical Licensure](#), AM. MED. ASS’N (last visited June 30, 2015).

²² R.L. Bashshur et al., *The Empirical Foundations of Telemedicine Interventions for Chronic Disease Management*, 20 TELEMED. & E-HEALTH, 769 (2014), doi: 10.1089/tmj.2014.9981.

- [State Telemedicine Gap Analysis](#)
 Latoya Thomas & Gary Capistrant, AM. TELEMED. ASS'N (May 2015)
 Provides a comprehensive 50-state summary and analysis of telemedicine policies for coverage and reimbursement for medical services, including mental and behavioral health services.
- [Guidelines for the Practice of Telepsychology](#)
 Linda Campbell et al., AM. PSYCHOLOGICAL ASS'N (2013)
 Provides guidance on standards of care, informed consent, and confidentiality in the provision of psychological services through telemedicine.
- Telehealth in Developmental-Behavioral Pediatrics
 Neelkamal S. Soares & Diane L. Langkamp, 33 J. DEVELOPMENTAL & BEHAV. PEDIATRICS 656 (2012), doi: 10.1097/DBP.0b013e3182690741.
 Outlines legal regulatory issues in using telemedicine for developmental-behavioral pediatric medicine.
- [Attention-Deficit/Hyperactivity Disorder and Telemental Health](#)
 Nancy B. Palmer et al., 12 CURRENT PSYCHIATRY REPS. 409 (2010).
 Encourages the use of telepsychiatry services for children and adolescents with ADHD and discusses issues that have arisen in billing Medicaid for telemental health services.
- [Practice Parameter for Telepsychiatry with Children and Adolescents](#)
 Kathleen Myers et al., 47 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 1468 (2008).
 Provides guidance, including a list of legal and regulatory requirements that should be addressed, for establishing a telepsychiatric practice and for providing psychiatric care to children and adolescents through the use of telemedicine.
- Legal and Ethical Aspects of Telemedicine
 B. Stanberry, 12 J. TELEMED. & TELE CARE 166 (2006), doi: 10.1258/135763306777488825.
 Discusses legal and ethical concerns of telemedicine, including provider liability, confidentiality, and patient privacy, that apply to provision of mental health services.
- Legal and Ethical Challenges in Telepsychiatry
 Steven E. Hyler et al., 10 J. PSYCHIATRIC PRAC. 272 (2004), doi: 10.1097/00131746-200407000-00011.
 Discusses ethical and legal issues presented by the use of telemedicine for psychiatric treatment.

Resources on Medicaid Reimbursement for Behavioral Health Services

Challenges getting reimbursed for behavioral health services can prevent providers from providing behavioral therapy to children with ADHD. The following resources discuss Medicaid reimbursement policies that could improve access to behavioral health services by enabling providers to obtain reimbursement.

- [Coverage of Behavioral Health Services for Children, Youth, and Young Adults with Significant Mental Health Conditions](#)
CENTERS FOR MEDICARE & MEDICAID SERVICES & SUBSTANCE ABUSE & MENTAL HEALTH SERVICES ADMINISTRATION (2013).
Explains the various Medicaid authorities used by states to implement reimbursement programs for behavioral health services for child, youth, and young adults.
- [Financing of Behavioral Health Services within Federally Qualified Health Centers](#)
TRUVEN HEALTH ANALYTICS & BRANDEIS UNIVERSITY (2012).
Describes reimbursement strategies—and the impact the Affordable Care Act has on these strategies—for federally qualified health centers providing behavioral health services to Medicare and Medicaid patients.
- [State Policy Report #34: Health Center Reimbursement for Behavioral Health Services in Medicaid](#)
NATIONAL ASSOCIATION OF COMMUNITY HEALTH CENTERS (2010).
Reports on various state Medicaid reimbursement policies for behavioral health services, including paying health centers for mental health visits directly through Medicaid, carving out mental health services to another entity, and paying for mental health group visits.

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