Children and Adults with Attention-Deficit Hyperactivity Disorder (CHADD) Position Statement on Controlled Substances Measures

Background: CHADD has become aware of state and local policies, including legislation and regulations, intended to address the misuse of opioids, but which may have unintended consequences for children and adults prescribed FDA-approved medications to treat attention-deficit hyperactivity disorder (ADHD). CHADD recognizes the misuse of opioids to be a major public health problem in the United States and one that regulators and other entities are right to seek to address. It has come to CHADD's attention that, in rightfully addressing the misuse of opioids, these proposed rules and bills have also inadvertently swept into their purview the distribution, prescription, and administration of medications used for the treatment of ADHD that are Schedule II controlled substances ("stimulants"). Unless appropriately targeted to the misuse of opioids, these policies can cause unintended consequences for a physician licensed to practice in the state when that physician distributes, prescribes, administers, or dispenses a stimulant for the treatment of ADHD and can ultimately complicate patients' access to clinically appropriate and medically necessary treatment.

With this Statement, CHADD asks that any proposed state rule or bill intended to address opioid misuse create an explicit exception for the distribution, prescription, and administration of medications used for the treatment of ADHD.

Summary of our position: As discussed further below, ADHD is a significantly impairing disorder, especially when inadequately treated. Research has shown economic costs of ADHD in the United States that range from $143 to $266 billion (B), annually,[1] but the economic costs can be reduced with better treatment management. Medication is recognized by the scientific community as a primary treatment to effectively reduce the core symptoms of ADHD.[2]

Any requirement that restricts, delays, or substantially limits a physician in providing a prescription for an ADHD stimulant medication imposes an obstacle for individuals with ADHD—including children—to obtaining appropriate treatment. Likewise, any measures that require individuals prescribed ADHD stimulant medications to provide evidence of their continued use, such as providing routine urine samples, needlessly stigmatizes the disease and interferes in the proper course of medical treatment.

In a 2016 survey of CHADD's membership, 69% of respondents described hardship in obtaining access to needed medications. Restrictive new policies on the use of all controlled substances threaten to further compromise patient access to medications that are uniformly recognized as the clinically appropriate and medically necessary standard of care. Further, CHADD is concerned that some physicians may decline to treat patients with ADHD to avoid the administrative burden imposed by these requirements. Strict measures for obtaining refills of stimulant medications for

---

[1] Jalpa A. Doshi., et al., Economic *Impact of Childhood and Adult Attention-Deficit/Hyperactivity Disorder in the United States*, 51:10 Journal of the American Academy of Child and Adolescent Psychiatry 990 (2012).

[2] The MTA Cooperative Group, *A 14-Month Randomized Clinical Trial of Treatment Strategies for Attention-Deficit/Hyperactivity Disorder*, 56:12 J. AM. MED. ASSOC. 1073 (Dec. 1999). **This study used stimulant medications.** *Article available at* http://archpsyc.jamanetwork.com/article.aspx?articleid=205525

the treatment of ADHD already exist throughout the 50 states, and while these measures should be subject to periodic review, we do not believe there is sufficient evidence to justify further restricting access at this time.

Given (i) the economic costs of ADHD; (ii) ADHD's being the most prevalent mental disorder in children; and (iii) the difficulty each individual with ADHD encounters identifying the ADHD medication or medications that provide the maximum clinical benefits with the fewest side effects, CHADD believes that issuing any state rule or enacting any state law or other policy intended to address the misuse of opioids but which would also cover the treatment of ADHD with stimulants would adversely impact the effective treatment of ADHD in the state and could result in significant societal and economic costs to the state.

As explained in more detail below, the evidence is clear that the benefits of ADHD stimulant medications significantly outweigh the harms associated with prescribing and dispensing controlled substances. Unlike opioids, for which long-term use is linked to dire public health consequences ranging from addiction to overdose mortalities, ADHD stimulant medications are appropriately and safely used for varying duration by patients with a medical necessity for their sustained use. Simply put, while there may be justification to restrict patient access to opioids, there is insufficient justification to restrict patient access to the continued use of ADHD stimulant medication.

About CHADD: *Children and Adults with Attention Deficit/Hyperactivity Disorder (CHADD) is a national non-profit, tax-exempt organization (under section 501(c)(3) of the Internal Revenue Code) providing education, advocacy, and support for individuals with ADHD.* ***CHADD is recognized by the U.S. Centers for Disease Control and Prevention as the national clearing house for ADHD information.***

CHADD has three current priority objectives: (1) serving as a clearinghouse for evidence-based information on ADHD, (2) facilitating face-to-face family support groups through our local chapters, and (3) serving as an advocate for appropriate public policies and public awareness in response to needs faced by families and individuals with ADHD.

CHADD currently has about 12,000 members. Most are children and adults with ADHD and their family members. About 2,000 CHADD members are professionals providing clinical and other services to people with ADHD.

Discussion of CHADD's position: Prevalence. ADHD is a neurodevelopmental disorder characterized by developmentally inappropriate impulsivity, inattention, and, in some cases, hyperactivity.[3] ADHD is one of the most prevalent mental disorders in children in the United States and often persists into adulthood with associated symptoms and impairments.[4] ADHD

3 Centers for Disease Control and Prevention (CDC), *Attention-Deficit / Hyperactivity Disorder (ADHD), Facts About ADHD*, http://www.cdc.gov/ncbddd/adhd/facts.html (last updated, November 16, 2016).

[4] Jalpa A. Doshi., et al., *Supra,* at 990; *See also Practice Parameters for the Assessment and Treatment of Children and Adolescents with Attention-Deficit/Hyperactivity Disorder*, 46:7 Journal of the American Academy of Child and Adolescent Psychiatry 894, 895 (2007), *available at* http://www.aacap.org/App_Themes/AACAP/docs/practice_parameters/jaacap_adhd_2007.pdf

affects approximately 4.4% of adults.[5] The Center for Disease Control and Prevention's (CDC's) most recent National Survey of Children's Health (NSCH) reports the prevalence of children and adolescents currently diagnosed with ADHD (by parent report) in the U.S. to be 8.8%.[6] Based on current U.S. census data for children and adults, CHADD estimates that 17 million people in the U.S have ADHD.

Etiology. Research shows that ADHD has a strong biological basis, including structural and chemical abnormalities in the brain.[7] "Insights from neuroscience have unequivocally shown that the brains of children with ADHD differ from those of controls."[8] "[F]indings from structural and functional neuroimaging suggest the involvement of **developmentally abnormal brain networks related to cognition, attention, emotion and sensorimotor functions**."[9] The significant chemical difference found in the brains of individuals with ADHD seems to involve the disruption of catecholamines (neurotransmitters) in the frontal-subcortical systems. Stimulant medication appears to ameliorate this disruption.[10] Genetics also contribute significantly to ADHD.[11]

ADHD is a significantly impairing disorder. "[T]here is no debate among competent and well-informed health care professionals that ADHD is a valid neurobiological condition that causes significant impairment in those whom it afflicts."[12] **ADHD, particularly when untreated or**

---

[5] *See* Ronald C. Kessler, et al., *The Prevalence and Correlates of Adult ADHD in the United States: Results From the National Comorbidity Survey Replication*, 163:4 The American Journal of Psychiatry (2006), *available at* http://ajp.psychiatryonline.org/article.aspx?articleid=96525; *See also Practice Parameters for the Assessment and Treatment of Children and Adolescents with Attention-Deficit/Hyperactivity Disorder*, 46:7 Journal of the American Academy of Child and Adolescent Psychiatry 894, 895 (2007), *available at* http://www.aacap.org/App_Themes/AACAP/docs/practice_parameters/jaacap_adhd_2007.pdf

[6] Susanna N. Visser S, M.S., et al. *Trends in the Parent-Report of Health Care Provider-Diagnosis and Medication Treatment for ADHD: United States, 2003—2011: United States, 2003—2011*, Journal of the American Academy of Child and Adolescent Psychiatry (2013), *available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4473855/..; National Resource Center on ADHD (NRC), a Program of CHADD funded by the CDC, *General Prevalence*, http://www.help4adhd.org/Understanding-ADHD/About-ADHD/Data-and-Statistics/General-Prevalence.

[7] National Resource Center on ADHD (NRC), a Program of CHADD funded by the CDC, *The Science of ADHD*, http://www.help4adhd.org/Understanding-ADHD/About-ADHD/The-Science-of-ADHD.aspx

[8] Samuele Cortese, *The neurobiology and genetics of Attention-Deficit/Hyperactivity Disorder (ADHD): What every clinician should know*, 16 European Journal of Paediatric Neurology, 422, 430 (2012), *abstract available at* http://dx.doi.org/10.1016/j.ejpn.2012.01.009

[9] Samuele Cortese, id. , See Abstract; National Institutes of Health (NIH), *Brain Matures a Few Years Late in ADHD, But Follows Normal Pattern*, November 12, 2007, *available at* https://www.nimh.nih.gov/news/science-news/2007/brain-matures-a-few-years-late-in-adhd-but-follows-normal-pattern.shtml; ; Jenco, Melissa, *Study: Brain differences found in children with ADHD*, AAP News (February 16, 2017), *available at* http://www.aappublications.org/news/2017/02/16/ADHDBrain021617; and Hoogman M, et al. *Lancet Psychiatry*. (February 15, 2017), abstract available at http://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(17)30049-4/fulltext

[10] NRC, *Supra*; See also, Thomas E. Brown, Ph.D, *Ten Myths About ADHD and Why They Are Wrong, ADHD-related executive function impairments are due primarily to a "chemical imbalance" in the brain,* Attention! 6, 8 (June 2013), *available at* http://www.drthomasebrown.com/wp-content/uploads/2013/07/BROWN_ADHD_MYTHS.pdf

[11] Russell A. Barkley, *et al., International Consensus Statement on ADHD*, 5:2 Clinical Child and Family Psychology Review 89 (2002), *available at* http://www.russellbarkley.org/factsheets/Consensus2002.pdf;\ ; Samuele Cortese, *supra* at 427. See Abstract

[12] *Practice Parameters for the Assessment and Treatment of Children and Adolescents with Attention-Deficit/Hyperactivity Disorder*, *supra* at 894; see also Russell A. Barkley, *et al., International Consensus Statement*

inadequately treated, can lead to devastating consequences; individuals with ADHD are far more likely than unaffected individuals to experience school failure, employment problems, car accidents, depression, failed relationships, teen pregnancies, children born out of wedlock, injuries, conduct disorder, antisocial and criminal behavior, and substance abuse.[13] In their 2008 report of the two largest and most comprehensive longitudinal studies of adults with ADHD conducted to the date, Barkley, Murphy, and Fischer[14] state:

> Across all of our results, one thing seems abundantly clear—ADHD in adults is a significantly impairing disorder. It is associated with numerous difficulties in virtually every domain of major life activity studied here. Whether one studies functioning in education, occupation, social relationships, sexual activities, dating and marriage, parenting and offspring psychological morbidity, crime and drug abuse, health and related lifestyles, financial management, or driving, ADHD can be found to produce diverse and serious impairments. Indeed, its impairments are more substantial than are those seen in other disorders most likely to present to outpatient mental health clinics, such as anxiety disorders, dysthymia, and major depression, among others.[15]

A recently reported longitudinal, population-based study concludes that childhood ADHD is associated with "significantly increased risk" of suicide and that "the cumulative burden of ADHD through the lifespan is considerable, including mortality, social adversity in the form of criminal behavior, persistence of ADHD into adulthood, and increased rates of other mental health problems."[16]

Treatment and Management of ADHD. The largest longitudinal study to date on the treatment of ADHD, often referred to the as Multimodal Treatment of ADHD Study (MTA Study), found that effective treatments include medication, various psychotherapies including behavior therapy, education and training, or a combination of treatments.[17] The MTA study found that multimodal treatment, a combination of these treatments, is very effective for individuals with ADHD, particularly because at least 70 percent had co-occurring disorders; however, **multimodal treatment provided no greater benefit than stimulant medication alone for managing the core symptoms of ADHD.[18]** Treatment does not cure ADHD; but for a majority of the individuals studied, treatment helped control the symptoms of ADHD. Today, a few non-stimulant ADHD medications are available. However, it is important to note that **individuals with ADHD respond differently to different medications, and thus must often try several**

---

on ADHD, 5:2 Clinical Child and Family Psychology Review 89 (2002), *available at* http://www.russellbarkley.org/factsheets/Consensus2002.pdf; and NRC, *The Science of ADHD*, available at http://www.help4adhd.org/en/about/science

[13] Russell A. Barkley, *et al*., *Id*. at 90; *Practice Parameters for the Assessment and Treatment of Children and Adolescents with Attention-Deficit/Hyperactivity Disorder*, *supra* at 895-896.

[14] Russell A. Barkley, Ph.D., Kevin R. Murphy, Ph.D., Mariellen Fischer, Ph.D., *ADHD in Adults What the Science Says* 435 (2008).

[15] Russell A. Barkley, Ph.D., *supra* at 435 (paperback ed. 2010).

[16] William J. Barbaresi, *et al*., *Mortality, ADHD, and Psychosocial Adversity in Adults With Childhood ADHD: A Prospective Study*, 131:4 Pediatrics (2013), *available at* http://pediatrics.aappublications.org/content/early/2013/02/26/peds.2012-2354.full.pdf+html

[17] The MTA Cooperative Group, *A 14-Month Randomized Clinical Trial of Treatment Strategies for Attention-Deficit/Hyperactivity Disorder*, 56:12 Journal of the American Medical Association (1999), *available at* http://archpsyc.jamanetwork.com/article.aspx?articleid=205525

[18] The MTA Cooperative Group, *supra*

medications to identify the medication or medications that provide the maximum clinical benefits with the fewest side effects. Thus, if an individual with ADHD has found a *stimulant* medication that provides the maximum clinical benefits with the fewest side effects, *switching to a non-stimulant medication may not provide effective treatment for that individual's ADHD symptoms*. A meta-analysis of 29 studies concluded that "therapeutic oral doses of stimulants decrease alterations in brain structure and function in subjects with ADHD relative to unmedicated subjects and controls. These medication-associated brain effects parallel, and may underlie, the well-established clinical benefits."[19] **Thus, treatment with stimulant medication of individuals with ADHD may well have positive effects on brain structure.**

Conclusion. **No state can afford to block the effective treatment of ADHD in its population.** As discussed, research clearly demonstrates that untreated, or inadequately treated, ADHD can have **costly societal consequences**, including but not limited to, increased rates of suicide, school failure, employment problems, car accidents, depression, failed relationships, unwanted pregnancies, injuries, conduct disorder, antisocial and criminal behavior, and substance abuse.

About this document: *This position statement was developed by CHADD, with the guidance of CHADD's Public Policy Committee and Professional Advisory Board. No other organizations or entities were involved in its development. As additional policy-makers consider measures to restrict access to controlled substances, we invite interested stakeholders to share CHADD's position statement with relevant officials* ***without modification****.*

CHADD welcomes feedback or questions from policy-makers and stakeholders alike. Any questions or comments should be submitted to CHADD's Chief Operations Officer April Gower-Getz at april_gower@chadd.org.

[19] Spencer et al. *Effect of Psychostimulants on Brain Structure and Function in ADHD*, J Clin Psychiatry. 2013 Sep; 74(9):902-17, *abstract available at* https://www.ncbi.nlm.nih.gov/pubmed/?term=Spencer+et+al.+Effect+of+Psychostimulants+on+Brain+Structure+and+Function+in+ADHD