APSARD
The American Professional Society of ADHD and Related Disorders

APSARD 2026 Annual Conference

Abstract Book

Thursday, January 15, 2026

1:00pm – 4:00pm

ADHD 201

Chair: Gregory Mattingly, Midwest Research Group

Presenters:

Gregory Mattingly, Midwest Research Group

Brooke Molina, University of Pittsburgh

Margaret Sibley, University of Washington

Ann Childress, Center for Psychiatry and Behavioral Medicine

Betsy Busch, Tuffs University

Learning Objective 1: Examine historic stereotypes of age, gender and environment verses the current ADHD treatment landscape.

Learning Objective 2: Explore how our digital environment with data overload, constant notifications and algorithm-driven distractions can exacerbate attention difficulties, complicate diagnostic assessment and necessitate careful differentiation between ADHD and environmentally driven attentional strain.

Learning Objective 3: Discuss multidisciplinary approaches to ADHD care which challenge historic “physician driven” models of care.

Overall Abstract: ADHD 201 is designed for clinicians seeking to deepen their understanding of ADHD across the lifespan and refine evidence-based treatment strategies. This session brings together leading experts to address emerging science, evolving clinical challenges, and practical decision-making in ADHD care.
Dr. Maggie Sibley will present advances in psychosocial treatments for adolescents with ADHD, focusing on developmentally informed, evidence-based interventions. Dr. Ann Childress will discuss rational combination therapies, emphasizing thoughtful, individualized treatment planning for complex presentations. Dr. Brooke Molina will examine ADHD and the aging brain, highlighting longitudinal findings and implications for adult and later-life management. Dr.Greg Mattingly will then explore contemporary issues in ADHD prescribing, challenging traditional approaches and offering strategies to optimize safety and effectiveness. ADHD 201 will then conclude with an interactive Q & A discussion with our APSARD members.
Together, these presentations will provide a comprehensive, clinically relevant update for practitioners managing ADHD across developmental stages and levels of complexity.

Advances in Psychosocial Treatments for Adolescents with ADHD

Margaret Sibley, University of Washington

Individual Abstract: Dr. Sibley will provide an overview of the literature on psychosocial treatment for adolescents with ADHD incorporating findings from a recent systematic review

(Sibley et al., 2025, Journal of Child Psychology & Psychiatry). Detailed walk-through of common elements of psychological treatments (CBTs and related interventions) will be provided including engagement focused components that are designed to improve motivation for behavior change and follow-through on behavioral intentions. Resources will be shared with the audience to guide effective application of interventions discussed in the presentation.

Rational Polypharmacy for the Treatment of ADHD and Comorbid Mood Disorders

Ann Childress, Center for Psychiatry and Behavioral Medicine

Individual Abstract: Objective: The prevalence of Attention-deficit/hyperactivity disorder (ADHD) is about 6% in adults and 10% in children and adolescents in the United States. Approximately 66% of children and 75% of adults have comorbid psychiatric conditions. Best practices for evaluation and pharmacological treatment of ADHD and comorbid mood disorders will be presented.
Methods: A literature search of clinical trials for ADHD and comorbid disorders, mood disorders was completed. Clinical guidelines for children and adults were also reviewed.
Results: Symptoms of ADHD and comorbid disorders may overlap, making it imperative to complete a thorough diagnostic evaluation. Data from combined pharmacotherapy trials for ADHD and comorbid disorders and will be presented.
Conclusions: Combination medications for ADHD can be safely prescribed to patients with mood disorders. The order in which the disorders are treated does vary by diagnosis and symptom severity.

ADHD Doesn't Retire: Navigating ADHD in Older Adults

Brooke Molina, University of Pittsburgh

Individual Abstract: ADHD is now recognized as a lifelong condition for most people. However, scientific and clinical literature have only recently begun to investigate the prevalence, diagnosis, course, and treatment of ADHD beyond mid-life. This presentation will provide data on the global prevalence of ADHD in older adulthood, challenges and strategies for diagnosing ADHD in older adults, emerging data on the course, including brain health, of people with ADHD, and emerging trends and expert recommendations for treatment based on accumulating clinical experience.

Rethinking ADHD Prescribing

Gregory Mattingly, Midwest Research Group

Individual Abstract: My session will explore contemporary issues in ADHD prescribing in the context of our digital world and evolving treatment landscape. This session will challenge traditional approaches and offer multidisciplinary strategies to improve holistic care.

4:30pm - 5:30pm

Noven Industry Sponsored (Non-CME): A Tailored Treatment for ADHD

Presenters:

Joel Young, Rochester Center for Behavioral Medicine

Overall Abstract: What if you could offer your patients a wearable ADHD treatment that offers application time flexibility to meet the varying needs of your patient's daily schedule? Learn more at the Noven Industry Sponsored Symposium: A Tailored Treatment for ADHD from 4:30 pm to 5:30 pm on Thursday, January 15, 2026**.**

Friday, January 16, 2026

7:00am – 8:00am

Vertical Industry Sponsored Symposium (Non-CME): Finding the Right Dose: A Case-Based Discussion on Optimizing ADHD Treatment

Presenters:

Gabriel Anzueto, UT Health Houston

Overall Abstract: Grab your breakfast and join us for an engaging session with Gabriel Anzueto, MD, a developmental and behavioral pediatrician specializing in attention deficit hyperactivity disorder (ADHD) management. Dr Anzueto will delve into the latest trends in ADHD prevalence among children and adults, discuss the impact of ongoing stimulant medication shortages, and highlight the importance of individualized dosing.

8:30am - 10:00am

Opening Plenary: ADHD and Pregnancy

Chair: Gregory Mattingly, Midwest Research Group

Presenters:

Katherine Bang-Madsen, University of Southern Denmark

Allison Baker, Harvard Medical School/Massachusetts General Hospital

Learning Objective 1: Explore the impact of discontinuing verses maintaining ADHD medication during pregnancy for anxiety, mood and functional outcomes.

Learning Objective 2: Examine the risks and benefits for neurodevelopmental outcomes in mothers prescribed stimulants or nonstimulants during pregnancy.

Overall Abstract: This session will analyze the risks and benefits of ADHD pharmacologic treatment during pregnancy. Outcome data from women who discontinued, maintained, or adjusted their ADHD medications during pregnancy will look at the effects medication treatment on anxiety, depression, stress, and functional impairment. This session will explore the impact of ongoing ADHD medication treatment with significant improvements in mood and family functioning. It will also explore prior studies on the risks perinatal exposure to psyhcostimulants. Recent data from the Swedish birth registry will be utilized to explore the risk of neurodevelopmental disorders in mothers who prescribed stimulants or nonstimulants during pregnancy. Specific data for amphetamine, methylphenidate and atomoxetine use either maintained or discontinued during pregnancy will be explored. Holistic strategies for family planning and ADHD management before, during and after pregnancy will be discussed.will be explored.

ADHD Medication Safety During Pregnancy and Breastfeeding: Evidence and Clinical Implications

Katherine Bang-Madsen, University of Southern Denmark

Individual Abstract: The safety of ADHD medication use during pregnancy and breastfeeding is a topic of increasing clinical and public health importance. As more women of reproductive age are diagnosed with ADHD and receive pharmacological treatment, questions about the consequences of continuing or discontinuing medication during pregnancy and the postpartum period have become central to clinical care and patient decision-making. The evidence base in this area has long been limited by the exclusion of pregnant and breastfeeding women from randomized controlled trials. However, in recent years, an expanding body of evidence has emerged from large, population-based observational studies that provide valuable insights into both maternal and child outcomes. These studies have substantially improved our understanding of ADHD medication safety. The aim of this presentation is to provide an updated and evidence based overview of the safety of ADHD medications during pregnancy and breastfeeding, drawing primarily on large-scale Nordic register-based studies and international research. The presentation will examine associations between prenatal exposure to stimulant and non-stimulant medications and a range of outcomes, including obstetric complications and long-term developmental and growth trajectories. Attention will also be given to the clinical implications of discontinuing ADHD medication during pregnancy, particularly with respect to maternal mental health, functioning, and risk of psychiatric relapse. In addition, the presentation will summarize the emerging, though still scarce, evidence on ADHD medication use during breastfeeding. This includes current knowledge about medication transfer into breast milk and infant exposure levels. Finally, the presentation will translate this body of evidence into practical clinical considerations for risk communication and individualized treatment planning. Special emphasis will be placed on balancing the mental health and functional needs of women with ADHD against concerns about fetal and infant safety, with the overarching goal of supporting informed, patient-centered decision-making in perinatal ADHD care.

ADHD in Perinatal Women: A Clinical Approach to Treatment and Support

Allison Baker, Harvard Medical School/Massachusetts General Hospital

Individual Abstract: This clinically focused session examines ADHD in pregnant and postpartum women through a risk–risk consultation framework, emphasizing that the perinatal period often amplifies ADHD symptoms and functional impairment. Drawing on emerging evidence and real-world practice, this talk highlights how risks associated with untreated or undertreated ADHD—including impaired functioning, safety concerns, and psychiatric destabilization—must be weighed alongside medication-related considerations, rather than defaulting to medication avoidance.
The session will review best practices in preconception counseling, perinatal planning, and multidisciplinary management, including proactive screening for ADHD and comorbid psychiatric conditions, individualized care planning, and attention to modifiable factors such as sleep deprivation, nutrition, stress, and loss of external structure. Nonpharmacologic interventions—psychoeducation, self-management and coaching, CBT, mindfulness-based interventions, and DBT—will be discussed as foundational tools, particularly for mild to moderate ADHD, with emphasis on maintaining function and safety during pregnancy and postpartum.
For patients with moderate to severe ADHD, the session will address the role of pharmacotherapy, reviewing the largely reassuring reproductive safety data and

underscoring the importance of treating ADHD alongside co-occurring mood and anxiety disorders. The goal is to equip clinicians with a nuanced, evidence-informed approach that supports collaborative decision-making, preserves maternal functioning, and optimizes outcomes for both parent and child.

10:00am - 11:30am

Invited Concurrent Symposium: Navigating the Complexities of ADHD in the Military: A Lived Experience Open Discussion with former Army Members and a Military Clinician

Chair: Douglas Russell, University of Washington / Seattle Children's

Presenter:

Brandi Walker, V.O.I.C.E for Neurodiversity Inc./ Marie Pauline Consulting LLC

Panelists:

Shelley Watson

Angela Gaffney

Learning Objective 1: Explore the contributing factors, challenges, and nuances Servicemembers with ADHD/neurodiverse brains face.

Learning Objective 2: Consider how a military environment/lifestyle can foster excessive worry, fear, and other related symptomology in individuals with ADHD and contribute to comorbid psychiatric conditions.

Learning Objective 3: Review relevant, effective, interventions specific to Servicemembers and Veterans with ADHD.

Overall Abstract: This symposium will focus on the experience of ADHD on military members and Veterans. The CDC estimates ADHD prevalence in youth at 10-12%, with 30% having never received ADHD-specific treatment. Military Entrance Processing Stations (MEPS) currently disqualify applicants who have been treated for ADHD with medications in the previous 24 months, incentivizing nondisclosure. Yet military service can present unique challenges for individuals with the condition, potentially impacting multiple domains vital to the military's mission (i.e., occupational, tactical, academic, and social) and affecting career advancement. We will invite two Veterans to discuss the contributing factors, challenges, and nuances they faced as Servicemembers with ADHD. Consideration will also be given to the presence of comorbid disorders, like anxiety, depression and PTSD and how a military environment/lifestyle can foster excessive worry, fear, and other related symptomology. This session will also highlight some of the relevant policies related to entrance into the military, treatment and career progression when ADHD is diagnosed.

Navigating the Complexities of ADHD in the Military: A Lived Experience Open Discussion with former Army Members and a Military Clinician

Brandi Walker, V.O.I.C.E for Neurodiversity Inc./ Marie Pauline Consulting LLC

Individual Abstract: This symposium will focus on the experience of ADHD on military members and Veterans. The CDC estimates ADHD prevalence in youth at 10-12%, with 30% having never received ADHD-specific treatment. Military Entrance Processing Stations (MEPS) currently

disqualify applicants who have been treated for ADHD with medications in the previous 24 months, incentivizing nondisclosure. Yet military service can present unique challenges for individuals with the condition, potentially impacting multiple domains vital to the military's mission (i.e., occupational, tactical, academic, and social) and affecting career advancement. We will invite two Veterans to discuss the contributing factors, challenges, and nuances they faced as Servicemembers with ADHD/neurodiverse brains. Consideration will also be given to the presence of comorbid disorders, like anxiety, depression and PTSD and how a military environment/lifestyle can foster excessive worry, fear, and other related symptomology. This session will also highlight some of the relevant policies related to entrance into the military, treatment and career progression when ADHD is diagnosed. Objectives: 1.) Explore contributing factors, challenges, and nuances Servicemembers with ADHD/neurodiverse brains face. 2.) Explain how a military environment/lifestyle can foster excessive worry, fear, and other related symptomology in individuals with ADHD and contribute to comorbid psychiatric conditions. 3.) Review relevant, effective, interventions specific to Servicemembers and Veterans with ADHD. 4.) Highlight the importance of an intersectional and contextual lens for military members when pursing diagnostic clarification and administering treatment References: M Bolstad, I, Lien, L., Bramness, J. (2021). ADHD symptoms as risk factor for PTSD in inpatients treated for alcohol use disorder. Elsevier Psychiatry Research. 300(2021). ScienceDirect Fruchter, E., Marom-Harel, H.; Fenchel, D.; Kapra, O.; & et al. (2019). Functioning of young adults with ADHD in the military. Journal of Attention Disorders. 23(12). Huraby, A. Lieberman, H. & Smith, T. (2021). Symptoms of depression, anxiety, and post-traumatic stress disorder and their relationship to health-related behaviors in over 12,000 US military personnel: Bi-directional associations. Journal of Affective Disorders. 283 (84-93). Olinover, M, Gidron, M., Yarmolovsky, J. & Geva, R. (2022). Strategies for improving decision making of leaders with ADHD and without ADHD in combat military context. The Leadership Quarterly Elsevier. 33(6).

10:00am - 11:30am

Concurrent Symposium: How to Fill the Gap? Supporting Access to Affordable and Culturally Responsive Mental Health Services for Youth and Emerging Adults with ADHD.

Chair: Zoe Smith, University of Denver

Presenters:

Elizabeth Chan, Rutgers University

Kelsey Wiggs, Indiana University School of Medicine

Learning Objective 1: Recognize health disparities young people who hold systemically oppressed identities experience when trying to access services for ADHD.

Learning Objective 2: Understand how stigma around ADHD and other aspects of discriminations affects people with ADHD.

Learning Objective 3: Provide concrete ways of changing systems, including research, assessment and treatment to be ADHD-friendly and culturally responsive.

Overall Abstract: Although young people with attention-deficit/hyperactivity disorder (ADHD) are approximately 5-11% of the population, not all youth are assessed and receive equitable treatment. In fact, Black, Latiné, female, among other systemically oppressed identities, are less likely to receive an accurate ADHD diagnosis and treatment. This health disparity leads to worsening impairment and symptomatology over time, including secondary diagnoses (e.g.,

anxiety, depression), high levels of masking (leading to low self-esteem), distress in relationships, and worse grades and work performance. With support and accurate diagnosis, these disparities can be mitigated by our field, but first, we must value the lived experiences of the people we serve. This symposium provides examples of disparities in access to services directly from the people we serve, how to provide a holistic model of ADHD care for college students, and provide culturally responsive assessments and feedback sessions. These examples span childhood to young adulthood and provide actionable steps to support young people with ADHD, with a focus on people who hold systemically oppressed identities (e.g., Black youth, Latiné youth, females with ADHD). The first presentation includes a specific focus on females with ADHD, who are often excluded from ADHD treatment and research. Stigmatization and lack of understanding of gendered societal norms' impact on ADHD symptoms will be discussed and suggestions of important treatment considerations will be provided. Next our presenters will focus on creating systems of care that are culturally responsive and ADHD-friendly. First, an ADHD care model for college students will highlight the need for culturally responsive, low-cost ADHD care on college campuses for students with and without ADHD. Next, a culturally responsive model of ADHD assessment for Black and/or Latiné youth will be explained, including feedback from adolescent and parent advisory board members and how discrimination plays a role in access to services. Presenters provide wide ranging experiences of supporting young people with ADHD and hold similar identities to the families they serve. This symposium closely aligns with the APSARD's mission to highlight the latest research and clinical best practice regarding inclusive and affirming mental health services for people with ADHD.

Expanding Access to ADHD Evaluations in Higher Education: a Virtual and Digitized Model for University Training Clinics.

Elizabeth Chan, Rutgers University

Individual Abstract: Aim: Comprehensive ADHD evaluations are critical for unlocking evidence-based treatments, but often underprovided at universities (Aluri et al., 2024). We examine the feasibility and sustainability of (a) free/low-cost, evidence-based virtual evaluations and (b) streamlined electronic intake systems to improve access and reduce wait times for students needing ADHD services on campus. Methods: In collaboration with university stakeholders, a comprehensive ADHD assessment battery was developed. An external consultant digitized intake data and report templates using a secure medical platform. Billing procedures were streamlined to reduce delays. Graduate trainees were trained in gold-standard ADHD evaluations, report writing, and clinic operations to support service delivery. Results: Since 2023, our clinic completed 140+ evaluations. In the last quarter, 53% received an ADHD diagnosis; 40% were graduate/medical students; 70% were female; 60% identified as a racial/ethnic minority. Intake/payment to clinician contact averaged one week; assessments completion averaged just over a month. Recent annual gross profit was $14,000. Conclusions: Findings indicate virtual, low-cost ADHD evaluations with digitized intake systems are feasible and sustainable for undergraduate/graduate students, particularly underserved groups. High rates of non-ADHD diagnoses suggest ADHD evaluations may be less stigmatizing and can facilitate broader mental health care. Expanding this model to other universities may address unmet diagnostic needs.

Understanding the Impact of Systemic Bias and Inequity in the Diagnosis and Treatment of Young Adult Females with ADHD: Findings From a Qualitative Pilot Study

Kelsey Wiggs, Indiana University School of Medicine

Individual Abstract: Objective: Poor ADHD detection in females leads to a wide range of negative health outcomes and stems in part from persistent, inaccurate beliefs that ADHD is primarily a male disorder limited to childhood. The current study sought to sought to understand these inequities from the perspective of females with ADHD themselves. Methods: I summarize qualitative interviews with 11 young adult females (YAF; ages 18-25) with ADHD on their experiences across healthcare and daily life at the intersections of ADHD, sex and gender, and age. Interviews were conducted by female clinicians with lived experience and clinical training. Results: Barriers to diagnosis (M age:19, SD:5.48) included familial denial of ADHD symptoms, lack of ADHD awareness due to underrepresentation in females, and bias by healthcare providers. YAFs described internalized stigma/self-blame, including gendered expectations to hide symptoms, "…if a guy is [unorganized] it's okay, but if it's a woman? She's sloppy." Conclusions: Findings suggest systemic biases rooted in sexism hinder diagnosis and treatment of YAFs with ADHD, causing psychological harms which may explain negative outcomes. The symposium will also cover findings on YAFs reporting difficulty finding resources/care and providing suggestions (e.g., sexual health, transition into adulthood) for research and treatment development).

Discrimination in ADHD: Providing Culturally Responsive Assessments to Improve Health Access and Equity for Black and/or Latiné Youth

Zoe Smith, University of Denver

Individual Abstract: Aim: Most researchers who have examined psychodiagnostic assessments for youth with attention-deficit/hyperactivity disorder (ADHD) included over 70% White participants, with very few including Black and/or Latiné youth and none specifically focusing on youth with these identities (AHRQ, 2023). In this presentation, we will describe how to conduct culturally responsive assessments for Black and/or Latiné youth with ADHD, describe the discrimination experienced, report rates of accommodations pre- and post-assessment, and focus on what happens when families receive a culturally responsive psychodiagnostic assessment (i.e., increased access and satisfaction). Methods: Participants include 50 Black and/ or Latiné adolescents with ADHD. Discrimination prior to assessment was examined as a predictor of service utilization for 10 months after assessment. Mixed-methods analysis is used to determine acceptability and feasibility of assessments, service utilization, and how discrimination affects Black and/or Latiné adolescents with ADHD. Path analyses were run cross-sectionally and longitudinally. Results: Prior to assessment, 36% of families who needed school accommodations received them, while post-assessment, 82% of families received needed accommodations. More discrimination was associated with not receiving an IEP or 504 Plan at baseline (;#ÒÒã#r'à Youth who experienced more daily and lifetime discrimination were more likely to receive accommodations after the culturally responsive assessment (;#Òã“ Â ;#Òãc' respectively). Families reported frustration with the health care and school accommodation systems, reporting that they felt "invalidated" until receiving an assessment from our team. Multiple parents reported long histories of trying to access services but being repeatedly denied despite clear ADHD impairment. Conclusions: Discrimination plays a role in lack of access to resources, but when Black and/or Latiné adolescents receive culturally responsive assessments, access to resources increases. This presentation will conclude with how to use culturally responsive methods to increase access to services as well as how to earn trust with families.

10:00am - 11:30am

Management Strategies for Real World Complex Cases

Chair: Gregory Mattingly, Midwest Research Group

Presenters:

Gregory Mattingly, Midwest Research Group

Brooke Molina, University of Pittsburgh

Timothy Wilens, Massachusetts General Hospital

Jo Hughes, Piedmont Partners for Mental Health

Learning Objective 1: Develop strategies to screen and evaluate diagnostic dilemmas for complex comorbid patients.

Learning Objective 2: Examine the gender and hormonal differences in ADHD presentation.

Learning Objective 3: Discuss the research data which impacts clinical care when considering rational medication combinations.

Learning Objective 4: Explore the impact of cognitive behavioral treatment, motivational engagement and other psychotherapeutic approaches for holistic ADHD management.

Overall Abstract: This symposium brings together multidisciplinary experts in child, adolescent, and adult psychiatry, psychology, and physician assistant practice to examine the complex, comorbid presentation of ADHD in real-world settings. Panelists will present four case-based discussions from their practices, highlighting diagnostic challenges, safety considerations, and holistic treatment strategies informed by recent evidence. Topics include child and adolescent ADHD, gender differences, neurodiversity, cognitive-behavioral and motivational interventions, strategies to reduce stimulant misuse, and principles of rational polypharmacy.

1:15pm – 2:15pm

Collegium Industry Sponsored Symposium (Non-CME): The Lifelong Impact of ADHD: Addressing the Unmet Needs for All Ages

Presenters:

Jeffrey R. Strawn, University of Cincinnati College of Medicine

Learning Objective 1: Recognize how the symptoms of ADHD impact patients from childhood through adulthood

Learning Objective 2: Understand the unmet needs in ADHD treatment shared by children and adults

Learning Objective 3: Review clinical evidence for an ADHD treatment option that can support a patient's journey from 6 years of age through adulthood

3:15pm - 4:45pm

Concurrent Symposium: ADHD In Adolescent Girls

Chair: Julia Schechter, Duke University Medical Center

Presenters:

Molly Nikolas, University of Iowa

Dara Babinski, Penn State College of Medicine

Iris Manor, Geha MHC

Learning Objective 1: Participants will be able to explain recent findings on how pubertal timing can impact ADHD symptoms in adolescent females.

Learning Objective 2: Participants will be able to describe the association between menstrual cycle differences for adolescents with and without ADHD, as well as the impact of trauma on these differences.

Learning Objective 3: Participants will be able to summarize social processing differences in adolescent girls with ADHD, as well as the neural alterations underlying these differences

Overall Abstract: ADHD has been associated with unique impairments for females across the lifespan, including increased risk for internalizing conditions, peer challenges, eating disorders, and suicide (Young et al., 2020; Hinshaw et al., 2022). Adolescence—a time of significant biological and social transition for all youth—is an especially important developmental stage to examine ADHD symptoms in females. Adolescence has been found to be a period of influx in ADHD symptoms and impairment for females (Eng et al., 2023) as well as a time of increased risk for the onset of psychological comorbidities and suicide attempts (Chronis-Tuscano et al., 2010). Furthermore, emerging data has shown a connection between hormonal fluctuations and ADHD symptomatology in females (Osianlis et al., 2025). However, research focused specifically on ADHD females during adolescence is extremely limited. This symposium highlights new research that helps to fill this gap. First, Dr. Nikolas will present data on the timing of pubertal maturation on ADHD symptom fluctuations and emotion regulation in female and male adolescents with and without ADHD. Next, Dr. Manor will describe data on the intersection between menstrual cycle disturbances and trauma among a population-based sample of adolescent females with and without ADHD. Lastly, Dr. Babinski will describe the neural correlates underlying social interactions and peer difficulties for adolescent girls with and without ADHD. Together, these presentations will use data from a variety of populations and utilizing an array of research methodologies to provide a nuanced understanding of ADHD in female adolescents. Implications for improving early identification, considerations for tailored interventions, and ideas for enhancing access to optimized care for adolescent girls with ADHD will be discussed.

Neural Correlates of Peer Problems in Adolescent Girls with ADHD

Dara Babinski, Penn State College of Medicine

Individual Abstract: Hypothesis/objective: Adolescent girls with ADHD often struggle with peer relationships, yet underlying mechanisms remain unclear. This study examines whether alterations in neural processing of social rejection and acceptance cues are linked to the peer problems of girls with ADHD, hypothesizing that neural alterations in social processing contribute to these difficulties. Methods: Forty-four girls with and 43 girls without ADHD (ages 11-14)

completed a laboratory task measuring neural responses (i.e., event-related potentials) to social acceptance and rejection cues. Additionally, girls completed a peer interaction task with a same aged, trained female peer actor to evaluate observed positivity, hostility, bossiness, and conversational skills. Results: Girls with ADHD demonstrated blunted neural response to social acceptance cues, and were observed to display less positivity and conversational skills compared to girls without ADHD. Neural responsiveness to acceptance and rejection cues enhanced the association between ADHD and observed peer problems. Conclusions: These findings point to brain-behavior links that may be important to understanding the peer problems of girls with ADHD. Future work is needed to determine how associations between ADHD, altered processing of social cues, and peer problems emerge across development.

The Role of Early Pubertal Development for Girls with ADHD

Molly Nikolas, University of Iowa

Individual Abstract: This presentation will demonstrate the important role of early pubertal timing in accelerating changes in ADHD symptom presentation and onset of comorbid emotional difficulties among girls. Early relative pubertal development is a robust risk factor for mental health problems during adolescence. Adolescent girls may be particularly vulnerable to the effects of early pubertal maturation, which can both exacerbate childhood problems and contribute to the onset of new symptoms. These effects may be due, in part, to the downstream effects of pubertal development on emotional functioning, including emotional lability and emotion regulation. This talk will present data collected from 135 youth ages 9-14 years and their parents (55% with ADHD), who all completed laboratory assessments in addition to two weeks of at-home symptom surveys using ecological momentary assessment (EMA). Findings indicated that early pubertal timing predicted increased daily ADHD symptom fluctuations for girls with ADHD but not for boys. Further, early pubertal timing also predicted increased emotion regulation difficulties, indexed via electrocardiograph recording, and increased lability in negative emotions, with stronger effects among girls compared to boys. Findings are in line with other work that has demonstrated shifts in ADHD symptoms and associated cognitive functions across the menstrual cycle among girls and women. Broader implications include the need to consider how the pubertal transition might impact course trajectories of ADHD for adolescent girls.

The Effect of Trauma on Menstrual Disturbances in Adolescent Girls with and Without ADHD: A Preliminary Study

Iris Manor, Geha MHC

Individual Abstract: Trauma exposure has been linked to menstrual disturbances and greater pain severity. ADHD in females is underexplored, and menstrual disturbances in this group are scarcely documented. Limited evidence suggests higher rates of dysmenorrhea, heavy menstrual bleeding, and menstrual irregularities, yet trauma-related vulnerability in girls with ADHD has not been examined. Assessing dysmenorrhea, heavy menstrual bleeding, and menstrual irregularities among adolescent girls with/without ADHD before and after a severe population level traumatic event. We conducted a retrospective case–control study using anonymized electronic health records from Clalit Health Services, Israel's largest health organization. The cohort included all girls aged 11–17 years in 2022 (N=265,852), of whom 27,326 had ADHD. Menstrual complaints were identified using diagnostic codes during a pre-trauma period (10/01/2022–01/01/2023) and a post-trauma period (10/01/2023–01/01/2024). Period-specific associations were tested using chi-square and adjusted logistic regression. Longitudinal changes were examined using generalized estimating equations with a time-by-ADHD interaction term, adjusting for psychiatric comorbidities. Girls with ADHD had higher odds

of dysmenorrhea and heavy menstrual bleeding across both periods compared with controls (all p"d0.002). Still, they didn't demonstrate a difference in menstrual irregularities in either period. Longitudinal analyses showed a smaller increase in heavy menstrual bleeding among girls with ADHD relative to controls (OR=0.81, p=0.027). No differential changes were observed for dysmenorrhea. Adolescent girls with ADHD exhibit increased dysmenorrhea and heavy menstrual bleeding independent of psychiatric comorbidity and traumatic exposure, with distinct post-trauma trajectories for bleeding versus pain, mechanisms suggested.

3:15pm - 4:45pm

Concurrent Symposium: New Research on ADHD and Sleep in Preschoolers, Children, and Adults: Implications for Treatment

Chair: Mark Stein, University of Washington

Presenters:

Brooke Molina, University of Pittsburgh

Jessica Lunsford-Avery, Duke University Medical Center

Margaret Weiss, Cambridge Health Alliance

Learning Objective 1: The objective of this symposium is to present new research on the relationship between sleep difficulties and ADHD in children, adolescents, and adults

Learning Objective 2: Discuss the importance of assessing and measuring sleep behaviors in children, adolescents, and adults who present for ADHD treatment.

Overall Abstract: Sleep problems are common across the lifespan, although the prevalence of particular sleep problems vary with age. Achieving adequate sleep varies from individual to individual and over time, and clearly impacts attention, mood, and daytime functioning. ADHD, its treatment, and comorbid disorders impact nighttime behavior and can interfere with sleep, especially sleep latency and duration. Research on the complex, mutually exacerbating relationship between sleep and ADHD in different age groups continues to grow. Taking a life cycle approach, this symposium includes three research presentations, a summary and panel discussion led by Dr. Stein on implications for assessing and treating ADHD throughout the lifespan. Difficulties settling down or sleeping through the night are common in preschool age children with ADHD and impact family functioning. Dr. Avery will present data from an RCT on feasibility, acceptability, and preliminary effectiveness of the Preschool Attention and Sleep Support (PASS) program, an eight week telehealth intervention, versus behavior therapy only, in 44 preschoolers (aged 3-5) with elevated ADHD symptoms and sleep concerns recruited from pediatric primary care. Dr. Molina will report on sleep difficulties in mid-adulthood from the Pittsburgh ADHD Longitudinal Study (PALS). This is a unique sample of participants diagnosed with ADHD in childhood (n=233) or recruited in adolescence/early adulthood for absence of ADHD. The ADHD group more often reported sleep problems and taking sleep medicine more often, 18.2% vs 7.2%, and using other substances, 17.6% vs 7.9%, at least once/week to aide sleep. This study highlights the chronic nature of sleep problems. Since Bradley's original study of amphetamine in hyperactive children, adverse effects of ADHD medications on sleep are commonly reported. Dr. Weiss presents a literature review of the relationship between stimulant treatment and sleep, comparing studies of sleep difficulties as an adverse event with clinical trials of stimulants in which sleep was the primary outcome. In contrast to acute effects, systematic clinical trials of short and long duration stimulants using subjective and objective

outcomes (self-report measures such as the PSQI and CSHQ, actigraphy and PSG) have demonstrated improvement in all domains of sleep, across all age groups, with both amphetamine and methylphenidate.

The Effects of Stimulant Treatment on Sleep: Adverse Event vs. Clinical Outcome

Margaret Weiss, Cambridge Health Alliance

Individual Abstract: Objective: To compare data on sleep difficulties that may occur as an adverse event with stimulant treatment to data on sleep outcome in DBRCT of long duration stimulants. Method: Two literature reviews were conducted and the results compared. The first review looked at studies of sleep difficulties that emerge as an adverse event with stimulant treatment. The second review looked at clinical trials of stimulants in which sleep was \ a primary or secondary outcome. Results: There is a robust literature demonstrating that stimulant treatment is complicated by initial and middle insomnia, delay sleep phase, decreased total sleep time and night to night variability in approximately 20% of individuals. This literature is complicated by discrepancies between subjective and objective studies, nocebo effects, and failure to control for baseline sleep problems. Sleep side effects vary with dose, drug, prior stimulant exposure and rate of titration. Multiple systematic clinical trials of long duration stimulants using self-report, actigraphy and PSG have demonstrated improvement in all domains of sleep measures such as the PSQI and CSHQ and across all age groups with both amphetamine and methylphenidate compounds. In a double-blind comparison of dexmethylphenidate with placebo, 21.1% of adolescents went from being poor sleepers at the end of the double-blind treatment to good sleepers at 6 months, while 8.1% went from being good sleepers to poor sleepers during the same time period. Conclusion: This presentation will review the methodological differences between studies of sleep as an adverse event and sleep as an outcome that can explain how stimulants may have either deleterious or beneficial effects on sleep. Clinicians providing consent to stimulant treatment need to emphasize the possibility that sleep may either deteriorate or improve with stimulant treatment, and always insure assessment of sleep at baseline prior to treatment before attributing sleep complaints to treatment. Understanding the impact of duration of stimulant, time on drug, rate of titration, and differences between various sleep outcomes are essential to best practice in management of sleep in the context of stimulant treatment of ADHD.

Sleep difficulties in mid-adulthood among the participants in the Pittsburgh ADHD Longitudinal Study.

Brooke Molina, University of Pittsburgh

Individual Abstract: Hypothesis/Objective. Sleep difficulties in youth with ADHD are well documented but research with adults is needed. We will describe sleep difficulties in mid adulthood by the Pittsburgh ADHD Longitudinal Study (PALS) participants. Methods/Results. Participants were diagnosed with ADHD in childhood (n=233) or recruited in adolescence/early adulthood for absence of ADHD (n=170). In mid-adulthood, M(SD)=38.9(2.6), we administered the Pittsburgh Sleep Quality Index (Buysse et al., 1989). Participants were 87% male sex at birth, 95% cisgender, and 14.4% Black/80.6% White. Childhood ADHD predicted more “trouble sleeping,” 56.5% vs 38.6% at least once/week, p<.0001. Additionally, individuals with a history of ADHD reported greater sleep latency, 28.1 vs 21.3 minutes to fall asleep, p=.003. and were more likely to sleep six or fewer hours/night 48.8% vs 37.6%, p=.028, than individuals without childhood ADHD. The ADHD group more often reported taking medicine, 18.2% vs 7.2%, p=.001, and using other substances, 17.6% vs 7.9%, p=.005, at least once/week to aide sleep. Surprisingly, no differences were observed for sleep-related impairments (e.g., late to work).

Conclusions. Results confirm potential for modest sleep problems which may contribute to other negative outcomes and underscore the importance of sleep assessment in ADHD. Additional analyses will consider substance use and ADHD symptom persistence. Co-authors: Kennedy, Traci M., Wang, Frances L., Walther, Christine A.P., Margherio, Samantha M., Gnagy, Elizabeth M., Pedersen, Sarah L.

Preschool Attention and Sleep Support (PASS): A Novel Telehealth Intervention to Improve ADHD Symptoms in Early Development

Jessica Lunsford-Avery, Duke University Medical Center

Individual Abstract: Objective: To evaluate the feasibility, acceptability, and preliminary effectiveness of Preschool Attention and Sleep Support (PASS), an 8-week telehealth intervention to improve sleep and ADHD symptoms. PASS streamlines two empirically supported, parent-based interventions, behavioral parent training (BPT) and behavioral sleep medicine (BSM), to target behavioral concerns across the 24-hour day. Methods: Forty-four caregivers of preschoolers (aged 3-5) with elevated ADHD and sleep concerns were randomized to PASS or active control (BPT only). Caregiver- and clinician-ratings of ADHD and sleep were collected pre- and post-intervention. Prespecified feasibility/acceptability metrics were assessed. Repeated-measures linear models characterized between-group differences in ADHD and sleep over time. Results: Of enrolled families, 33 completed treatment, 3 discontinued (retention rate=92%), and 8 are in treatment. To date, treatment engagement and caregiver-rated therapy satisfaction exceed benchmarks. PASS families display small-to-large improvements in care giver rated sleep (Cohen’s d=.38-1.01), and negligible-to-small improvements in clinician- and caregiver-rated ADHD (d=.10-.26), compared to BPT-only families at post-intervention. Conclusions: A streamlined BPT-BSM telehealth intervention is associated with high feasibility and acceptability for caregivers of preschoolers with ADHD and sleep concerns. PASS may improve caregiver-rated sleep and ADHD symptoms in preschoolers compared to BPT alone; updated analyses (Fall 2025) with the full sample (44 families) will clarify these preliminary findings.

5:00pm - 6:30pm

Plenary: ADHD, Telehealth, and Stimulant Safety: A Conversation with the DEA Chair:

Chair: Timothy Wilens, Massachusetts General Hospital

Presenters:

Gregory Mattingly, Midwest Research Group

Katie Laughery, DEA

Timothy Wilens, Massachusetts General Hospital

Learning Objective 1: Learn the risk of new onset of substance use disorders in adults newly started on stimulant medication

Learning Objective 2: Evaluate the risk of new onset of substance use disorder in patients treated virtually compared to in person

Learning Objective 3: Examine recent trends in the prescription of stimulants in adults with ADHD

Overall Abstract: Objectives: This Symposium aims to examine the association between ADHD and substance use disorder (SUD) in the context of the timing and use of stimulants, nonstimulants, and the nonmedical use of prescription stimulants in both in-person and virtual settings. Methods: Data from pharmaceutical databases, longitudinal studies employing national longitudinal multicohort panels and electronic health records attending to child- and adult-onset stimulant treatment, prescription stimulant misuse, and impact of virtual vs in-person care were analyzed for the development of stimulant use disorder (stimUD) and SUD. The presented data are adjusted for covariates. Results: There have been increases in the prescribing of stimulant medications-particularly in adult women with ADHD. Adult-onset stimulant prescribing for ADHD was not associated with later SUD. In contrast, stimulant misuse in adolescence, not the appropriate use of stimulants for ADHD, was linked with later SUD. The entirely virtual prescribing of stimulants for adolescents and adults with ADHD was not associated with increases in stimulant or other SUDs compared with historically in-person visits. Conclusions: Increase prescribing of stimulants are occurring in adult populations. When used appropriately, prescription stimulant onsets in adolescents and adults with ADHD do not increase the risk for SUD but appear to decrease the risk. Virtual care of ADHD appears safe in terms of subsequent stimulant and other SUDs. Discussion of these and other issues amongst clinical researchers and the Drug Enforcement Administratioin will be undertaken with time for questions and comments by attendees.

Navigating the Landmines In ADHD Care

Gregory Mattingly, Midwest Research Group

Individual Abstract: Our digital environment presents an ever expanding challenge with data overload and algorithm-driven distractions. Online social media narratives can increase help seeking and awareness, but may also raise expectations for stimulant treatment or minimize discussion of risks and alternatives. This session will explore recent research to navigate the clinical landmines within our ADHD ecosystem.

ADHD, Telehealth and Stimulant Safety: A Conversation with the DEA

Timothy Wilens, Massachusetts General Hospital

Individual Abstract: Objectives: This Symposium aims to examine the association between ADHD and substance use disorder (SUD) in the context of the timing and use of stimulants, nonstimulants, and the nonmedical use of prescription stimulants in both in-person and virtual settings. Methods: Data from pharmaceutical databases, longitudinal studies employing national longitudinal multicohort panels and electronic health records attending to child- and adult-onset

stimulant treatment, prescription stimulant misuse, and impact of virtual vs in-person care were analyzed for the development of stimulant use disorder (stimUD) and SUD. The presented data are adjusted for covariates. Results: There have been increases in the prescribing of stimulant medications-particularly in adult women with ADHD. Adult-onset stimulant prescribing for ADHD was not associated with later SUD. In contrast, stimulant misuse in adolescence, not the appropriate use of stimulants for ADHD, was linked with later SUD. The entirely virtual prescribing of stimulants for adolescents and adults with ADHD was not associated with increases in stimulant or other SUDs compared with historically in-person visits. Conclusions: Increase prescribing of stimulants are occurring in adult populations. When used appropriately, prescription stimulant onsets in adolescents and adults with ADHD do not increase the risk for SUD but appear to decrease the risk. Virtual care of ADHD appears safe in terms of subsequent stimulant and other SUDs. Discussion of these and other issues amongst clinical researchers and the Drug Enforcement Administratioin will be undertaken with time for questions and comments by attendees.

ADHD, Telehealth and Stimulant Safety: A Conversation with the DEA

Katie Laughery, DEA

Individual Abstract: The rise in stimulant prescribing, with a 60.1% increase in Schedule II stimulant prescriptions since 2012, is driven by adult patients, telemedicine platforms, and targeted advertising, particularly post-COVID-19. Telemedicine has enabled easy access to stimulants, often prioritizing profits over patient care, as seen in cases of companies exploiting prescribing practices. Nurse practitioners now write the highest percentage of prescriptions (23.4%), and evidence-based guidelines for adult ADHD diagnosis are not yet available. Drug shortages and counterfeit stimulant pills containing methamphetamine further exacerbate risks, underscoring the need for stronger regulations and proactive measures to prevent a stimulant crisis akin to the opioid epidemic.

Saturday, January 17, 2026

7:00am – 8:00am

Prescribing Stimulants in ADHD: Clinical and Pharmacokinetic Considerations During Times of Transition

Presenters:

Ann Childress, Center for Psychiatry and Behavioral Medicine

Maitri Patel, Progressive Therapeutics Framingham

Learning Objective 1: Apply knowledge in conversations about stimulants to combat misinformation, including benefits, risks, and limitations of use

Learning Objective 2: Identify differences between stimulant formulations and how these characteristics affect their PK and PD profiles and potential clinical implications

Learning Objective 3: Discuss the different clinical considerations when prescribing stimulant medications for patients with ADHD, especially

during times of transition

Learning Objective 4: Select an appropriate stimulant formulation based on patient needs and preferences

Overall Abstract: Dr. Childress will discuss pharmacokinetic parameters and their impact on onset and duration of effect for multiple amphetamine and methylphenidate formulations. Case examples will be presented to aid the learner in understanding when different formulations may be considered in the treatment of ADHD.

8:00am - 9:30am

Saturday Morning Plenary: Do Stimulant Medications Prevent Harmful Substance Use by People with ADHD: Untangling the Evidence for Clinical Application

Chair: Stephen Becker, Cincinnati Children's Hospital Medical Center

Presenters:

Brian D'Onofrio, Indiana University

Brooke Molina, University of Pittsburgh

Stephen Becker, Cincinnati Children's Hospital Medical Center

Ryan Sultan, Columbia University College of Physicians and Surgeons

Learning Objective 1: Participants will be able to describe strengths and limitations of longitudinal clinical samples and large-scale observational studies.

Learning Objective 2: Participants will be able to apply empirical evidence on stimulant medications and substance use to guide clinical case conceptualization and decision-making.

Overall Abstract: The relationship between stimulant pharmacotherapy for ADHD and the risk of substance use and substance use disorder (SUD) has been debated for decades. Despite strong claims in various scientific and media reports, accumulating evidence paints a more nuanced picture. This plenary brings together three leading experts to provide a comprehensive and balanced perspective on the state of the science and clinical application of research examining stimulant medication use and harmful substance use by individuals with ADHD. First, Dr. Brooke Molina will review longitudinal studies of individuals carefully diagnosed with ADHD in childhood and followed into adulthood. These deeply phenotyped cohorts provide rich developmental insights but have yielded mixed findings, with some studies pointing to protective effects of stimulant treatment and other studies showing no association. Dr. Molina will highlight methodological strengths and limitations of these studies and discuss how developmental trajectories of ADHD and its treatment intersect with later substance use. Second, Dr. Brian D'Onofrio will present evidence from large-scale observational studies leveraging large, national datasets and advanced epidemiologic designs. These studies often point to stimulant medications reducing risk of severe substance-related outcomes, including acute medical treatment and substance-related mortality. Dr. D'Onofrio will also highlight critical unanswered questions, such as the role of treatment duration, medication type and dosing, and individual differences in moderating these effects. Finally, Dr. Ryan Sultan will bridge research and practice by discussing how clinicians can integrate these findings into real-world decision-making. Using

case-based examples from his own practice, Dr. Sultan will illustrate strategies and clinical decision-making when working with patients with ADHD, including those with co-occurring substance use, to ensure safe and effective care. The plenary will conclude with discussion through audience-generated questions.

Stimulant Pharmacotherapy and Substance Use Problems: Evidence from Large-Scale Observational Studies

Brian D'Onofrio, Indiana University

Individual Abstract: This presentation will describe how large-scale observational studies have extended the findings from randomized controlled trials and intensive longitudinal studies examining the effects of stimulant pharmacotherapy on substance use problems. Analyses of nation-wide samples using advanced analytic approaches and design features have demonstrated that stimulant medications are associated with fewer serious substance use problems, including acute medical treatment for substance problems and substance-related mortality. Several key clinical questions remain, however, especially regarding the effects of age of initiation, type and dose of stimulant medication, length of treatment, and individual differences that may moderate the effects of stimulant pharmacotherapy.

Applying the Evidence: Clinical Decision-Making About Stimulant Treatment and Substance Use Risk in ADHD

Ryan Sultan, Columbia University College of Physicians and Surgeons

Individual Abstract: Prescribing stimulants to individuals with ADHD and co-occurring substance use problems presents complex clinical challenges. Clinicians must navigate overlapping symptom presentations, heightened risks for misuse or diversion, and the ethical responsibility to provide effective ADHD treatment despite these concerns. Moreover, inconsistent research findings regarding the impact of stimulants on the development of substance use further complicate clinical decision-making. This presentation will combine empirical findings previously discussed with the realities of clinical care. Through case-based examples, Dr. Sultan will illustrate how clinicians can use current research to guide decisions around ADHD risk assessment, treatment planning, and ongoing monitoring to ensure patients with co-occurring ADHD and substance use risk receive safe, effective, and individualized care.

Stimulant Treatment and Later Substance Use and Disorder: What do Longitudinal Studies of Clinical Samples Tell Us?

Brooke Molina, University of Pittsburgh

Individual Abstract: Longitudinal studies of individuals diagnosed with ADHD, principally in childhood and followed into adulthood, have reported either protective effects of stimulants on the development of substance use and substance use disorder, or they have reported no association. These variable findings have resulted in some confusion regarding the state of the literature and whether or not stimulant medications are safe. This presentation will summarize these findings in the literature and discuss the merits of these intensive longitudinal studies (e.g., deeply phenotyped research participants) alongside their limitations (e.g., relatively small sample size) in relation to country-wide datasets. The developmental nature of substance use and its

evolution into substance use disorder for individuals with ADHD will also be discussed given its relevance to trends in stimulant treatment.

10:00am - 11:30am

Invited Symposium: Environmental Influences on ADHD: The State of the Science and the Challenges Ahead

Chair: Julie Schweitzer, University of California, Davis

Presenters:

Howard Hu

Stephanie Engel

Irva Hertz-Picciotto, UC Davis

Learning Objective 1: Describe key environmental exposures associated with ADHD risk — and summarize recent epidemiologic findings linking these exposures to ADHD and related neurodevelopmental outcomes.

Learning Objective 2: Discuss mechanisms and methodological approaches used to investigate environmental determinants of ADHD and related disorders.

Learning Objective 3: Evaluate implications of environmental risk findings for prevention, policy, and translational research aimed at reducing modifiable exposures and improving developmental outcomes in children at risk for ADHD.

Overall Abstract: Growing evidence suggests that environmental exposures contribute meaningfully to the development and expression of ADHD, yet this area remains understudied compared with genetic and behavioral influences. Increasing interest in environmental factors reflects their potential modifiability and importance for prevention. This symposium will provide an overview of the state of the science in environmental epidemiology as it relates to ADHD and neurodevelopment. Dr. Stephanie Engel (University of North Carolina, Chapel Hill) will present new findings on phthalates, replacement plasticizers, and organophosphate esters and their associations with ADHD and related outcomes. Dr. Howard Hu (University of Southern California) will discuss new evidence on lead's impact on ADHD and antisocial behavior, and emerging research on potential impact of fluoride exposure that parallels recent controversial findings on IQ. Dr. Hertz-Picciotto (University of California, Davis) will discuss a framework for understanding the overall and relative contributions from environmental exposures, genetics, family and social determinants in the etiology of ADHD, and the centrality of multifactorial causation as a foundation. The symposium will conclude with a panel discussion on future directions, methodological innovations, and translational implications, followed by audience Q & A. This session will equip researchers and clinicians to evaluate environmental contributions to ADHD.

Lead and Fluoride: New Research on a Well-Recognized Neurobehavioral Toxicant and a Potential (and Controversial) Neurobehavioral Toxicant

Howard Hu

Individual Abstract: Lead is well known to the clinical and scientific community as a neurodevelopmental toxicant that negatively impacts intelligence and increases the risk of

inattention and hyperactivity. Less is known about lead exposure's impact as a risk factor for clinical ADHD, anti-social behavior, and violent/criminal behavior. By contrast, fluoride is best known for its ability to prevent dental caries, a property that has persuaded communities to fluoridate drinking water serving 65% of the US population. However, evidence has been building indicating that early life exposure to fluoride lowers IQ and increases the risk of inattention and hyperactivity symptoms. In this talk, Dr. Hu will provide research updates on both lead and fluoride with respect to potential impacts on behavior, with some studies stemming from his on-going longitudinal cohort studies in the U.S., Mexico, and India as well as a collaboration with scientists from the U.S. EPA on systematic reviews of key studies that have appeared in the scientific literature.

Emerging Evidence Linking Phthalates, Replacement Plasticizers, and Organophosphate Esters with ADHD and ADHD-like Behaviors

Stephanie Engel

Individual Abstract: Plasticizers and flame retardants are ubiquitous exposures in daily life, arising from contact with a wide range of consumer materials, from personal care products, cosmetics, and home cleaning materials, to building materials, textiles and the casings of electronics. They readily leach from these products into surrounding media, facilitating human exposure through multiple routes including inhalation, dermal update, and ingestion. Nationally representative human biomonitoring studies document widespread exposure across all age ranges. Numerous longitudinal studies of child neurodevelopment with biomarkers of prenatal and/or childhood exposure to these compounds have contributed important evidence of their role in brain development. This presentation will provide an overview of these chemicals and their putative mechanisms of action and summarize the strength of evidence linking exposure during key developmental windows with child behavior, executive functioning, and ADHD, including any sex-specific effects.

The Etiology of ADHD: A framework for understanding the contributions from environmental exposures, genetics, behavioral, family and social determinants

Irva Hertz-Picciotto, UC Davis

Individual Abstract: An array of environmental, behavioral, genetic, and social factors have been proposed and assessed as potential causes of ADHD. In contrast to the complexity of behavioral profiles and the processes of brain development, which suggest a more complex web of causal factors at play, much of the literature is devoted to single or a class of similar exposures, social determinants, or genes alone. This presentation focuses on a framework that highlights a multi-layered understanding of causation, an approach that ultimately can unveil the overall and relative contributions from environmental chemicals, food, genetics, family and social determinants in the etiology of ADHD. This framework is grounded in a realistic, evidence-based concept of multifactorial causation, which circumvents misguided debates about, for example, nature vs. nurture, and replaces a silo-driven emphasis with a perspective that recognizes and interrogates multiple factors, specifically, elevating the investigation of interactions. Examples will be explored, including ADHD associations involving gene-by-environment interactions of phthalates with gene expression of dopamine receptor; sex differences in the environmental chemical associations such as organophosphates; and implications of the intersectionality of sociodemographic factors with the positive effects of greenspace. Additionally, the development of two major advances for statistical analyses: first, causal epidemiologic methods and an effective tool for implementing them, and secondly, models incorporating mixtures of exposures —the 'exposome, together open the door to a broader scope of research with less bias, more precision in confounder control and greater nuance for interpreting combined, joint and

independent influences on development of ADHD. All of these lead to the centrality of multifactorial causation as foundational to etiologic research and can enhance the search for modifiable factors that can improve the lives of those affected by ADHD, as well as their families and friends.

10:00am - 11:30am

Concurrent Symposium: From Session to Self-Sufficiency: Enhancing the Generalization and Maintenance of CBT for ADHD

Chair: Kevin Antshel, Syracuse University

Presenters:

Nicholas Marsh, University of Maryland - College Park

Margaret Sibley, University of Washington

Arthur Anastopoulos, University of North Carolina at Greensboro

Kevin Antshel, Syracuse University

Learning Objective 1: The participant shall be able to identify evidence-informed strategies that enhance the generalization and long-term maintenance of CBT outcomes for adolescents and adults with ADHD across diverse developmental contexts.

Learning Objective 2: The participant shall be able to identify evaluate the role of digital tools, motivational interviewing, behavioral activation, and tailored intervention design in sustaining CBT gains beyond the clinical setting.

Overall Abstract: This symposium aims to explore strategies to enhance the generalization and long-term maintenance of cognitive-behavioral therapy (CBT) gains in adolescents and adults with ADHD. Four presentations will highlight innovative, evidence-informed approaches to extend CBT outcomes beyond the clinical setting. Kevin Antshel will present on integrating digital tools to support CBT generalization and maintenance for adults with ADHD. Kevin will emphasize the potential of mobile apps to extend skill use between sessions, automate reminders, and offer real-time behavioral prompts. Data will be presented demonstrating increased adherence and improved functioning when technology complements core CBT components such as time management and emotional regulation. Maggie Sibley will present findings on the 3-year effects of Supporting Teens' Autonomy Daily (STAND) program, emphasizing the use of motivational interviewing (MI) to promote treatment maintenance. Maggie will also present emerging findings from results of in-depth interviews 4-7 years post-STAND and describe engagement-focused STAND elements which promote maintenance. Arthur Anastopoulos will present findings from the Accessing Campus Connections and Empowering Student Success (ACCESS) program, a tailored CBT intervention for college students with ADHD. Arthur will discuss the many steps taken to increase the sustainability of improvements over time in the ACCESS program. Outcome data will be presented, highlighting how these strategies contributed to long-term maintenance of treatment effects. Nicholas Marsh will present findings from a study examining growth curves in an alcohol use intervention for adults with ADHD, comparing motivational interviewing (MI) supportive counseling versus MI combined with Behavioral Activation (BA). Results indicate that the BA condition demonstrated better sustained improvements in executive functioning over time, suggesting that structured

engagement in rewarding, goal-directed activities may enhance maintenance of treatment effects. These four presentations will present developmentally informed, context-sensitive approaches to maximizing generalization and maintenance of CBT gains in ADHD across different developmental periods. Each presenter will also offer empirically grounded strategies to enhance generalization and maintenance of CBT outcomes for individuals with ADHD. CBT teaches clients to become their own therapists. For this to be effective, clients need to generalize coping skills to a wide variety of situations and maintain these practices without ongoing clinician input.

Using Motivational Interviewing to Enhance Engagement in CBT for Adolescents with ADHD

Margaret Sibley, University of Washington

Individual Abstract: Objective: Behavior therapy for childhood ADHD consistently demonstrates no long-term effects on outcomes (Jensen et al., 2007); however, 11 RCTs demonstrate long term maintenance of effects for adolescent ADHD CBTs. At least two RCTs demonstrate maintenance of effects for adolescent ADHD CBTs up to three years (for review see Sibley et al., 2025). Methods: This presentation has three parts: (1) 3-year RCT results for STAND, an Enhanced CBT for adolescents with ADHD (N=278; Sibley et al., 2024, JAACAP); (2) results of in-depth interviews 4-7 years post-treatment for parents and teens who received the STAND treatment (N=42; Sibley et al., 2022; Child Psychiatry and Human Development); and (3) description of engagement-focused STAND elements that were designed to promote maintenance, as well as data linking elements to indices of treatment engagement.. Results: RCT results suggest three-year maintenance of STAND effects (vs. usual care psychotherapy) on core ADHD symptoms, parent-teen conflict, and executive functioning skills—but only when therapists were licensed. Interviews identified key themes perceived to promote maintenance including enhanced motivation, organization skills, self-awareness, and parental autonomy granting. Conclusions: Specific strategies from STAND to promote maintenance will be shared that are largely derived from motivational interviewing and other engagement focused practices. These include applying engagement-focused techniques at treatment outset, when collaborating on action planning, and when debriefing on attempts to follow-through on intentions. We will discuss how attention to process-specific issues can be integrated into clinical practice to make CBT ADHD-friendly--maximizing opportunities for long-term maintenance.

ACCESS Program for College Students with ADHD: Conceptual Underpinnings, Structural Components, Session Content, and Other Strategies to Enhance Long-Term Maintenance of Improvements

Arthur Anastopoulos, University of North Carolina at Greensboro

Individual Abstract: Accessing Campus Connections and Empowering Student Success – ACCESS - is an innovative, evidence-based program for college students displaying features of Attention-Deficit/ Hyperactivity Disorder (ADHD). Guided by cognitive-behavioral principles and delivered across two consecutive semesters, ACCESS gives students with ADHD the knowledge, skills, and confidence necessary for successfully managing the increased demands for self-regulation that arise in college, encompassing academic, personal, and social functioning. In the first semester, known as the active phase, group and individual mentoring sessions are conducted concurrently across eight weeks to address multiple objectives, including: giving students research supported knowledge of ADHD appropriate to their developmental level as young adults; increasing student awareness and mastery of behavioral strategies addressing a

variety of executive functioning challenges associated with ADHD (e.g., time management, organization, planning); teaching students how to identify unhelpful thinking patterns and to replace them with thinking strategies that promote academic success and personal well-being; educating and empowering students to utilize various campus support services (e.g., disability accommodations, counseling, student health) that can be used in combination with ACCESS and other interventions. ACCESS also includes a semester-long maintenance phase in which mentors meet less frequently with students to help prepare them for functioning independently after the program ends. Immediate and long-term outcomes have been evaluated in an initial open clinical trial followed by a large scale multisite randomized controlled trial, as well as in several dissemination efforts. Clinical trial findings have revealed: high levels of engagement; improvements in attention span, executive functioning, use of academic learning and study strategies, daily life functioning, and general well-being; increased use of campus disability services; and persistence of improvements six months after intervention. Similar outcomes have been reported by multiple universities serving as dissemination sites, thereby demonstrating that ACCESS can be implemented successfully by staff on college campuses.

Enhancing Maintenance of CBT Effects via Behavioral Activation: Executive Functioning Gains in College Students with ADHD Engaging in Heavy Drinking

Nicholas Marsh, University of Maryland - College Park

Individual Abstract: Objective: College students with ADHD are at high risk for negative alcohol-related consequences and often have executive functioning (EF) impairments that make it difficult to follow through on motivational goals. However, Brief Motivational Interventions (BMI)—the gold-standard treatment for alcohol misuse in college—do not support EF. Therefore, we examined whether augmenting BMI with Behavioral Activation (BA) enhances the maintenance of EF improvements over time. Methods: College students with ADHD (N=112) were randomized to BMI+BA or BMI+supportive counseling (BMI+SC). EF was assessed at baseline, posttreatment, 1-month, and 3-month follow-up using the Barkley Deficits in Executive Functioning Scale (BDEFS). Piecewise latent growth modeling evaluated EF change from baseline to post (slope 1) and post through follow-up (slope 2) to test sustained effects and group differences. Models adjusted for alcohol consumption and sex assigned at birth. Results: BMI+BA showed significantly greater improvement in EF (b = " 2.376, SE = 0.993, p = .017) than BMI+SC (b = 0.510, SE = 1.043, p = .625) during the follow-up period, suggesting better maintenance of skills. Exploratory EF subscale analyses indicated significantly greater follow-up improvements specifically in time management and organization for BMI+BA compared to BMI+SC. Conclusion: BA's structured scaffolding—including systematic scheduling, use of assists, and engagement in value-driven activities—may help students with ADHD maintain and generalize EF-related gains beyond active treatment. These findings support BA as a promising CBT-enhancement strategy and help bridge the "point of performance" gap for those with EF impairments.

Bridging the Gap: Digital Supports for Maintaining CBT Skills in Adult ADHD

Kevin Antshel, Syracuse University

Individual Abstract: Cognitive-behavioral therapy (CBT) is one of the most effective psychosocial treatments for adults with Attention-Deficit/Hyperactivity Disorder (ADHD), particularly for addressing impairments in executive functioning, emotional regulation, and time management. However, a persistent challenge is helping individuals generalize and maintain CBT-acquired skills outside of structured therapy sessions. This presentation focused on the

integration of digital tools—especially mobile applications—to bridge this gap and enhance treatment adherence and sustainability. The presentation will begin by outlining the rationale for incorporating technology into CBT for ADHD, highlighting how ADHD symptoms such as forgetfulness, disorganization, and distractibility can interfere with the consistent application of CBT strategies. Digital tools offer an accessible and scalable solution by supporting daily skill use through prompts, reminders, and structured guidance. Several categories of app-based features, including real-time alerts for task initiation, mood and behavior tracking, digital planners, and progress dashboards, all designed to extend therapeutic gains beyond the clinical hour, will be reviewed. Using data from a recently completed RCT of Inflow, empirical findings will be presented that underscore the effectiveness of pairing CBT with digital tools. Participants who used mobile apps in conjunction with standard CBT reported higher levels of engagement, greater homework completion, and significant improvements in daily functioning compared to those receiving CBT alone. Importantly, the apps were not standalone treatments, but rather augmentative supports that reinforce CBT principles such as behavioral activation, goal-setting, and self-monitoring. The presentation will address practical issues clinicians may encounter when integrating digital tools into CBT. These include how to select user-friendly, evidence informed apps, strategies for introducing them to clients, and ways to tailor app use to individual goals and needs. The presentation will conclude with a discussion of practical and ethical considerations, including user burden, privacy, and the importance of clinician involvement in selecting and integrating digital tools into treatment plans. Future directions, such as adaptive algorithms that tailor prompts based on user behavior and integrating biometric feedback to support emotional regulation, will be introduced.

10:00am - 11:30am

Concurrent Symposium: Shedding Light on ADHD Stigma: New Findings Focused on Youth, Families, and Schools

Chair: Stephen Becker, Cincinnati Children's Hospital Medical Center

Presenters:

Melissa Dvorsky, Children’s National

Melissa Miller, Cincinnati Children's Hospital Medical Center

Stephen Becker, Cincinnati Children's Hospital Medical Center

Learning Objective 1: The participant will be able to describe mental health and ADHD stigma.

Learning Objective 2: The participant will be able to summarize school and family factors that relate to ADHD stigma in youth and their caregivers.

Overall Abstract: Stigma includes a set of negative beliefs held by either an individual or group towards another that tarnishes the target’s social status and often results in prejudice, stereotypes, and discrimination. In considering mental health stigma, stigma compounds many of the difficulties already associated with having a mental health disorder. Manifestations of ADHD stigma range from an increased desire among adults to avoid children with ADHD to some doubting validity of the diagnosis altogether. This can result in individuals with ADHD feeling unsupported, or like others are downplaying legitimate challenges experienced as resulting from their symptoms. In addition, far less is known about mental health stigma in children and

adolescents compared to adults, and it is important to examine stigma earlier in development as attitudes and identity consolidation are taking shape and youth are enveloped within systems that can promote or reduce stigma. This symposium will present novel findings on ADHD stigma, with a focus on youth, families, and schools. The first presentation uses novel vignette methodology to examine patterns of stigma towards a peer with or without ADHD symptoms in 50 adolescents (ages 13-15, 42% female), approximately half with ADHD. This presentation will also examine the impact of contact and similarity with a peer described in the ADHD vignette, and whether associations differ for teens with or without ADHD. The second presentation will examine aspects of the school environment in relation to ADHD-related stigma in fifth grade students with ADHD (N=71; 58% female). Multiple domains of school environment (i.e., school climate, connectedness, and support) are considered as well as a multi-dimensional measure of ADHD-related stigma. In the third presentation, 150 caregivers of children with ADHD (Mage=10.62; 47% female) completed measures of their own ADHD-related stigma, as well as measures of family support mechanisms and child adjustment. Using a longitudinal design, parents' ADHD stigma was associated with lower support and increased school barriers, which indirectly worsened child internalizing symptoms. Together, these findings highlight the presence and importance of ADHD stigma in youth and their caregivers, with implications for the family and school systems surrounding youth with and without ADHD.

Family Support Mechanisms Help Explain the Impact of Parental Self-Stigma on Child Social and Emotional Outcomes in Youth with ADHD

Melissa Dvorsky, Children's National

Individual Abstract: Hypothesis/Objective: Parents of children with ADHD experience significant stigma from doubts about diagnosis to fears of isolation(1). While prior research emphasizes courtesy stigma(2), self-stigma remains understudied(3) yet hinders seeking family, school, or professional support(4). This study examines whether familial supports mediate the association between self-stigma and child social and emotional outcomes.
Methods: In a community-based sample of 150 youth (Mage=10.62; 46.7% female; 37.3% youths of color) diagnosed with ADHD, we examined family support mechanisms (barriers to school involvement, therapy use, social support) in a parallel multiple-mediation structural equation model examining the longitudinal association between parental self-stigma about ADHD and child socio-emotional functioning.
Results: Parental stigma predicted greater barriers to school involvement (β=.19) and lower social support (β=-.17). School barriers (β=.17) and lower therapy use (β=-.26) predicted greater child internalizing 6-8 months later, while social support (βs=.17) predicted closer teacher-student relations. Family support mechanisms significantly mediated parent stigma and child internalizing (ab=1.40, 95%CI[.45, 2.77]).
Conclusions: Parental self-stigma reduced support and increased school barriers, indirectly worsening child internalizing symptoms. Familial social support promoted better teacher–student relationships. Findings highlight the need for interventions targeting parent stigma and strengthening family and school supports. Future work should evaluate stigma-reduction strategies to improve socio-emotional outcomes for youth with ADHD.

Hidden Barriers: Social Exclusion of ADHD Peers Despite Low Explicit Stigma

Melissa Miller, Cincinnati Children's Hospital Medical Center

Individual Abstract: Hypothesis/Objective: Individuals with attention-deficit/hyperactivity disorder (ADHD) experience substantial stigmatization, yet few studies have examined the specific nature of stigma or individual factors (e.g., contact, similarity) that influence ADHD stigma. The current study examined patterns of stigma toward a peer with ADHD symptoms

compared to a peer without ADHD symptoms, as well as the impact of contact and similarity on ADHD stigma.
Methods: Fifty adolescents (ages 13-15, 42% female), approximately half diagnosed with ADHD (n = 27), completed measures assessing aspects of stigma after reading vignettes describing a peer with ADHD symptoms and a comparison peer without symptoms.
Results: Repeated-measures ANOVAs revealed no significant differences between the ADHD and comparison peer for social distance, explicit stereotype, and explicit prejudice. However, willingness to engage in activities with the peer was significantly lower for the peer with ADHD compared to the peer without ADHD. Interaction effects of ADHD diagnosis and vignette condition were non-significant, indicating that ADHD stigma was not impacted by the participant having an ADHD diagnosis. Regression analyses showed that identifying similarly to the ADHD peer was associated with significantly lower prejudice and stereotype scores, and greater intention to engage in academic and social activities. Higher frequency of contact with a peer similar to the ADHD peer was significantly associated with greater prejudice and anger toward the ADHD peer.
Conclusions: Findings indicate that despite not endorsing explicit stereotypes or prejudice toward peers with ADHD, adolescents may exclude ADHD peers in activities. Feeling similar to a peer with ADHD symptoms may decrease stereotypes and prejudice toward ADHD peers, though frequent contact with an ADHD peer in the classroom may result in greater ADHD stigma. Future longitudinal research is warranted to examine these associations.

Examining School Environment Factors in Relation to ADHD-related Stigma in Students with ADHD

Stephen Becker, Cincinnati Children's Hospital Medical Center

Individual Abstract: Objective: Despite the substantial stigmatization experienced by individuals with ADHD, few studies have examined ADHD stigma in children and none have examined school environment correlates. The current study examined aspects of school engagement – including school climate, connectedness, and support – in relation to ADHD-related stigma in children with ADHD.
Methods: Fifth-grade students diagnosed with ADHD (N=71; 41 female, 30 male; Mage=10.62) completed measures assessing school climate, school connectedness, and school support (including teacher-student relationship and peer support), in addition to a multi-dimensional measure of ADHD stigma.
Results: Controlling for previous ADHD diagnosis, medication use, child opportunity index, race, and sex, higher school connectedness and peer support remained associated with lower concern with public attitudes stigma, and higher school connectedness was associated with lower overall ADHD stigma.
Conclusions: School engagement factors are important to evaluate when examining ADHD stigma. Research in larger samples with a longitudinal design that can examine predictive associations as well as mechanisms and moderators are warranted.

1:15pm – 2:15pm

Otsuka Industry Sponsored Symposium: Advancing ADHD Treatment by Addressing Emotional Dysregulation, Executive Function, and Other Unmet Needs

Presenters:

Greg Mattingly, Washington University

Craig Chepke, Excel Psychiatric Associates

Andrew Cutler, SUNY Upstate Medical University and Neuroscience Education Institute

Rakesh Jain, Texas Tech - Permian Basin

Learning Objective 1: Describe the neurobehavioral burden of emotional dysregulation and related comorbidities in ADHD (eg, anxiety, executive dysfunction), and examine the limitations of current treatments in addressing these challenging symptom domains.

Learning Objective 2: Explain the role of serotonergic signaling in the regulation of emotion and cognition in ADHD, and describe how serotonin interacts with dopamine and norepinephrine pathways to influence treatment targets.

Learning Objective 3: Evaluate novel pharmacologic targets involving serotonergic modulation as emerging strategies to address under-recognized and under-treated features of ADHD.

Learning Objective 4: Apply individualized, developmentally-informed treatment strategies for patients with stimulant intolerance, comorbid symptoms, or residual impairment in clinical scenarios across the lifespan.

Overall Abstract: This symposium will equip clinicians with the knowledge and skills needed to address the full spectrum of ADHD symptomatology across the lifespan, with a particular focus on under-recognized and undertreated domains such as emotional dysregulation, executive dysfunction, and comorbid anxiety. By integrating emerging neurobiologic insights, especially the role of serotonergic pathways in emotional and cognitive regulation, this activity will bridge persistent gaps in pharmacologic understanding, enhance clinical confidence in interpreting data from trials of novel agents, and support evidence-based, patient-centered treatment decisions. Ultimately, this activity seeks to empower a multidisciplinary team of providers to move beyond traditional stimulant-centric paradigms and adopt individualized, mechanistically informed approaches that reflect the developmental complexity and comorbidity burden of ADHD across age groups.

3:15pm - 4:45pm

Invited Symposia: Understanding the Rise in ADHD Coaching

Chair: Margaret Sibley, University of Washington

Presenters:

Tamara Rosier, ADHD Center of Michigan

Margaret Sibley, University of Washington

David Coghill, University of Melbourne

Alexandra Belliter, Shimmer

Learning Objective 1: Identify recent practice trends in ADHD coaching in terms of coach characteristics and modalities of service provided nd how this service differs from other forms of psychosocial care.

Learning Objective 2: Describe contributors to the rise in ADHD coaching post-pandemic.

Overall Abstract: We are witnessing a rapidly shifting ADHD treatment landscape that includes ADHD coaching as an increasingly common form of care. Consequently, the presenters in this symposium conducted systematic surveillance and information gathering about the ADHD coaching fields in the United States and Australia. We will present public health trends that were released in these survey and discuss how they inform priorities for ADHD research, practice, policy, and guidelines. Both surveys collected information about the modern ADHD coaching workforce and their practices. These are the first studies surveilling routine care ADHD coaching, and take a descriptive approach to initially documenting this rapidly spreading form of care for individuals with ADHD. After study results are presented by Drs. Sibley and Coghill, two leaders in the ADHD Coaching field (Dr. Rosier from the ADHD Coaches Organization and Ms. Bellitter from the Shimmer ADHD Coaching start-up) will provide reflections on the state of the ADHD coaching field and in a panel-style discussion.

ADHD Coaching in Australia

David Coghill, University of Melbourne

Individual Abstract: ADHD coaching has become increasingly popular and available in Australia over the past decade. While much of the initial development lent heavily on the work of US coaches the field has more recently begun to develop its own identity. Despite a lack of evidence around effectiveness ADHD coaching was given tentative support within the Australian ADHD Guideline. We recently replicated the US survey of ADHD coaches in Australia. This presentation will present the findings of this study, describe the similarities and differences between ADHD coaching in the US and Australia, explore how we can use these data to move the field forward and develop further studies to improve the evidence base for ADHD coaching internationally.

Rapid Growth in ADHD Coaching in the U.S.: Demographic, Service Delivery, and Practice Trends

Margaret Sibley, University of Washington

Individual Abstract: Individuals with ADHD face great challenges accessing formal psychosocial treatment. ADHD coaching has rapidly emerged online as a popular and accessible form of grassroots psychosocial support. Nearly nothing is documented about this workforce or the safety and effectiveness of its services. This presentation will document the rapid rise of ADHD coaching, its practices, and workforce characteristics. The U.S. National Survey on ADHD Coaching was conducted from October 2024 to April 2025 using a purposive electronic survey and snowball sampling. Survey distribution to online and in-person ADHD community hubs, professional listservs, and direct outreach to individuals advertising ADHD coaching. Participants were self-identified ADHD coaches providing care to at least one U.S. client during the past year. Using descriptive statistics, we provided surveillance of the ADHD coaching workforce's characteristics and practices. The survey was accessed by 670 respondents; after excluding ineligible responders, bots, and duplicates, 481 ADHD coaches comprised the sample. Over half the ADHD coaching workforce (60.9%) began practicing after the COVID-19 pandemic's onset. Most actively receive referrals from healthcare (64.9%) and serve clients across state lines
(80.9%); many practice internationally (40.3%). Most self-identify as having/suspecting they have ADHD (72.7%), many previously received ADHD coaching (44.5%), and most use lived experience with ADHD to inform their services (98.9%). Coaches are typically self-employed (91.5%), work-from-home (86.9%), and operate without formal clinical supports (90.5%). ADHD coaches predominantly offer virtual 1:1 weekly sessions with self-pay fees similar to

psychotherapy, advertising via social media or other online platforms. While most (89.3%) report no professional background in mental health, 62.5% completed a curriculum led by ADHD coaches prior to workforce entry. ADHD coaches report using intervention modalities that mirror best practices in psychosocial treatment for ADHD and discuss clinical topics such as mental health crises, substance use, trauma, and medication adherence. ADHD coaching has momentum and offers a naturalistic opportunity for much-needed psychosocial workforce expansion. Randomized controlled trials are essential to establish ADHD coaching's safety and effectiveness. Conditional on positive RCTs, the healthcare and ADHD coaching communities might collaborate to develop standardized educational, credentialing/licensing, and clinical oversights.

3:15pm - 4:45pm

Concurrent Symposium: Autism and ADHD Co-Occurrence: Developmental Trajectories, Mechanisms, and Intersections

Chair: Kevin Antshel, Syracuse University

Presenters:

Lauren Kenworthy, Children's National Hospital

Caitlin Clements, University of Notre Dame

Benjamin Yerys, The Children's Hospital of Philadelphia

Kevin Antshel, Syracuse University

Learning Objective 1: The participant shall be able to describe the developmental, neuropsychological, and identity-related factors that influence the manifestation and outcomes of co-occurring ASD and ADHD across childhood, adolescence, and early adulthood.

Learning Objective 2: The participant shall be able to analyze emerging research findings that inform the design of affirming, developmentally tailored, and mechanism-based interventions for individuals with co-occurring ASD and ADHD.

Overall Abstract: Autism Spectrum Disorder (ASD) and Attention-Deficit/Hyperactivity Disorder (ADHD) are distinct neurodevelopmental conditions, yet research increasingly shows that they frequently co-occur. Individuals with dual diagnoses often experience greater clinical complexity, unique developmental trajectories, and elevated functional impairments compared to those with a single diagnosis. This symposium brings together four researchers whose work collectively advances understanding of autism-ADHD co-occurrence across childhood, adolescence, and early adulthood. Presentations will highlight the importance of developmental timing, neuropsychological mechanisms, and intersecting identities in shaping outcomes for individuals with both conditions. Dr. Kevin Antshel will open the session by examining how co-occurring autism and ADHD intersect with sexual and gender minority (SGM) identities. Drawing on empirical data, he will demonstrate that SGM individuals show disproportionately high rates of dual diagnoses and face compounded challenges due to minority stress, stigma, and healthcare disparities. The presentation will emphasize the need for affirming, identity-sensitive approaches in both research and clinical practice. Dr. Lauren Kenworthy will present a dimensional framework for conceptualizing and treating ADHD-related challenges within autism and broader neurodiverse populations. Using data from youth samples, she will describe shared executive function (EF) profiles and their links to adaptive and mental health outcomes. Intervention

strategies tailored to distinct EF profiles will be discussed. Dr. Caitlin Clements will discuss research exploring shared and distinct reward processing atypicality in children with ADHD and/or autism. Using electroencephalography and behavioral paradigms, Caitlin will cover how altered reward processing may underlie motivation difficulties in this population. The potential of targeting reward processing systems to improve intervention efficacy, particularly for individuals with both diagnoses, will be presented. Dr. Benjamin Yerys will close the symposium by presenting longitudinal and cross-sectional data on adaptive functioning in individuals with both conditions. He will show that dual diagnoses are associated with poorer adult outcomes compared to either condition alone, underscoring the importance of early developmental monitoring and individualized treatment planning. Together, the presentations offer a comprehensive, intersectional view of autism-ADHD co-occurrence, calling for nuanced, developmentally informed, and identity-affirming approaches in research and practice.

Taking a Dimensional Approach to the Co-Occurrence of Autism and ADHD

Lauren Kenworthy, Children's National Hospital

Individual Abstract: Use a dimensional approach to recognize, validate and treat ADHD-related challenges in autism . Draw on data from multiple studies of youth with autism and ADHD to describe common executive function profiles and their relationship to mental health and adaptive outcomes. Report on interventions that are tailored to executive function profiles.

Alterations in Reward Processing in Autism and ADHD

Caitlin Clements, University of Notre Dame

Individual Abstract: Objective Evidence indicates that individuals with ADHD and/or autism may experience altered reward processing. Both conditions show blunted anticipation to certain types of rewards in neuroimaging studies. This presentation will describe existing and novel evidence that characterizes the response to reward and its correlates in youth with ADHD and/or autism. Methods Electroencephalography (EEG) provides a noninvasive neuroimaging method to interrogate response to reward in younger populations with ADHD or autism that may struggle to comply with demands of fMRI studies. One measure generated by EEG, the Reward Positivity (RewP), reflects an individual’s neural responsiveness to reward. Results A small and rapidly growing body of literature suggests altered response to reward —measured as the RewP —in both autism and ADHD. In adolescents, blunted RewP is associated with worsening ADHD symptoms, but only for youth without co-occurring autism. Novel data on the RewP in preschoolers will also be presented. Conclusions Reward processing is a key transdiagnostic mechanism underlying ADHD and autism. Altered anticipation and response to reward bear directly on treatment efficacy since behavioral interventions for both conditions rely heavily on motivation for rewards. Individual differences in neural reward response could serve as a prognostic or treatment outcome biomarker.

Adaptive Behavior and Health Outcomes Among People with ADHD and Autism Diagnoses

Benjamin Yerys, The Children's Hospital of Philadelphia

Individual Abstract: Objective: This presentation will discuss the impact of the dual diagnoses of autism spectrum disorder (autism) and attention-deficit/hyperactivity disorder (ADHD) on adaptive behaviors across the lifespan and health outcomes in adulthood, as well as the clinical implications for developmental monitoring and treatment planning. Method: I will summarize findings of studies from my lab and others linking ADHD diagnoses or symptoms among autistic

youth and adults with adaptive behaviors. These studies have samples ranging from ~20 to >3,000 per group). I will also discuss my most recent study, which used Medicare claims data from all 50 states and the District of Columbia between 2008 and 2019, to examine health outcomes for more than 3.5 million young and middle-aged adults. Results: Across three studies, school-age children and adults with both autism and ADHD diagnoses experience significant challenges with adaptive behaviors that are needed for independent living at home and in the community. In adulthood, these individuals also experienced suboptimal health outcomes in substance use, injuries, and cardiovascular disease compared to either condition alone. Conclusions: The co-occurrence of ADHD and autism is associated with more challenges in adaptive behavior in childhood and adulthood, as well as suboptimal health outcomes compared to those observed in the autism or ADHD population independently. From the findings of my prior work, we can begin to make some concrete recommendations for supporting the growing independence and long-term health of people dually diagnosed with autism and ADHD.

Double Marginalization: Navigating Autism, ADHD, and SGM Identity

Kevin Antshel, Syracuse University

Individual Abstract: This presentation will explore the practical implications that emerge from the intersectionality of co-occurring Autism Spectrum Disorder (ASD) and Attention-Deficit/ Hyperactivity Disorder (ADHD) with sexual and gender minority (SGM) identities, focusing on emerging adulthood. As colleges and universities increasingly serve neurodiverse student populations, it is critical to understand how intersecting identities shape mental health experiences and service needs. Using data from the 2022–2025 American College Health Association's National College Health Assessments (NCHA), this presentation will report findings highlighting disproportionately high rates of self-reported ASD and ADHD diagnoses among students identifying as transgender, nonbinary, or queer. These students are significantly more likely to report co-occurring neurodevelopmental conditions than their cisgender and heterosexual peers. Moreover, they experience heightened mental health burdens—including increased rates of psychological distress, self-injury, and suicidal ideation—and face additional barriers to accessing care. This presentation will examine how minority stress theory and neurodivergence converge, compounding stigma and leading to negative academic and psychosocial outcomes. Particular attention will be given to how these dual stigmas—being both neurodivergent and SGM—interact with structural factors such as campus mental health services, provider training, and campus environments. Drawing on both NCHA data and emerging clinical literature, this presentation will argue for a reimagining of mental health services that affirm and integrate both neurodivergent and SGM identities. A conceptual framework for developing identity-sensitive, inclusive clinical models and research designs that capture the complexity of dual diagnoses within diverse populations will be introduced. Clinicians, disability service staff, and higher education mental health providers will gain practical recommendations for creating affirming, identity-sensitive systems of care. These include adapting intake and assessment procedures to be inclusive of both neurodevelopmental and SGM identities, fostering collaborative partnerships between disability services and LGBTQ+ support offices, and training clinicians to recognize how overlapping sources of stigma may influence student disclosure, engagement, and symptom presentation. This presentation will underscore the need for clinicians, educators, and researchers to move beyond a siloed approach to diagnosis and treatment. Instead, it will advocate for intersectional, culturally competent strategies that recognize the lived experiences of individuals navigating multiple marginalized identities.

3:15pm - 4:45pm

Concurrent Symposium: How and Why a Good Clinical Model and Processes is Important for the Current and Future Demand for ADHD Services - 'What is World Class?'

Chair: Phil Anderton, Fellow of Institute of Leadership and Management

Presenters:

Stephen Faraone, Norton College of Medicine at SUNY Upstate Medical University

Jeremy Didier, CHADD

Rebecca Whelan, ADHD 360

Learning Objective 1: Participants will be able to identify and discuss best practise in the ADHD clinical setting, especially when looking to run a scaled and large clinic to increase patient throughput.

Learning Objective 2: Audience participants will be able to identify best practise as opposed to poor practise and be able to transfer that into their own work environment.

Learning Objective 3: Participants will be able to identify how they can improve their own performance clinically and how this session can relate to their own clinical practise and build better standards over time.

Overall Abstract: As the understanding of ADHD increases, and the demand for services also increases globally. We need to move the clinical interface from the previous understandings into the modern world, first ensuring that we are evidence based and following the science. A greater use of technology, a greater understanding of the patient experience and patient demands leads to a much better service and much greater impact as a service model. Building from extensive experience in the UK and research experience globally, this small team of expertise brings to APSARD a modern way of looking at how we could deliver an ADHD service at scale and high quality. Clinical experience in clinical research will be examined in APSARD alongside the patient experience and patient perspectives, all of which add up to an extensive library of knowledge that can inform the design of future clinics. Specifically, we will look at the scientific rigour of ADHD and service delivery looking at data and an evidence base that is strong from global research. Stephen Faraone will talk about measurement-based care and Phil Anderton will talk about the data from the UK's premier clinic ADHD 360 which will add flavour and rigour to this element of the presentation. Rebecca Whelan, a Clinical and Medical Director, will add her experience from the shop floor of delivering a service at scale, looking at both assurance and clinical practise to ensure world class delivery while seeing over 3000 patients in the virtual ADHD 360 clinic a month. Jeremy Didier, the president of CHADD in the USA, will bring the parent perspective of what is being looked at and looked for in the clinical regime for herself and her patient group. Phil Anderton will discuss innovation and the design of the virtual hospital and mindful of errors made in the past by other global clinics, will discuss how telehealth can augment the ADHD treatment pathway and can lead to excellence. To conclude the session, the panellists will discuss how they apply their expertise to clinical practise and how we can work to take the service user experience forward positively.

Measurement Based Care for ADHD

Stephen Faraone, Norton College of Medicine at SUNY Upstate Medical University

Individual Abstract: This presentation explores the integration of measurement-based care (MBC) into the diagnosis and treatment of ADHD, emphasizing its critical role in advancing quality care. Traditional ADHD care has focused primarily on symptom reduction, often neglecting broader outcomes such as functional recovery and quality of life. MBC offers a transformative approach by systematically incorporating standardized, validated tools and patient-reported outcomes to guide clinical decision-making and personalize care. The talk highlights the framework provided by the International Consortium for Health Outcomes Measurement (ICHOM) and its collaboration with the WHO's International Classification of Functioning,
Disability and Health (ICF) to define outcomes that extend beyond diagnostic criteria. It describes the development of ICHOM's Neurodevelopmental Disorders (NDD) Set, which captures essential outcomes across ADHD, communication disorders, motor disorders, and specific learning disorders in youth aged 3–20. The process involved international collaboration, literature reviews, psychometric evaluations, and open validation surveys with both professionals and individuals with lived experience. The presentation reviews the benefits of MBC in clinical care, including early identification of non-responders, improved patient engagement, and better coordination among care teams. It also discusses strategies for overcoming barriers to MBC implementation and envisions a future where real-time analytics, telehealth integration, and predictive modeling enhance the precision and effectiveness of ADHD treatment.

The Patient Voice in Defining "World Class" ADHD Care: Aligning Clinical Models with Lived Experience and Measurable Outcomes

Jeremy Didier, CHADD

Individual Abstract: This section of the presentation will examine how embedding the patient voice within intentionally designed, data-driven ADHD service models can strengthen clinical outcomes and improve alignment between treatment goals and patient priorities. Drawing on advocacy experience, service-user feedback, and recent literature, it will highlight the risks of process gaps that overlook lived experience and the benefits of integrating patient perspectives into model design. Ward et al. (2024) found that individuals with ADHD often have broader unmet health needs—including disordered eating, burnout, and comorbid mental health conditions—not addressed in traditional guidelines, underscoring the need for holistic, patient-informed approaches. Patrickson et al. (2024) demonstrated that co-designing ADHD services with stakeholders improves relevance, engagement, and innovation in care delivery. Mautone et al. (2024) further showed that adapting behavioral interventions to family and community contexts increases reach and efficacy, particularly in marginalized populations. These findings reinforce the necessity for clinical systems to move beyond diagnostic criteria alone, incorporating patient defined measures of success alongside standardized clinical metrics. From the patient community's perspective, high-quality ADHD services are built on measurable standards and meaningful goals defined by the people receiving care. When the patient voice is embedded in service design, outcomes improve, engagement increases, and care becomes more relevant to real-world needs — not just diagnostic criteria. This presentation offers the patient advocacy perspective within a multidisciplinary panel exploring "world-class" ADHD service design from research, clinical, operational, and lived experience viewpoints. By linking these findings to on the-ground advocacy insights, this session will illustrate why process-led care — guided by robust measurement systems, collaborative design, and patient-defined success indicators — is essential for delivering ADHD services that are equitable, sustainable, and truly impactful.

How and Why a Good Clinical Model and Processes is Important for the Current and Future Demand for ADHD Services - 'What is World Class?'

Rebecca Whelan, ADHD 360

Individual Abstract: By the end of this session attendees will be able to: Discuss and identify best practise in the ADHD clinical setting especially when looking to run a scaled and large clinic to increase patient throughput The audience will be able to identify best practise as opposed to poor practise and be able to transfer that into their own work environment Attendees will be able to identify how they can improve their own performance clinically and how they can relate this session to their own clinical practise and build better standards over time.

5:00pm - 6:30pm

Saturday Evening Plenary: ADHD in the Crosshairs: Debunking Myths that Disrupt Care

Chair: Anne Arnett, Boston Children's Hospital

Presenters:

Russell Schachar, The Hospital for Sick Children, U of Toronto

Stephen Faraone, Norton College of Medicine at SUNY Upstate Medical University

Karen Saporito, Integrative Psychology Associates of South Jersey, LLC

Tanya Froehlich, Cincinnati Children's Hospital Medical Center

Jeffrey Newcorn, Mount Sinai Medical Center

Learning Objective 1: After participating in this session, attendees should be able to use scientific evidence to explain why common misperceptions about ADHD are false.

Learning Objective 2: After participating in this session, attendees should be able to respond to patients' misunderstandings about ADHD using lay language and open dialogue.

Overall Abstract: This plenary brings together experts from across disciplines to address some of the most common misperceptions about the genetic and cognitive etiologies of ADHD, and corresponding implications for clinical care. Dr. Stephen Faraone will open with scientifically grounded evidence that challenges notions of genetic determinism, ADHD as an evolutionarily adaptive trait, and the need for medical treatments for biological disorders. Next, Dr. Schachar will present evidence that challenges myths about cognitive profiles in ADHD, fixed cognitive potential, and the impacts of ADHD treatment on cognitive performance. Finally, a panel of clinicians spanning psychiatry, pediatrics, and psychology will discuss how best to approach these misunderstandings in clinical practice.

Genetic Myths and Misconceptions

Stephen Faraone, Norton College of Medicine at SUNY Upstate Medical University

Individual Abstract: The goal is to teach the audience about the genetics of ADHD and how it debunks several myths about the disorder:

- Myth: ADHD is an evolutionarily adaptive trait or “superpower”
- Myth: Heritability is fixed and deterministic
- Myth: Genetic risk necessitates biological treatment and precludes psychosocial approaches
- Myth: ADHD is merely the extreme of normal trait variation and not a disorder

- Myth: ADHD is an evolutionarily adaptive trait or “superpower”
- Myth: Heritability is fixed and deterministic
- Myth: Genetic risk necessitates biological treatment and precludes psychosocial approaches
- Myth: ADHD is merely the extreme of normal trait variation and not a disorder I will also discuss how genetic data informs the neurodiversity debate.

Cognitive Myths and Misconceptions

Russell Schachar, The Hospital for Sick Children, U of Toronto

Individual Abstract: This talk will address the following:

- Myth: ADHD is defined by a single cognitive or executive control deficit
- Myth: High IQ rules out a diagnosis of ADHD
- Myth: Comorbidity reflects multiple unrelated disorders rather than shared risk mechanisms
- Myth: Cognition is static and can only be changed by medication. How have cognitive studies informed the neurodiversity debate?

ADHD in the Crosshairs: Debunking Myths that Disrupt Care Panel Discussion

Karen Saporito, Integrative Psychology Associates of South Jersey, LLC

Tanya Froehlich, Cincinnati Children's Hospital Medical Center

Jeffrey Newcorn, Mount Sinai Medical Center

9:30am – 10:30am

US Guidelines for the Diagnosis and Treatment of ADHD in Adulthood: Update

Overall Abstract: This session will provide an update on the development of the US Guidelines for the Diagnosis and Treatment of ADHD in Adulthood. Overseen by APSARD and a Steering Committee chaired by Thomas Spencer, MD, and Frances Levin, MD, three subcommittees have been working for approximately the past two years on the development of guidelines for 1) Screening and Diagnosis; 2) Medication and other Medical Treatments; and 3) Psychosocial and Other Non-Medical Interventions. A Delphi process involving successive rounds of writing, discussion, and voting followed by Steering Committee review (Stage 1), is being followed by two rounds of external review that are in progress. CHADD is partnering with APSARD as the guidelines development moves through these stages to include the perspectives of individuals with lived experience and to make plans for dissemination. This session will provide an update on the status of, and procedures for, external review and incorporation of feedback, and anticipated timing of release.

Presenters:

Gregory Mattingly, Midwest Research Group

Brooke Molina, University of Pittsburgh

Margaret Sibley, University of Washington

John Ringhisen, SUNY Update Medical University

SATURDAY, JANUARY 17, 2026, 11:45am - 12:45pm

POSTER SESSION

1-What's the Link Between ADHD and Breastfeeding?

*Izza Choudhry, Elyse Mark[1], Michelle Wilson[2], Lauren Lorenzi-Quigley[2], Justine Vecchiarelli [2], Caitlyn Coughlin[2], Brooke Molina[3], Heather Joseph[3]

[1]University of Pittsburgh School of Medicine, [2]University of Pittsburgh Medical Center, [3]University of Pittsburgh

Hypothesis/Objective: This is the first prospective, longitudinal study of breastfeeding duration among infants at familial risk for ADHD. We aimed to examine (1) the relationship between parental ADHD and breastfeeding duration, (2) maternal and neonatal predictors of breastfeeding duration, and (3) the association between breastfeeding duration and toddlerhood ADHD-related behaviors.

Methods/Results: 151 mother-infant dyads (71 infants at risk for ADHD due to at least one parent with ADHD). A neurodevelopmental specialist completed the NeoNatal Neurobehavioral Scale with the neonates (Mage= 43-49GA). Mothers reported on breastfeeding duration and toddler behavior. Parents with and without ADHD did not differ significantly on breastfeeding duration (M= 6-10mo). Neonatal central nervous system stress signs were significantly associated with reduced breastfeeding duration (;#ÒÓ ãSc2Â. p=0.027), controlling for mother education and first pregnancy. Reduced breastfeeding duration did not predict ADHD symptoms in toddlerhood (;#ÒÓVã s,Â.p=0.578), controlling for parent ADHD, mother education, infant sex, and neonatal CNS stress signs.

Conclusions: Our findings suggest that infants with less well-developed central nervous systems, a potential risk factor for ADHD, may be more difficult to breastfeed. Contrary to literature suggesting the neuroprotective effects of breastfeeding may reduce risk of childhood ADHD, breastfeeding duration was not predictive of toddler ADHD-related behaviors.

2-Executive Functioning Moderates Parental Skill Use Trajectories in Technology-Enhanced Behavioral Parent Training

*Nicholas Marsh[1], Joshua Langfus[2], Sara Chung[3], Elizabeth Hawkey[4], Linda Pfiffner[4]

[1]University of Maryland - College Park, [2]University of California, San Francisco, [3]University of California, San Fransisco, [4]University of California San Francisco

Hypothesis/Objective: Behavioral parent training (BPT) improves ADHD outcomes, but use of prescribed skills often declines after treatment, especially for parents with executive functioning (EF) difficulties (Chacko et al., 2016). This study tested whether technology-enhanced BPT targeting EF barriers to adherence helps sustain skill use over time compared to BPT alone.

Methods/Results: A novel dhealth tool was developed to augment BPT (Pfiffner et al., 2022). School-based groups of parents of children with ADHD (k=10 groups, N=54 parents) were randomized to BPT-only or BPT+tool. Parents reported skill use at post-intervention, 6-, and 12months. Multilevel models showed a significant Condition × EF × Time interaction; tests of simple slopes confirmed that the EF effect on skill use differed significantly between conditions (9C" slope=0.198, SE=0.098, p=.048). In BPT-only, higher baseline EF impairment predicted steeper skill use declines over time, whereas in the BPT+tool condition, parents showed similar trajectories regardless of EF impairment.

Conclusions: The digital health tool augmentation buffered against declines in skill use trajectories among parents with EF difficulties, suggesting that digital supports can sustain parental adherence and strengthen durability of intervention effects. Ongoing work examines parent engagement mechanisms and child outcomes to guide larger-scale implementation.

3-Stimulant Therapy Improves Diabetic Outcomes in Adults with ADHD: A Retrospective Cohort Study

*John Dempsey[1], Adam Jiadi[1], Jairo Almonte[1], Ruth Weinstock[2], Stephen Faraone[3], Yanli Zhang-James[4]

[1]Department of Psychiatry and Behavioral Sciences, Norton College of Medicine, SUNY Upstate Medical University, 750 East Adams Street, Syracuse, NY 13210, USA, [2]Division of Endocrinology, Diabetes, and Metabolism, Upstate Medical University, USA, [3]Norton College of Medicine at SUNY Upstate Medical University, [4]SUNY Upstate Medical University

Hypothesis/Objective: ADHD is associated with worse diabetic outcomes in people with comorbid type 1 diabetes (T1D), yet the influence of ADHD treatment remains unclear. Our objective was to determine if stimulant treatment is associated with improved glycemic control and reduced risk of diabetic complications in adults with ADHD and T1D.

Methods/Results: Using the TriNetX Research Network, we examined adults with comorbid ADHD and T1D categorized as stimulant treated (n=7,366), non-stimulant treated (n=2,383), or untreated (n=6,822). Propensity score matching adjusted for demographic and clinical confounders. Compared to untreated ADHD, stimulant treatment was associated with a lower risk of poor glycemic control (risk ratio (RR)=0.92, p<0.001), hospitalization (RR=0.83, p<0.001), and diabetic ketoacidosis (DKA) (RR=0.75, p<0.001). Compared to non-stimulant therapy, stimulant treatment was associated with a lower risk of emergency room visits (RR=0.92, p<0.001), hospitalization (RR=0.80, p<0.001), and DKA (RR=0.84, p<0.001). Non-stimulant therapy showed no significant differences compared to untreated ADHD.

Conclusions: Recognizing and treating ADHD may have benefits beyond managing ADHD symptoms by also improving the control and self-management of T1D. Our findings highlight the need for interdisciplinary collaboration and integrated care pathways that address both mental and physical health needs in adults with comorbid ADHD and diabetes.

4-Clinical Differences Between Adults Diagnosed With ADHD in Childhood Versus Adulthood: A Cross-sectional Study From the All of Us Research Program

*Douglas Leffa[1], Guilherme Negrini[2], Bruna Bellaver[2], Firoza Lussier[2], Luis Rohde[3], Brooke Molina[2], Tharick Pascoal[2]

[1]University of Pittsburgh Medical Center, [2]University of Pittsburgh, [3]Federal University of Rio Grande do Sul

Hypothesis/Objective: Our objective was to characterize differences in demographic, clinical, and genetic profiles between adults with ADHD diagnosed in childhood/adolescence (0-17 years, early-diagnosed) vs adulthood ("e18 years, late-diagnosed), and to compare each group with matched non-ADHD individuals using data from the All of Us Research Program.

Methods/Results: Of 13527 adults with ADHD, 3853(28.5%) were early-diagnosed and 9674(71.5%) were late-diagnosed. Late-diagnosed individuals were older and had higher educational attainment and income than early-diagnosed. The ADHD late-diagnosed group had significantly lower odds of most co-occurring

psychiatric and somatic conditions, as well as less impairment in overall health and daily functioning compared with the early-diagnosed group. Compared with their matched controls, both ADHD groups showed markedly higher odds of comorbid psychiatric and somatic conditions and functional impairments. ADHD polygenic risk scores were lower in late- vs early-diagnosed individuals and higher in early- and late-diagnosed ADHD compared to their matched controls.

Conclusions: Individuals diagnosed with ADHD in adulthood show a milder ADHD-like clinical and genetic profile than those diagnosed in childhood/adolescence, which may contribute to later recognition. Nonetheless, both early- and late-diagnosed adults exhibited profiles characteristic of ADHD relative to matched controls, including substantial burden, supporting recognition and treatment of late-diagnosed ADHD.

5-Cognition and Blood-Based Biomarkers of Alzheimer's Disease in Adults With and Without Childhood ADHD: Preliminary Results From the Pittsburgh ADHD Longitudinal Study

*Douglas Leffa[1], Heidi Kipp[2], Kenneth Connor[3], Abigail Beattie[3], Laura Disarro[3], Brandy Callahan[4], Tharick Pascoal[3], Thomas Karikari[3], Ann Cohen[3], Brooke Molina[3]

[1]University of Pittsburgh Medical Center, [2]UPMC - Department of Psychiatry, [3]University of Pittsburgh, [4]University of Calgary

Hypothesis/Objective: Epidemiological studies support an association between ADHD and Alzheimer's disease (AD) dementia. However, findings were based primarily on electronic health records. To test whether adults rigorously diagnosed with ADHD in childhood show early AD signals in midlife, we assessed plasma biomarkers in the Pittsburgh ADHD Longitudinal Study (PALS).

Methods/Results: Participants "e40 years from PALS (to date: ADHD n=25, nonADHD n=25; mean age 44.1±2.4 years; 80% male) provided plasma samples. Cognitive testing was also conducted. Relative to nonADHD, ADHD history individuals had significantly higher markers of amyloid (A;#C"óCV.[p-value=0.0007, d=1.02],) and tau pathology (p-tau181 [p-value=0.02, d=0.57]), plus higher NfL (p-value=0.02, d=0.21), a nonspecific marker of neurodegeneration. Individuals with a childhood diagnosis of ADHD had lower performance in executive function, attention and processing speed (Trail Making [p-value=0.0004, Cohen's d=1.09], Number Span [p-value=0.001, d=0.98], and Digit Symbol [p-value=0.0002, d=1.12]) compared to nonADHD, with comparable delayed recall (Rey Auditory Verbal Learning [p-value=0.11, d=0.46]).

Conclusions: Adults diagnosed with ADHD in childhood showed expected executive/attention/processing speed deficits, but also higher AD biomarkers. This profile suggests that pathophysiological processes linked to later cognitive decline are already present in midlife ADHD. Findings are preliminary and require confirmation with full enrollment and longitudinal follow-up to test trajectories and mechanisms.

6-A Pragmatic, Evidence-Derived Psychopharmacology Algorithm for Adult ADHD

*Kevin Muthu[1], David Osser[2]

[1]Harvard South Shore Psychiatry Training Program, [2]VA Boston Healthcare System, Brockton Division

Hypothesis/Objective: To develop and propose an evidence-informed psychopharmacology algorithm for treating adult ADHD. The objective is to assist clinicians in decision-making on medication selection, dosing, and management of patients with typical comorbidities.

Methods/Results: This poster reviews and distills the latest literature, including key randomized controlled

trials, meta-analyses, and practice guidelines to provide clinicians with a brief, practical, and reasonably evidenced approach. Treatments are prioritized considering efficacy, safety, tolerability, and cost. The reasoning is validated by author consensus and through the peer review process. The algorithm begins with diagnostic evaluation, incorporating comorbidity assessment and screening for contraindications, particularly to stimulants. Methylphenidate is recommended first-line with weight-based dosing, followed by amphetamine formulations and then non-stimulants. Significant comorbidities (e.g., bipolar disorder, psychosis, substance use) typically take treatment priority and can modify ADHD pharmacologic choices.

Conclusions: An algorithm offers a structured framework for managing adult ADHD, guiding robust dosing and addressing comorbidities. While stimulant use remains controversial due to unclear long-term benefits and risks such as cardiovascular effects, the algorithm prioritizes them as first-line treatments. Algorithms are for consultation, and are not substitutes for clinical judgment.

7-Associations Between Executive Dysfunction and Heart Rate Variability During Stress in Adults with ADHD

*Heather Elahi[1], Catrina Calub[2], Ha Min Son[3], Jared Borden[4], Xin Liu[3], Julie Schweitzer[5]

[1]UC Davis MIND Institute, [2]MIND Institute, Dept Psychiatry, University of California Davis Sch Med, [3]Department of Computer Science, University of California, 1 Shields Avenue, Davis, CA 95616., [4]UC Davis, [5]University of California, Davis

Hypothesis/Objective: Executive functioning (EF) supports goal-directed behavior and often impaired in ADHD. Heart rate variability (HRV), an index of parasympathetic flexibility, is a physiological correlate of EF and stress regulation. This study examined whether stress-related autonomic activity relates to executive dysfunction in ADHD.

Methods/Results: Adults with ADHD (n=73) completed the Barkley Deficits in Executive Functioning Scale–Self-Report (BDEFS) to assess EF. We measured HRV during the Preparation (anticipation) and Speech (delivery) phases of the Trier Social Stress Test (TSST). Measures included respiratory sinus arrhythmia (RSA), RMSSD, NN50, and heart rate.Correlations tested associations between executive dysfunction and physiological stress. Higher self-reported executive dysfunction was significantly correlated with lower HRV across both TSST phases. During Preparation, higher BDEFS scores were associated with reduced parasympathetic activity, specifically with significant negative correlations to RSA (r = –0.26), RMSSD (r = –0.35), and NN50 (r = –0.31). During Speech,significantnegativecorrelationswerefoundwithRMSSD(r=-0.25)andNN%)(r=-0.19).

Conclusions: Greater self-reported executive dysfunction in adult ADHD is associated with lower parasympathetic activity during stress, particularly anticipation. While correlational, these findings highlight a potential relationship between autonomic regulation and executive functioning in ADHD, warranting further investigation.v

8-Emotion dysregulation in children with ADHD: Irritability is associated with EEG-measured frontal alpha asymmetry in response to emotional stimuli

*Giulia Salgari[1], Sandra Loo[2], Nastassia Hajal[3]

[1]University of California, Los Angles , [2]University of California, Los Angeles, UCLA School of Medicine, [3]University of California, Los Angeles

Hypothesis/Objective: Emerging research supports an updated conceptualization of ADHD that includes emotion dysregulation as a core feature or specific subtype of the disorder. This study contributed to this literature by examining relations between child- and parent-reported irritability and EEG-biomarkers of

emotion-related processing in 8- to -12-year-old children diagnosed with ADHD.

Methods/Results: We examined frontal alpha asymmetry (FAA), a neurophysiological index of the action tendency component of emotions, in response to emotionally evocative images from 50 children. As expected, greater relative left-FAA (reflecting greater approach tendency) in response to fearful and happy (but not calm) stimuli was associated with higher irritability symptom levels. Only early-FAA (0-200ms post stimuli) — not later-FAA (250-600ms post-stimuli)
— was associated with reports of irritability, which supports the concept of emotional impulsivity.Furthermore, FAA findings seemed to be driven by lower alpha power over the left hemisphere, suggesting greater approach (vs withdrawal) among those with high irritability.

Conclusions: Overall, findings were consistent with previous research showing the impact of emotions in ADHD, and specifically of dimensions of irritability/anger-proneness and high positive affect. Findings build upon previous research by showing support at the neurophysiological level, and highlighting the importance of approach related emotions, regardless of valence.

9-Understanding the Lived Experience of Adults Diagnosed With ADHD: Factors Influencing Diagnostic Fluctuations

*Melisa Shafiee[1], Saxon Sobolewski[1], Margaret Sibley[1]

[1]University of Washington

Hypothesis/Objective: The Multimodal Treatment of ADHD (MTA) study demonstrated adults with ADHD experience remission under environments with high demands (Sibley et al., 2024).However, qualitative studies on factors influencing ADHD diagnostic fluctuations are scarce. We presented MTA results to adults with ADHD to understand whether study results align with lived experiences.

Methods/Results: We conducted a focus group of 19 adults (mean age = 59.16 years) belonging to an adult ADHD support group in a large northeastern city. We prompted participants to comment on their interpretation of MTA findings to understand (1) the extent adults perceive fluctuations between persistent and remittent ADHD and (2) factors influencing symptom severity. Grounded theory procedures were employed to extract data. Open codes indicate participants reject experiencing remittent ADHD. Participants also perceived U-shaped relationships between factors (i.e. structure, stress, challenge) and symptom severity. Participants perceived one-directional relationships between other factors (i.e. novelty, busyness, social support) and symptom severity.

Conclusions: Although participants felt their lived experiences with ADHD did not align with a remittent diagnostic status, they did report feeling fluctuations in ADHD symptom severity and impairment across their lifespan. Focus group results will be used to generate hypotheses for future empirical work on the fluctuating nature of adult ADHD.

10-The Moderating Effects of Self-Esteem on ADHD Symptoms and Organizational Skills in College Students

*Anna Mathews[1], Rosa Peterson , Christina Saliba[1], Elena Wheatly, Fransico Guajardo, Lillian Hurd[1], Cynthia Hartung[2], ULEARN Consortium , Elia Soto[1]

[1]Louisiana State University, [2]University of Wyoming

Hypothesis/Objective: Lower Self-esteem and organization and planning skills are associated with more ADHD symptoms. Previous literature has not studied the moderating effects of self-esteem among these variables in college students with ADHD. In the current study, it was hypothesized that higher self-esteem

would weaken the relation between ADHD and organizational skills.

Methods/Results: Survey data were collected from 1,065 college students (age range 18-30 years old, mean age=19.31; SD=1.783; 71.5% female) across 13 universities. ADHD symptoms were measured using the ASRS, self-esteem was assessed using the Rosenberg Self Esteem scale (RSE), and organizational skills were measured using the Barkley Deficits in Executive Functioning Scale (BDEFS). A moderation analysis was then performed using ADHD symptoms as the predictor, organizational skills as the outcome, and self-esteem as the moderator.Analyses showed that the interaction effect was significant ($p<.05$; $B=0.012$), suggesting higher self-esteem weakened the relation between higher rates of ADHD symptoms and organizational skills.

Conclusions: The current study provides new insight into how higher rates of self-esteem may serve as a protective buffer against organizational skills among college students with ADHD.

11-Changes in Self-Reported ADHD Symptom Counts and Severity in College Students Across Eight Years

*Christina Saliba[1], Rosa Peterson[1], Fransico Guajardo, Elena Whatley[1], Anna Mathews[1], Lillian Hurd[1], Ashley Schiros[2], Destiny Orantes[2], Nandini Jhawar[2], Catherine Montgomery[2], Haley McBride[2], Kevin Antshel[2], Erik Willcutt[3], Patrick Goh[4], Will Canu[5], Emily Miller[6], Anne Stevens[6], Cynthia Hartung[6], ULEARN Consortium , Elia Soto[1]

[1]Louisiana State University, [2]Syracuse University, [3]The University of Colorado Boulder, [4]University of Hawaii, [5]Appalachian State University, [6]University of Wyoming

Hypothesis/Objective: ADHD is a common neurodevelopmental condition impacting 2-8% U.S.college students. While increases in ADHD symptom rates have been reported among children/ adolescents, these trends among college students are unknown. This study examined whether current self-reported total ADHD symptoms and symptom severity among college students have changed across eight years (2016-2024).

Methods/Results: Cross-sectional survey data from eight waves across multiple universities was analyzed to examine inattention, hyperactive/impulsive, and total ADHD symptom and symptom severity trends separately. All symptom counts models were modeled using negative binomial GLMs and severity symptom models with gamma-distributed GLMs, with wave as a categorical predictor and university site as a nested factor. All outcomes changed significantly over time ($p < .001$). Post hoc contrasts assessed consecutive wave differences with multiple-comparison adjustments. Results reflect small but distinct periods of fluctuation across self-reported inattention, hyperactive/impulsive, and total ADHD symptoms and symptom severities among college students.

Conclusions: ADHD symptoms, and severity among college students have not been stable over the past eight years, characterized by both periods of decreased and increased endorsement rates. These findings suggest possible shifts in symptom expression, reporting, or underlying risk factors.

12-Is Age Really Just a Number? Effect of Age on Responsiveness of Young Adults with ADHD to a Smartphone Intervention

*Isaac Gamwo, Aiden Williard[1], Traci Kennedy[2]

[1]University of Pittsburgh Medical Center, [2]University of Pittsburgh

Hypothesis/Objective: ADHD causes devastating impairments in young adulthood, which real-time support may help mitigate, especially for those who are just entering this transition. We hypothesized that

younger emerging adults (18–19) would show greater responsiveness to a mobile-health (mHealth) intervention focused on increasing momentary symptom awareness than older peers (20–21).

Methods/Results: Seventy-two participants with ADHD (ages 18-21) completed a three-week mHealth intervention involving smartphone-based symptom tracking and feedback once daily (low-dose) or five times daily (high-dose). Participants were randomized equally, with clinicians, collateral informants, and participants masked to group assignment. ADHD symptom severity was assessed by clinician and collateral informants at baseline and follow-up. Results showed significant reductions in symptom severity (Clinician: t=4.789, p<.001; Clinician: t=3.950, p<.001).High-dose predicted greater reductions in collateral ratings (b=4.005, p=.049), but not clinician-reports. No significant age-related differences emerged (Clinician: b= 0.019, p=.983; Collateral:b= –0.375, p=.729).

Conclusions: These findings suggest that near-real-time, smartphone-based interventions can effectively support ADHD symptom management in young adults, regardless of age within this developmental period of emerging adulthood. Future research should explore long-term effectiveness, whether age moderates these effects further into young adulthood, and individual factors influencing treatment response.

13- “I have no idea what I just read!” Teaching Reading for Retention to College Students with ADHD

*Sufia Islam, Sarah O'Neill[1], Mary Solanto[2], Anthony Rostain[3], Zeina Kamar Eddine[4], Anna Workman, Michael Tate[5], Mariely Hernandez[6], Kaitlin Kearney[1]

[1]The City College of New York, [2]Hofstra-Northwell School of Medicine, [3]Cooper University Health Care, [4]City College of New York, [5]Ferkauf Graduate School of Clinical Psychology, [6]Heathen Health Collective

Hypothesis/Objective: ADHD college students often repeatedly read material to comprehend its contents. This study investigated helpfulness of strategies promoting reading for retention for college students with ADHD and High versus Low reading skills. Compared to peers with High skills, students with Low skills were predicted to find the strategies more helpful.

Methods/Results: College students with ADHD [N=38, M=21.94 years] completed a group-based 12-week CBT intervention for executive dysfunction. One module taught active reading techniques and students rated its helpfulness (0=Not Helpful; 3=Very Helpful). Pre-intervention, reading skills were assessed: WIAT-4 Word Reading, Orthographic Fluency, Pseudoword Decoding and Reading Comprehension. N=12 (32%) students had “Low” skills; that is, standard score "d85 on one or more subtests. Number of childhood (r=-.31) and adulthood (r=-.32) inattention symptoms were marginally related to Orthographic Fluency (both p=.05). The reading module was more helpful for ADHD students with Low (M=1.89, SD=.60) than High Reading skills (M=1.22, SD=0.81), t(25)=2.18, p=.039.
Conclusions: Students with ADHD may benefit from learning active reading strategies. These techniques aim to enhance attention while reading, enable students to complete readings more quickly, extract the key points, and promote better retention of content. These strategies may be especially helpful for ADHD students who also have weak reading skills.

14-Visual-Evoked Potential Variability in Children with ADHD

*James Lynch[1], Anne Arnett[1]

[1]Boston Children's Hospital

Hypothesis/Objective: Prior research has found that compared to healthy controls, adults with attention-deficit/hyperactivity disorder (ADHD) display greater trial-by-trial variability in visual-evoked potentials (VEPs), an electroencephalography (EEG) marker of visual processing that is posited to reflect broader

cortical organization. However, this effect has not been examined in children with ADHD.

Methods/Results: Participants included two samples of children with and without a research diagnosis of ADHD, who completed a pattern-reversal EEG paradigm: Early Childhood, n = 108 (ages 2-4 years, 57% ADHD), and Middle Childhood, n = 103 (ages 7-11 years, 65% ADHD). For each participant, peak VEP amplitudes and latencies were calculated, as well as median absolute deviations (MAD) over trials. There were no diagnostic or age group differences in mean VEP peak amplitude or latency, nor in latency MAD. However, early childhood participants had significantly greater amplitude MAD compared to middle childhood participants ($F[1] = 59.64$, $p < .0001$]).

Conclusions: Variability in VEP amplitude decreased from early to middle childhood, suggesting cortical maturation. Although ADHD-TD differences were not found in childhood, a previous study indicated greater VEP variability in ADHD relative to TD adults, suggesting arrested maturation of visual cortical circuitries is a candidate marker of persistent ADHD in adulthood.

15-Prevalence of Physical Activity and Its Association with Medication Use and Healthcare Utilization Among Children with ADHD in the U.S.

*James Lynch[1], Samantha *Mansour Alotaibi [1]

[1]Northern Border University

Hypothesis/Objective: This study aimed to estimate the national prevalence of physical activity (PA) among U.S. children diagnosed with attention-deficit/hyperactivity disorder (ADHD) and examine how PA frequency is associated with ADHD medication use, hospital admissions, and frequency of emergency room (ER) visits using data from a nationally representative survey.

Methods/Results: Using the 2020-2023 U.S. National Survey of Children's Health (NSCH), this cross-sectional analysis of 18,547 children aged 6-17 years was carried out with caregiver-reported ADHD. PA was categorized by weekly frequency of ≥60-minute activity bouts (0, 1–3, 4–6, or 7 days). Only 17% of children with ADHD engage in daily physical activity, falling short of public health guidelines. Bivariate chi-square analyses revealed no association between PA frequency and ADHD current medication use (yes/no). Higher PA frequency was significantly (all $p=0.001$) associated with lower odds of hospital admissions (yes/no) and fewer ER visits (none, 1, 2–3, ≥4).

Conclusions: Most children with ADHD fail to meet PA guidelines, highlighting a population-level health behavior gap. Regular PA was significantly associated with decreased hospital admissions and ER visits, suggesting a protective health effect. Integrating PA promotion into ADHD care plans may reduce acute care utilization and improve patients' outcomes.

16-Family-Based Genomic Analysis Identifies Clinically Relevant Rare Variants in Pediatric ADHD

*Matthew Zimon[1], Ryan Doan[1], Anne Arnett[1], Elizabeth Harstad[1], Paulina Gonzalez Tovar[1], Mia O'Connell[1], Julieta Bonacina[1], Stephanie Brewster[1], Ashish Jain[1], Liang Sun[1], Shira Rockowitz[1], William Barbaresi[1]

[1]Boston Children's Hospital

Hypothesis/Objective: This study investigated the role of rare genetic variants in youth with ADHD who had comprehensive diagnostic information and assessment of family members.

Methods/Results: As in our previous publication, ~50% of families harbored a likely genetic cause (22% likely pathogenic), with enrichment for de novo variants in simplex families and rare inherited variants in multiplex families. Pathway analyses confirmed significant enrichment for chromatin-modifying enzymes, with

multiple variants detected in DIP2C [n=2], DOT1L [2], EP400 [4], KMT2B [3], and SETD1B [2]. Functional analyses using novel in vitro models and DNA methylation analyses in patient DNA samples revealed distinct methylation and expression patterns resulting from defects in several genes including DIP2C, SETD1B, and EP400 among cases versus controls.

Conclusions: This study provides additional evidence for significant contribution of rare variants to the etiology of pediatric ADHD in up to 50% of ADHD cases and indicates a causal role of chromatin modifying pathways.

17-Distinct Inhibitory Control Profiles Associated with Pediatric ADHD and Co-Occurring Psychiatric Symptoms

*Matthew Zimon[1], Virginia Peisch[1], Anne Arnett[1]

[1]Boston Children's Hospital

Hypothesis/Objective: Inhibitory control can be measured as action cancellation, action restraint, or interference control. Broad inhibitory control problems are associated with ADHD and psychiatric disorders, but unique associations between inhibitory measures and comorbidity are unknown. This study examines inhibitory control profiles in children with ADHD and psychiatric comorbidity.

Methods/Results: In two independent samples of children with ADHD (N1=63; N2=42), we collected parent ratings of ADHD and psychiatric symptoms, measures of action cancellation (Stop-Signal Reaction Time), restraint (Go-NoGo Commissions), and interference control (Color-Word Inhibition). Across samples, action cancellation and restraint explained unique variance in hyperactivity/impulsivity ($B = -0.0019 \pm 0.0010$, $p = 0.08$; $B = -2.56 \pm 1.05$, $p = 0.02$). In Sample 1, action cancellation explained unique variance in anxiety ($B = -0.022 \pm 0.009$, $p = 0.02$). There were no associations between inhibitory control measures and inattention, depression, or conduct problems in either sample.

Conclusions: Inhibition of action was associated with hyperactivity/impulsivity, whereas interference control had no association with ADHD severity. Response inhibition tasks featuring action cancellation (Stop-Signal Task) may be cross-diagnostic indicators, particularly for comorbid anxiety and ADHD. Inhibitory profiles, rather than single tests, may be clinically informative.

18-Performance-Enhancing Coping Mechanisms?! A Preliminary Study of Understimulation in Undergraduate Students

*Elena Whatley[1], Christina Saliba[1], Rosa Peterson[1], Anna Mathews[1], Francisco Guajardo[1], Lillian Hurd[1], Elia Soto[1]

[1]Louisiana State University

Hypothesis/Objective: This study examines whether sensory stimulation influences response inhibition among undergraduates with high vs. low ADHD symptoms. We hypothesize that students with high ADHD symptoms will report greater sensory processing differences and demonstrate weaker inhibitory control overall, but that underresponsive participants will perform better under added stimulation, while overresponsive participants

Methods/Results: This study will examine the effects of sensory stimulation on response inhibition in undergraduates. Using a 2 (group: ADHD vs. non-ADHD) × 8 (sensory stimulation condition) mixed factorial design, participants will complete a Go/No-Go task under eight sensory-focused conditions (e.g., auditory, tactile, gustatory). Self-reported sensory profiles will also be collected. Data collection and analysis will be completed by November.

Conclusions: Findings from this study aim to bridge gaps in the literature by providing empirical evidence on the behavioral effects of understimulation and informing targeted interventions to enhance task engagement in adults with ADHD.

19-Changes in ADHD symptoms and symptom severity among college students with and without SGM identities over time

*Rosa Peterson[1], Christina Saliba[1], Lillian Hurd[1], Francisco Guajardo[1], Elena Whatley[1], Anna Mathews[1], Emily Miller[2], Anne Stevens[2], Cynthia Hartung[2], Ashley Schiros[3], Destiny Orantes[3], Nandini Jhawar[3], Catherine Montgomery[3], Haley McBride[3], Kevin Antshel[3], Erik Willcutt[4], Patrick Goh[5], Will Canu[6], ULEARN Consortium , Elia Soto[1]

[1]Louisiana State University, [2]University of Wyoming, [3]Syracuse University, [4]The University of Colorado Boulder, [5]University of Hawaii, [6]Appalachian State University

Hypothesis/Objective: Emerging and converging evidence suggests that rates of self-reported ADHD symptoms across college students differ among sexual and gender minorities (SGM) as compared to cis-hetero women and cis-hetero males. Little is known about the stability of these group differences over time. We hypothesized that these group differences have increased overtime.

Methods/Results: Using cross-sectional survey data from a multi-site study on US college students (age range 18-30) collected across seven years (2017-2024), we assessed for changes in self-reported ADHD symptoms and symptom severity across college students cis-hetero women, cis-hetero men, or SGM identities. ADHD symptom counts and symptom severity scores for both inattention and hyperactivity/impulsivity symptom clusters were derived from the ASRS. Using GLMM analyses, results show that the differences across groups differ over time for hyperactive symptoms counts and severity. Differences across groups differ over time for inattention symptom counts but remain similar for inattention symptom severity.

Conclusions: The rates of self-reported ADHD symptoms and their severity differ across college students identifying as cis-hetero women, cis-hetero men, and those having a SGM identity.However, these group differences have differed over the past seven years, suggesting that SGM membership should be considered when assessing for ADHD.

20-Novel Cognitive Profiles of Adolescents with ADHD

*Carlos Yeguez[1], Stefany Coxe[2], Nicole Groves[3], Paulo Graziano[4], Pablo Martin[4], Margaret Sibley[5]

[1]Seattle Children's Research Institute, [2]Biostatistics Shared Resource, Cedars-Sinai Cancer & Department of Computational Biomedicine, Cedars-Sinai, [3]University of Washington School of Medicine, [4]Florida International University, [5]University of Washington

Hypothesis/Objective: Adolescents with ADHD demonstrate heterogenous cognitive performance that may represent distinct cognitive endophenotypes. We parsed heterogeneity by using Latent Class Analysis, which uses data-driven/person-centered approaches to establish profiles. Identifying qualitatively distinct profiles is an initial step in understanding how cognitive performance maps onto the symptoms/impairments of adolescent ADHD.

Methods/Results: A diverse sample of 253 adolescents with ADHD were administered cognitive tasks upon entry into randomized-controlled trials of psychosocial treatment. We used 14 task-based indicators to identify profiles. A three-class model provided the best fit (Entropy=.80; BLRT p<.001; classification probabilities=.876-.974). An Emotion Dysregulation class (N=34) demonstrated strong cool EF skills (NIH

Toolbox), impaired decision-making (modified-Iowa Gambling Task), and omission errors that were exacerbated by threatening stimuli (emotional Go/ No-Go). A High Impulsivity Class (N=67) demonstrated high commission errors overall and low reactions times for positively/negatively valanced stimuli. A Slower and Accurate Class (N=152) demonstrated the highest reaction times and relative accuracy.

Conclusions: Findings extend work identifying qualitatively distinct cognitive profiles that are distinguished by more than just overall severity of cognitive dysfunction (Karalunas & Nigg, 2020). Our poster will also include associations between identified profiles and baseline clinical characteristics (e.g., ADHD symptom severity, comorbidities, academic and social functioning, and sleep).

21-Ecological Momentary Assessment of Positive and Negative Parenting Behaviors: Associations with Child's Disruptive Behaviors During the Day

*Tessa Botkin[1], Darcey Allan[1]

[1]Ohio University

Hypothesis/Objective: The current study aimed to examine whether the well-established relations of greater positive (e.g., warmth) and fewer negative parenting behaviors (e.g., harshness) related to greater disruptive behaviors held at the daily within-subject level. Few studies have examined the within-subject associations outside of a singular set of interactions or across years.

Methods/Results: Participants included 26 children, the majority of whom were diagnosed with ADHD, aged 6-12 and their parents. Parents completed an electronic survey about morning behaviors/interactions (Mobile Survey Parent-Child Dynamics, Li & Lansford, 2018) for ten days. Child behaviors were recorded throughout each day by counselors in a therapeutic summer camp. A multilevel model was used to analyze parent and child behaviors nested within the dyads. The results indicated a nonsignificant (small effect sizes) association between daily morning parent and later child behaviors across settings, when examining child behavior across the whole day or just the morning only.

Conclusions: These results may indicate that parent behaviors are not related to child disruptive behaviors in a therapeutic summer camp or may reflect study limitations (e.g., treatment setting, participant bias). More research is needed to better understand the within-subjects association, or lack thereof, between daily parent and child behaviors across settings.

22-Pharmacological Characterization of Centanafadine – Potential Implications for Efficacy and Safety in ADHD and Comorbid Psychiatric Disorders

D.J. Heal[1], S.L. Smith[1], J Gosden[1], *Reem Elbekai[2]

[1]DevelRx Ltd, BioCity, Nottingham, UK, [2]Otsuka Pharmaceutical Development & Commercialization, Inc, Rockville, Maryland, United States

Hypothesis/Objective: Centanafadine—a norepinephrine, dopamine, and serotonin reuptake inhibitor (NDSRI)—with unique serotonergic activity among ADHD drugs. In vitro, it shows highest affinity for norepinephrine>dopamine>serotonin. Using intracerebral microdialysis, we measured centanafadine's effects on extracellular monoamines in the prefrontal cortex (PFC) and ventral striatum (vSTR)—regions critical to ADHD treatment.

Methods/Results: Microdialysis probes were implanted into PFC and vSTR of male Sprague-Dawley rats. Following baseline sampling, centanafadine or vehicle was administered, and dialysate samples were collected every 20 minutes over 4 hours. Centanafadine dose-dependently increased extracellular

norepinephrine, dopamine, and serotonin in PFC, and serotonin and dopamine in vSTR. Increases were gradual and sustained. At 30 mg/kg, peak increases ($p<0.001$) were: PFC—serotonin 1638%, norepinephrine 739%, dopamine 302%;vSTR—serotonin 1590%, dopamine 219%. Over 0–4 hours, monoamine elevations remained high. Centanafadine had no effect on locomotor activity versus vehicle.

Conclusions: Centanafadine acts as an NDSRI in vivo, markedly increasing serotonin, norepinephrine, and dopamine in key regions. Its unique serotonergic activity may contribute to its favorable efficacy and tolerability and suggest potential benefit for ADHD associated features (emotional dysregulation, impaired executive function) and comorbid anxiety symptoms common in adults with ADHD.

23-OTC Iron Supplementation may Improve Sleep Consistency in Children with ADHD

*Rachel Northrup[1], Alison Pritchard[1]

[1]Kennedy Krieger Institute

Hypothesis/Objective: Night-to-night variability in sleep is common; however, excessive variability predicts negative outcomes such as poorer attention and behavior problems in youth with ADHD. Iron supplementation may improve both sleep and attention. This study examines the impact of iron supplementation on sleep variability in children with ADHD.

Methods/Results: Twelve youth ages 11-16 (M=13.56) with ADHD and restless sleep completed three months of oral iron supplementation. Pre- and post-treatment sleep metrics from five nights of at-home actigraphy monitoring were compared. Mixed effects restricted maximum likelihood regressions were used to model night-to-night variability for each outcome, with significant chi-squared values indicating a better fit for models with different residual variances for pre- and post-treatment. Variability decreased for wake after sleep onset (Pre-treatment SD=68.60 minutes, Post-treatment SD=37.10, chi-squared=11.79, p=.001) and periodic limb movements of sleep (Pre-treatment SD=4.04 PLMS/hour, Post-treatment SD=2.78, chi-squared=5.87, p=.015), but not total sleep time or sleep efficiency.

Conclusions: This study is the first of its kind to assess the impact of iron supplementation on night-to-night sleep variability in children with ADHD. Findings suggest that iron supplementation has the potential to improve night-to-night variability in some sleep metrics, possibly rendering sleep more consistent in this population.

24-d-Amphetamine Transdermal System in Treatment of Children and Adolescents with ADHD: Analysis of Conners' Parent Rating Scale-Revised Short Form Subscale Scores From a Pivotal Trial

*Andrew J. Cutler[1], James Waxmonsky[2], Mariacristina Castelli[3], Houda Haj-Ibrahim[3], Mahwish Khan[3], Marina Komaroff[3], Suzanne Meeves[3]

[1]SUNY Upstate Medical University, Neuroscience Education Institute, [2]Penn State College of Medicine, [3]Noven Pharmaceuticals, Inc.

Hypothesis/Objective: CPRS-R:S is standardly used to assess ADHD behaviors based on parent/caregiver observations. In a pivotal study, d-ATS, the only amphetamine-based transdermal treatment available for ADHD, demonstrated significant improvement using CPRS R:S total score. Here, d-ATS efficacy is evaluated using CPRS-R:S subscale scores.

Methods/Results: Patients received d-ATS 5mg/9hr, with weekly increases to optimal dose, which was maintained throughout the open-label dose-optimization (DOP, Weeks 1-5, N=110) and double-blind periods

(DBP, Weeks 6/7, n=106). Efficacy was assessed by difference (treated vs placebo) in least-squares (LS) mean change from baseline in CPRS-R:S subscale scores via a likelihood-based mixed-effect model for repeated measures. In the DBP, the differences in LS mean (95% CI; effect size) CPRS-R:S subscale scores for d-ATS vs placebo were: oppositional, -2.4 (-3.8, -1.1; -0.49); cognitive problems/inattention, -4.5 (-5.8, -3.2; -0.98); hyperactivity, -3.5 (-4.8, -2.2; -0.76); and ADHD index, -7.9 (-10.1, -5.6; -0.97), all P-values<.001.

Conclusions: A significant difference between placebo and d-ATS (optimized dose) in each CPRS-R:S subscale score was observed, suggesting that from the parent/caregiver perspective, d-ATS was efficacious in treating ADHD across a spectrum of disruptive behaviors. These findings also add information regarding the impact of d-ATS in multiple settings.

25-Efficacy of Centanafadine on Emotional Dysregulation and Cognitive Executive Function in Adult Males With ADHD: A Post hoc Analysis

*Andrew J. Cutler[1], CAROLINE WARD[2], Mary Hobart[2], Zhen Zhang[3], Gregory Parks[2], Matt Brams[4], Timothy Wilens[5]

[1]SUNY Upstate Medical University, Neuroscience Education Institute, [2]Otsuka, [3]Otsuka Pharmaceutical Development & Commercialization Inc., Princeton, NJ, United States, [4]Bayou City Research, Houston, TX, United States, [5]Massachusetts General Hospital

Hypothesis/Objective: A phase 2a, flexible-dose, single-blind study evaluated the efficacy and tolerability of centanafadine for adult males with ADHD over 4 weeks. This post hoc analysis assessed efficacy of centanafadine, a norepinephrine, dopamine, and serotonin reuptake inhibitor, on emotional dysregulation and cognitive executive function in adult males with ADHD.

Methods/Results: Overall, 37 male participants (aged 18 55 years) with a diagnosis of ADHD, per DSM-IV, were titrated with centanafadine 200 300, 400, or 500 mg/day for 2 weeks, and then were treated openly with the titrated dose for 2 weeks. WRAADDS (a clinician-rated scale assessing ADHD symptom severity across 7 domains) and BRIEF-A (a behavioral rating scale assessing executive function deficits) were analyzed. By Week 4, adult males experienced measurable and meaningful improvements on both WRAADDS and BRIEF-A scores (all nominal p's<0.0001). Large effect sizes (>0.9) were observed in domains spanning both emotional and executive processes—behavioral regulation, working memory, and metacognition.

Conclusions: These exploratory findings suggest centanafadine may improve emotional regulation and cognitive executive functioning in adult males with ADHD. These results support further investigation into centanafadine’s potential to address impairments beyond core symptoms, including emotional and cognitive difficulties frequently comorbid in adults with ADHD.

26-Sex Differences in ADHD Diagnosis and Treatment Patterns Among Medicaid-Insured Youth in North Carolina

*Naomi Davis[1], Zhen Li[1], Jessica Lunsford-Avery[1], Kelley Jones[1], Naomi Duke[1], Samantha Repka[2], Jennifer Gierisch[2], Julia Schechter[1]

[1]Duke University Medical Center, [2]Duke University

Hypothesis/Objective: Female youth are often delayed in diagnosis and treatment for ADHD, raising concerns given unique risks for females and limited research on sex differences in diagnosis and treatment pathways. We hypothesized that behavioral health (BH) pathways pre-and post-diagnosis would differ by sex. Impact of race/ethnicity and rurality were also examined.

Methods/Results: We conducted a retrospective cohort study of pediatric Medicaid beneficiaries ages 5-17 with incident ADHD diagnoses in 2022 (N=12,398). Using claims data, we explored sex differences in characteristics prior to, during, and post-ADHD diagnosis using t-tests, <s" tests, relative risk, and odds ratios. Race/ethnicity and rurality were examined as moderators. Females were diagnosed at older ages and more likely to have prior BH diagnoses, with 1/3 having internalizing disorders. Females were diagnosed more often by BH providers, less likely to receive medications, and more likely to receive therapy. Hispanic females were 11% more likely to be diagnosed >12 years old.

Conclusions: Findings provide insights into sex differences in the diagnostic and treatment pathways for ADHD in a large, racially/ethnically diverse sample. Results have important implications for educational, clinical, and health policy initiatives to optimize diagnosis and treatment of ADHD.

27-Disparities in Adult ADHD Care Delivery among U.S. Telepsychology Providers

*Ava Gaddis[1]

[1]Seattle Children's Hospital

Hypothesis/Objective: This study examined systemic inequities in telepsychology services for adults with ADHD compared to depression and anxiety. The aim was to determine whether PSYPACT credentialed psychologists advertise treatment and cognitive behavioral therapy (CBT) for adult ADHD at rates comparable to anxiety and depression amid rising demand and expanded interstate telehealth access.

Methods/Results: Using the April 2025 PSYPACT directory (N=12,898), publicly available profiles were identified for 10,692 psychologists (82.9%). Profiles were coded for adult ADHD, depression, anxiety, and CBT services (;£ÓVãs2’à Only 26.4% advertised treatment for adult ADHD, compared with 68.2% for depression and 74.0% for anxiety; 21.3% offered CBT specifically for ADHD. McNemar’s tests showed large disparities (h=0.89–0.99, ps<.001). Provider density per 100,000 residents was significantly lower for ADHD (M=1.25) than for depression (M=3.36) or anxiety (M=3.59).

Conclusions: Adult ADHD remains markedly underserved in U.S. psychological care relative to depression and anxiety. Although many providers deliver CBT, few apply it to ADHD, reflecting provider level barriers. Addressing these disparities will require workforce expansion, enhanced training, and targeted approaches to ensure equitable access to evidence based psychosocial treatment for adults with

28-Promoting Culturally Responsive Care for Children with ADHD: A Systematic Review of Assessment Tools and Interventions

*Annahita Modirrousta[1], Tanya Froehlich[1], Tyler Lackey[2], Anne Arnett[3], Veronica Meneses[4]

[1]Cincinnati Children's Hospital Medical Center, [2]University of Oklahoma Health Sciences Center, [3]Boston Children's Hospital, [4]Yale University School of Medicine

Hypothesis/Objective: To support clinicians in selecting appropriate and equitable tools for pediatric ADHD care in non-majority groups, our systematic review identified scales and interventions that have been tested in racially, ethnically, and linguistically minoritized children with ADHD and reports on their outcomes.

Methods/Results: Eighteen scale validation articles evaluated Spanish versions of ADHD-related scales, compared scores among children of differing racial/ethnic groups, or tested scales in a predominantly non-majority group sample. Results indicated comparable internal consistency and external validity among the target samples compared to the norming population. Eighteen intervention articles evaluated culturally adapted ADHD therapies, tested existing ADHD interventions in a specific racial/ethnic group, compared

treatment outcomes among children of differing racial/ethnic groups, or tested new interventions in a predominantly non-majority group population. Results suggested that these interventions improved child outcomes such as ADHD-related functional impairment, academic performance, screening rates, and medication prescription.

Conclusions: A nascent group of ADHD-focused assessment scales and interventions has been evaluated in racially, ethnically, and linguistically diverse groups, with strong outcomes overall. This body of literature provides a foundation for researchers to develop and test additional culturally relevant tools, and for clinicians to promote culturally responsive pediatric ADHD care.

29-Long-Term Safety and Efficacy of Centanafadine in Children and Adolescents With ADHD: Results From a Phase 3 Open-Label Extension Study

Osman Turkoglu[1], CAROLINE WARD[2], Ann Childress[3], *Timothy Wilens[4], Na Jin[5], Taisa Skubiak[6], Judy van Stralen[7], Valerie Arnold[8]

[1]Otsuka Pharmaceutical Development & Commercialization, Inc., [2]Otsuka, [3]Center for Psychiatry and Behavioral Medicine, Inc., [4]Massachusetts General Hospital, [5]Otsuka Pharmaceutical Development & Commercialization, Inc., Rockville, MD, USA, [6]Otsuka Pharmaceutical Development & Commercialization, Inc. (OPDC), [7]Center for Pediatric Excellence, [8]University of Tennessee Center for the Health Sciences

Hypothesis/Objective: This phase 3, open-label extension trial (NCT05279313; trial is ongoing) determined the long-term safety and efficacy of once-daily extended-release centanafadine, a norepinephrine, dopamine, and serotonin reuptake inhibitor, for the treatment of ADHD in children and adolescents (ages 4-17 years; minimum duration, 52 weeks; maximum duration, 136 weeks).

Methods/Results: Overall, 680 participants (eligible rollover from previous trials/de novo; mean age 11.5 years, 59.3% male, 70.9% White) with a primary diagnosis of ADHD were enrolled; 675 were treated with centanafadine. The primary objective was to evaluate the long-term safety and tolerability of centanafadine. Efficacy endpoints included change from baseline in ADHD-RS-5 with Inattentive and Hyperactivity/Impulsivity subscales and CGI-S-ADHD / CGI-C-ADHD. Centanafadine had a favorable safety profile and was well-tolerated. Continued reduction of ADHD-RS-5 total, and ADHD-RS-5 Inattention and Hyperactivity/Impulsivity over time was observed with a greater reduction at Week 100 versus Week 52. Similar improvements were observed in clinician-reported CGI-S-ADHD/CGI-C-ADHD.

Conclusions: Starting at Week 1 and for at least 52 weeks of treatment, centanafadine showed continued improvements in efficacy in children and adolescents with ADHD.

30-Long-Term Changes in ADHD Symptoms Assessed by the Conners 3–Parent Short: Results From a Phase 3 Open-Label Extension Study of Centanafadine in Children and Adolescents With ADHD

CAROLINE WARD[1], Ann Childress[2], *Timothy Wilens[3], Dorothee Oberdhan[4], Na Jin[5], Taisa Skubiak[4], Judy van Stralen[6], Valerie Arnold[7]

[1]Otsuka, [2]Center for Psychiatry and Behavioral Medicine, Inc., [3]Massachusetts General Hospital, [4]Otsuka Pharmaceutical Development & Commercialization, Inc. (OPDC), [5]Otsuka Pharmaceutical Development & Commercialization, Inc., Rockville, MD, USA, [6]Center for Pediatric Excellence, [7]University of Tennessee Center for the Health Sciences

Hypothesis/Objective: This phase 3, open-label extension trial (NCT05279313; trial is ongoing) determined the long-term safety and efficacy of once-daily extended-release centanafadine, a norepinephrine,

dopamine, and serotonin reuptake inhibitor, for the treatment of ADHD in children and adolescents (ages 4-17 years; minimum trial duration, 52 weeks; maximum trial duration, 136 weeks).

Methods/Results: Overall, 680 participants (eligible rollover from previous trials/de novo; mean age 11.5 years, 59.3% male, 70.9% White) with a primary diagnosis of ADHD were enrolled; 675 were treated with centanafadine. Other efficacy endpoints included change from baseline in the Conners 3–Parent Short Inattention, Hyperactivity/Impulsivity, Executive Function, Defiance/Aggression, Peer Relations, and Learning Problems content scales T-scores. At Week 52, sustained improvement was observed for all scales; those with higher baseline scores (Inattention, Hyperactivity/Impulsivity, Executive Function) showed greater improvement than those with lower baseline scores (Defiance/Aggression, Peer Relations, Learning Problems).Centanafadine had a favorable safety profile and was generally well tolerated.

Conclusions: Over a 52-week treatment period, improvements were observed in ADHD symptoms as reported by the Conners 3–Parent Short, with greater improvements observed in children and adolescents with higher baseline symptom severity.

31-Understanding night-to-night variability in sleep for children with ADHD

*Rebecca Warwick[1], Christopher Carosella[1], Janet Lam[2], Alison Pritchard[1]

[1]Kennedy Krieger Institute, [2]Nemours Children's Health

Hypothesis/Objective: Night-to-night variability (N2N) in sleep is common. While some studies have suggested greater N2N variability in sleep metrics among children with ADHD, none have evaluated the moderating effect of child-level variables. The objective of this study was to characterize age and sex differences in N2N variability in children with ADHD.

Methods/Results: Twenty-five children with ADHD (40% male; Mage=11.66 years, SD=2.73) used ankle-worn actigraphy monitors at home for 14 nights. N2N variability in sleep was substantial across metrics (Mean total sleep time (TST)=7.85 hours, N2N variability=1.6; Mean wake after sleep onset (WASO)=43.03 minutes, N2N variability=54.75; Mean periodic limb movements of sleep index (PLMSI)=2.42 leg movements/hour, N2N variability=1.88). Mixed effects maximum likelihood regression models indicated that children 12 and older had greater N2N variability across all sleep metrics than those under 12 ($p<.003$ for all). Girls were more variable in TST ($p=.032$) and PLMSI ($p=.001$), while boys showed greater variability in WASO ($p=.003$).

Conclusions: Significant N2N variability challenges the validity of the gold-standard single-night sleep assessment provided by polysomnography. At-home multi-night actigraphy offers additional information that can support more valid diagnosis of sleep problems common in children with ADHD and can be critical in evaluating treatment effectiveness.

32-Symptom Overlap between ADHD and other DSM-5 Psychiatric Disorders: Implications for Differential Diagnosis

*Autumn Yi[1], Devin Hill[1], Margaret Sibley[1]

[1]University of Washington

Hypothesis/Objective: Accurate diagnosis of ADHD is complicated by shared features between ADHD symptoms with other disorders and high comorbidity rates. We investigate potential areas of symptom overlap between ADHD and disorders in the DSM-5 to provide guidance to clinicians in differentiating ADHD symptoms from other diagnoses during the diagnostic process.

Methods/Results: We conducted a secondary data analysis of a dataset with extracted symptom descriptions from the DSM-5 (Forbes et al., 2023). We applied a coding system that operationally defined each ADHD symptom. Coding identified 32 disorders/specifiers sharing at least 1 symptom with ADHD, (max=5 symptoms; Bipolar I, Bipolar II). 30.16% of disorders with shared symptoms were substance-related and addictive disorders, 28.57% bipolar and related disorders, and 15.87% neurocognitive disorders. 38 of disorders shared symptoms of hyperactivity/impulsivity symptoms; 25 shared inattentive symptoms (max=14; difficulty sustaining attention). Of the disorders/specifiers, 68.75% were a known ADHD comorbidity/had ADHD as a risk factor.

Conclusions: We will make recommendations to clinicians for differential diagnosis. We hope to reduce inconsistencies in clinicians' understanding of ADHD, particularly for clinicians treating substance-related, bipolar, and neurocognitive disorders who should be well-versed in ADHD differential diagnosis.

33-Working Memory and Emotional Regulation in Adolescents and Young Adults With and Without ADHD

*Danielle Wilson[1], Catrina Calub[2], Prerona Mukherjee[3], Julie Schweitzer[4]

[1]Alliant International University, [2]MIND Institute, Dept Psychiatry, University of California Davis Sch Med, [3]MIND Institute, University of California Davis Sch Med, [4]University of California, Davis

Hypothesis/Objective: Study objective was to explore if adolescents and young adults with ADHD show poorer working memory and emotional regulation than typically developing peers, and whether emotional regulation difficulties are associated with working memory performance within the ADHD group, consistent with theories linking cognitive control and affective dysregulation in ADHD.

Methods/Results: Participants included 129 individuals with and without ADHD (ages 12–29). Working memory was assessed using digit span forward and backward tasks and an object memory test; emotional regulation was assessed using Conners Emotional Lability, irritability scores, and BDEFS scales. MANOVAs showed significant group differences ($p < 0.001$), with the ADHD group displaying weaker working memory and greater emotional dysregulation. Within-group correlations showed no significant associations between task-based working memory and emotional regulation in ADHD (all $p > .20$), whereas parent-reported regulation correlated with working memory only in the TD group ($r = .61$, $p < 0.001$).

Conclusions: ADHD was characterized by both reduced working memory and greater emotional dysregulation, yet these domains were not linked within the ADHD group. Findings suggest dissociation between cognitive task performance and everyday emotional functioning in ADHD, highlighting the need for multi-method assessment in clinical practice.

34-The Association Between Walking Age and ADHD Symptom Severity in Young Children with Familial and Behavioral Likelihood for ADHD

*Samantha Bongiolatti [1], Virginia Peisch[1], Anne Arnett[1]

[1]Boston Children's Hospital

Hypothesis/Objective: Approximately 50% of children with attention-deficit/hyperactivity disorder (ADHD) display motor difficulties. Prior research suggests a link between deviant early motor milestones and neurodevelopmental disorders. We tested whether atypical walking age is a predictor of ADHD symptoms and we expected that early and late walking is positively associated with symptom severity.

Methods/Results: 130 children (39% female; 81% White) ages 2:6-4:11 years without autism or global developmental delay participated. Caregivers reported children’s motor milestones and current ADHD

symptoms (Preschool ADHD Rating Scale). Children were characterized as early (<=11 months), typical, or late (>=15 months) walkers. One-way ANOVAs revealed omnibus effects of walking age group on inattention (F[2,120]=3.31, p=.040) and hyperactive/impulsive (F[2,120]=3.96, p=.021) symptoms. Post-hoc pairwise comparisons revealed early walkers had significantly higher hyperactive/impulsive symptoms than typical walkers. After controlling for sex and IQ, regressions indicated both linear and quadratic associations between continuous walking age and total ADHD symptoms (ps < .06).

Conclusions: In our sample, children who walked at or before 11 months had greater parent-reported hyperactive symptoms in early childhood, suggesting elevated risk for ADHD. These findings are consistent with emerging research on other neurodevelopmental disorders (e.g., autism) and suggest that atypical developmental milestones could be early risk markers for ADHD.

35-Validity of an Online Assessment of Attention-Deficit/Hyperactivity Disorder Among a Real-World Sample of Adults Seeking Web-Based Mental Health Care

*Barry Herman[1], Stephen Faraone[2], Andrew J. Cutler[3], Jeffrey Newcorn[4], Michelle Ripper Lewis[1], Emily LaFrance[5], Charles Ruetsch[5]

[1]Mentavi Health, [2]Norton College of Medicine at SUNY Upstate Medical University, [3]SUNY Upstate Medical University, Neuroscience Education Institute, [4]Mount Sinai Medical Center, [5]Health Analytics

Hypothesis/Objective: To compare the results of a proprietary online assessment of adult attention-deficit/hyperactivity disorder (ADHD) with the current standard of care, a clinical interview, among a real-world population of adults seeking online ADHD assessment.

Methods/Results: Adult participants seeking online ADHD assessment completed a virtual clinical interview followed by the online self-report assessment. Agreement was calculated using a 2 ×2 matrix, and factors contributing to disagreement were further examined. The sample (N = 345) was predominantly female, with an approximate age of 35 years. The agreement between assessments was 78% (positive predictive value: 94.9%, negative predictive value: 15.1%, sensitivity: 80.6%, specificity: 44.0%, and ;£ 0.13). Over 80% of cases with disagreement were found to have ADHD on clinical interview, whereas the initial online assessment did not confirm a diagnosis of ADHD and recommended further assessment.

Conclusions: This is the first study to validate an online asynchronous ADHD assessment compared with the current standard of care among adults seeking online diagnosis. The online assessment correctly identified over 80% of ADHD-positive cases. Compared with the clinical interview, the online assessment was more conservative in rendering ADHD-positive diagnoses.

36-To Use or Not Use Lisdexamfetamine in Pregnancy and Breastfeeding: A Case Report Highlighting ADHD Management and Maternal-Fetal Outcomes

Tammy Tran[1], Marissa Beal[2], Melissa Free[3], *Ritika Baweja[4]

[1]Pennsylvania State College of Medicine, [2]Department of Psychiatry and Behavioral Health, Penn State Milton S. Hershey Medical Center , [3]Dept of Psychiatry, Penn State Milton S. Hershey Medical Center, [4]Penn State University College of Medicine, Hershey, PA

Hypothesis/Objective: This case report provides one example in which lisdexamfetamine use did not exhibit any severe adverse effects during pregnancy or breastfeeding but instead had a positive effect on mental health.

Methods/Results: This patient experienced similar pregnancy courses and obstetrics and neonatal outcomes including chronic hypertension, NICU admission, cleft palate, and micrognathia during both

pregnancies, regardless of exposure to lisdexamfetamine. However, she emphasized the difference in her quality of life between her first and second pregnancy, noting the impact of lisdexamfetamine on treatment of ADHD during pregnancy and postpartum period.

Conclusions: This case demonstrates one instance of successful breastfeeding with maternal use of lisdexamfetamine with no observed side effects in the infant. It highlights the importance of managing ADHD during pregnancy and postpartum period and offers an example of breastfeeding without significant side effects or concerns.

37-Obstetric and Psychiatric Outcomes with ADHD Medication Use in Pregnancy: A Retrospective Cohort Study Utilizing TriNetX database

Tammy Tran[1], Marissa Beal[2], Melissa Free[3], Kristin Sznajder[4], *Ritika Baweja[5]

[1]Pennsylvania State College of Medicine, [2]Department of Psychiatry and Behavioral Health, Penn State Milton S. Hershey Medical Center, [3]Dept of Psychiatry, Penn State Milton S. Hershey Medical Center, [4]Dept of Public Health Sciences, Penn State Milton S. Hershey Medical Center, [5]Penn State University College of Medicine, Hershey, PA

Hypothesis/Objective: To investigate a range of obstetric and psychiatric outcomes among pregnant women with ADHD, comparing those who used ADHD medication during pregnancy to those who did not, as well as comparing outcomes between stimulant and nonstimulant medication use.

Methods/Results: We conducted a retrospective cohort study utilizing TriNetX database, including pregnant women with ADHD between January 2014, to December 2024. Obstetric and psychiatric outcomes were compared between those with and without ADHD medication exposure, and between stimulant and nonstimulant use. Measures of Association was used to compare risk ratio and odds ratio to analyze the matched cohorts. Patients using ADHD medications had reduced risk of obstetric complications (e.g., preterm delivery RR=0.68, gestational diabetes RR=0.65) but increased risk of postpartum psychiatric outcomes (e.g., depression RR=1.58). Stimulants were associated with fewer psychiatric risks than nonstimulants (e.g., depressive episodes RR=0.66, substance-related disorders RR=0.38).

Conclusions: This study suggests ADHD medication during pregnancy may reduce obstetric complications, possibly due to better self-regulation and prenatal care. Contrastingly, increased psychiatric risks, particularly with nonstimulants, emphasize the need for comprehensive perinatal mental health care. Stimulants may provide protective effects compared to nonstimulants against certain psychiatric outcomes.

38-ADHD and Chronic Health: Impacts on Anxiety and Depression

*Chris Balbo, Tom Schlechter[1], Smith Kidkarndee[2]

[1]Colorado State University, [2]University of Hartford

Hypothesis/Objective: Individuals with ADHD may experience stress and inflammation that worsen chronic health conditions (Saccaro et al., 2021)., which are associated with increased rates of anxiety/depression (Fu et al., 2025). Therefore, it is hypothesized that individuals with both ADHD and chronic illness diagnoses will have increased symptoms of anxiety and depression.

Methods/Results: A secondary data analysis of the 2023 Healthy Minds Survey was conducted on college students with diagnoses of ADHD, chronic illness, and both (N =104,729). Within this sample, 18% percent of participants diagnosed with ADHD also reported a chronic health condition. An ANOVA showed a significant difference on both anxiety and depression scores from those diagnosed with ADHD only, chronic illness only, and ADHD+chronic illness (p<.0001).Multivariate regressions further showed that specific chronic health conditions were contributing to these findings including high blood pressure (p=.009), asthma (p<0.001), arthritis (p=0.01), gastrointestinal conditions (p<0.001), and other chronic health conditions (p<0.001).

Conclusions: These findings suggest that increasing medical complexity significantly impacts mental health, with differences occurring across chronic illnesses. Differences may be due to significant impact chronic illness specific stressors, compounded with medical complexities of ADHD. Implications of these findings can help understand the experiences and support neurodiverse individuals with chronic illnesses.

39-Differences in Peer Stigma Toward Adolescents with ADHD vs. Cognitive Disengagement Syndrome

*Melissa Miller[1], Stephen Becker[1]

[1]Cincinnati Children's Hospital Medical Center

Hypothesis/Objective: ADHD and cognitive disengagement syndrome (CDS) have different social profiles: whereas ADHD is associated with peer rejection, CDS is linked to withdrawal.Although adolescents with ADHD are at risk of peer stigmatization, no research has examined stigma associated with CDS. This study explored stigma toward youth with CDS vs. ADHD.

Methods/Results: 110 adolescents (ages 13-15) read vignettes describing a peer with either ADHD or CDS symptoms and a comparison peer. Stigma questions were completed after each vignette. ANCOVAs were conducted with sex and vignette condition as between-group factors, stigma variables as dependent factors, and stigma for comparison peer as a covariate. Social status was higher (p=.012, ;w #Òã b’for the ADHD peer compared to the CDS peer. Physical social distance (i.e., how closely one would sit near the peer in class) was higher (p=.041, ;w #Òã B’for ADHD peer compared to CDS peer. No differences emerged for other stigma domains (e.g., stereotype, prejudice).

Conclusions: Peers with ADHD or CDS were viewed as differing in perceived social status and physical social distance. Adolescents may perceive peers with CDS symptoms as less popular but may prefer to sit near them in a class setting. Additional research is needed to examine ADHD- and CDS-related stigma in youth.

40-Parent Skill Use in Behavioral Parent Training as a Function of Emotion Dysregulation in Children with ADHD

*Joshua Langfus[1], Sara Chung[2], Pevitr Bansal[3], Laura Henry[1], Elizabeth Hawkey[4], Keith McBurnett[1], Linda Pfiffner[5]

[1]University of California, San Francisco, [2]University of California, San Fransisco, [3]Montclair State University, [4]Providence Hood River Memorial Hospital, [5]University of California San Francisco

Hypothesis/Objective: Emotion dysregulation (ED) in children with ADHD is linked to poorer response to behavioral parent training (BPT; Ansar et al., 2024; Hawkey et al., 2024). Lower parental engagement also attenuates treatment effects (Dvorsky et al., 2021). This study examines how child ED impacts parental engagement with specific BPT-prescribed skills.

Methods/Results: Parents (N=56) of children with attention and behavior problems completed an 8-week

parent BPT group with pre-, post-, and weekly measures. Baseline child ADHD (CASI-5; Gadow, 2016) and negative and positive emotion lability (NEL, PEL; Emotion Regulation Checklist; Shields & Cicchetti, 1997), and parent weekly adherence to the prior week's skill were assessed. Controlling for ADHD severity, cumulative link mixed models found that higher NEL predicted greater overall skill adherence (OR=1.54,p=.019), but lower adherence to Homework Planning (OR=0.45,p=.011) and Parent Stress Management (OR=0.56,p=.048) skills. Higher PEL predicted greater Parent Stress Management adherence (OR=3.49,p=.001).

Conclusions: Negative and positive child emotional dysregulation showed distinct associations with parents' adherence to BPT and the use of specific skills. These findings indicate the need for person-centered approaches to enhance BPT adherence and further exploration of the relevance of particular parenting skills for diverse child presentations of emotion dysregulation.

41-Developmental Trajectories of Adolescent Depression: The Role of ADHD, Pubertal Maturation, and Social Functioning

*Azadeh Bakhtiari[1], Hannah Brockstein[2], Carolyn Campbell[2], Amanda J. Thompson[3], Steven Evans[4]

[1]Loyola University, New Orleans, [2]Ohio University, [3]Nationwide Children's Hospital, [4]Nationwide Children's Hospital/Ohio State University

Hypothesis/Objective: ADHD symptoms and related impairment are risk factors for the onset of depression that operate differently for males and females. We hypothesized variability in the developmental trajectories of depressive symptoms that would differ based on ADHD symptoms, puberty, social functioning, family conflict, and school functioning.

Methods/Results: The present study includes participating youth (N = 11,864, 52% male) from the Adolescent Brain Cognitive Development Study,SM who were annually assessed from ages 9 to 14 years. Latent class growth curve modeling identified distinct trajectories of depression within sex. Five trajectories emerged for females and four for males. Social problems most strongly predicted risk for displaying persistently high depressive symptoms in both sexes. ADHD symptoms, pubertal advancement, low school engagement and economic hardship were also significant predictors of following risky trajectories of depression in both sexes—including later onset depression or early onset with symptom remission.

Conclusions: Social problems and ADHD symptoms consistently predicted elevated depressive trajectories in both sexes, and social problems was most robustly associated with persistently high depression. Results suggest a need to develop screening and interventions specific to each sex. Future research should focus on unique developmental patterns by sex.

42-One Disorder, Many Stories: Exploring ADHD in African American College Students

*Skyla Ross-Graham[1], Kevin Antshel[1]

[1]Syracuse University

Hypothesis/Objective: An increasing number of African Americans are being diagnosed with ADHD, yet remarkably little is known about African Americans and other ethnic minority college students with ADHD. This study aims to examine ADHD prevalence rates, symptom severity and psychosocial functioning in African American, Latinx, and White students.

Methods/Results: Methods: College student participants (n = 8178) were recruited from eight geographically diverse colleges in the United States. African American, Latinx, and White participants reported on current

ADHD diagnoses and completed measures of ADHD symptoms, depression, anxiety and psychosocial functioning. Results: White students had the highest numbers of ADHD diagnosis (n = 250), followed by Latinx (n = 200) and African American (n = 99). No differences in ADHD sex ratios exist between the three groups. Ongoing analyses will examine group differences in ADHD severity, diagnosis age, and mental health outcomes.

Conclusions: These results will help inform our knowledge of any cultural differences of ADHD that may exist in college students regarding mental health and associated outcomes. This knowledge may help clinicians consider the impact of race when treating ADHD in college students and inform culturally responsive practices among college health professionals.

43-Understanding Student-Level Factors Associated with Student-Teacher Relationships for Upper Elementary-Aged Students with ADHD

*Madeline DeShazer[1], Melissa Dvorsky[2], R. Elizabeth Capps[3], Stephen Becker[1]

[1]Cincinnati Children's Hospital Medical Center, [2]Children's National, [3]Case Western Reserve University

Hypothesis/Objective: Although research shows students with ADHD experience conflictual and distant relationships with their teachers, more research is warranted to understand these complex dynamics. The current study explores the extent to which teacher-reported student-teacher relationship quality constructs are associated with school engagement across multiple domains and perspectives for students with ADHD.

Methods/Results: Participants included fifth grade students with ADHD (N= 138, 45.7% female, 35.5% youth of color) Students and teachers rated their school engagement, and teachers rated students' ADHD symptoms (inattention and hyperactivity-impulsivity) and student-teacher relationship quality (closeness and conflict). Separate multiple linear regressions revealed unique effects of conflict and closeness in predicting school engagement, controlling for the child's sex and ADHD severity. Teacher-student conflict was significantly associated with lower teacher-rated emotional and cognitive school engagement and lower child-rated behavioral and emotional school engagement. Teacher-student closeness positively was associated with all domains of engagement (behavioral, emotional, and cognitive) from only teachers' perspectives.

Conclusions: Conflict is consistently related to lower engagement for students with ADHD, from both teacher and student perspectives. Closeness is uniquely associated with teachers'perspectives of student engagement. Therefore, focusing on reducing conflict and fostering closeness in student-teacher relationships may be key for improving school engagement and outcomes for these students.

44-Characterizing ADHD Prevalence and Severity in a School-age Sample of Children at High Likelihood for ASD

*Beatrice Ojuri[1], Olivia Evers[1], Tanya St. John[2], Juhi Pandey[3], Heather Hazlett[4], Robert Schultz[5], Stephen Dager[6], Annette Estes[6], Kelly Botteron[7], Natasha Marrus[7], Lonnie Zwaigenbaum[8], Joseph Piven[9], Jed Elison[1], Catherine Burrows[1]

[1]University of Minnesota, [2]University of Washington , [3]Children's Hospital of Philadelphia, [4]University of North Carolina Chapel Hill , [5]Children's Hospital of Philadelphia , [6]University of Washington, [7]Washington University in St. Louis, [8]University of Alberta, [9]University of North Carolina Chapel Hill

Hypothesis/Objective: To evaluate attention/deficit hyperactivity disorder (ADHD) prevalence and severity in children at a high-familial likelihood (HL) and low-familial likelihood (LL) for autism spectrum disorder (ASD), stratified by ASD diagnosis and co-occurring conditions.

Methods/Results: Participants (mean age=9.9 years) included HL (n=206) and LL children (n=102) from the Infant Brain Imaging Study. Presence of ADHD was determined based on parent reports of past diagnoses, current ADHD diagnosis criteria on the KSADS, and clinically-significant inattention or hyperactivity/impulsivity on the Conners-3. ADHD severity was derived from a confirmatory factor analysis of parent-reported measures. ADHD was more prevalent in HL participants (42%) compared to LL participants (16%). ADHD severity was greater in participants with both ASD and ADHD compared to ADHD-only, ASD-only, and non-spectrum, but did not differ between HL and LL groups within diagnostic groups.

Conclusions: ASD familial likelihood increases ADHD prevalence, and co-occurring ASD may further increase ADHD severity. ADHD research may benefit from using ASD-family-history designs. Moreover, children with an increased ASD likelihood should be monitored for ADHD in addition to ASD.

45-Does Social Positive Bias Status Help Explain How Some Children with ADHD Evaluate Themselves and Others?

*Betsy Hoza[1], Erin Shoulberg[1], Bethany Hunt[1]

[1]University of Vermont

Hypothesis/Objective: We examined whether presence of a social positive bias (PB) in children with ADHD predicts performance evaluations for self and others on a laboratory task in which we experimentally controlled for competence. We considered mechanistic explanations of self-protection versus cognitive deficits as explanations for PB in this context.

Methods/Results: In the context of a TV Talk Show paradigm, 7-12 year-old children with ADHD who did (n=62) and did not (n=102) display a PB were compared to control children (n=96) on how they evaluated the performance of themselves and others. Evaluations were made of hypothetical others who performed equally, better, and worse than the participant. Mixed model ANOVAs indicated that when the other clearly scored better or worse than the participant, all groups provided relatively accurate evaluations. Only in the case of equal scores, requiring more nuanced interpretation, did one or both of the ADHD groups inflate self-ratings.

Conclusions: Although neither the defensive self-protection nor cognitive deficits explanations of PB can be ruled in or out based on our results, additional insights into PB were gained. Specifically, PB may reflect difficulty processing ambiguous situations where clear feedback is not available.

46-Unique and interactive effects of ADHD symptoms and executive dysfunctions on peer problems during early childhood

*Bethany Hunt[1], Dianna Murray-Close[1], Betsy Hoza[1]

[1]University of Vermont

Hypothesis/Objective: ADHD behaviors are well established predictors of peer dysfunction (Hoza et al., 2005). Extending this work, we considered five executive function deficits (inhibitory control, shifting, emotional control, working memory, and planning/organization) as potential moderators of the association between total ADHD symptoms and peer problems.

Methods/Results: Teachers rated 142 preschoolers (Mage = 5.58 years, SD = 0.64; 40.8% female) in a community sample using well-validated instruments. Five simultaneous regression models revealed that inhibition, shifting, and emotional control deficits, but not planning/ organization or working memory deficits, moderated associations between ADHD symptoms and peer problems. ADHD symptoms consistently predicted more peer problems at high levels of dysfunction involving inhibitory control ($b = 0.43$; $t = 6.73$; $p <$

0.001), shifting (b = 0.51; t = 10.54;p < 0.001), and emotional control (b = 0.51; t = 10.49; p < 0.001); results varied at low levels.

Conclusions: The risk for peer problems appears to increase for preschoolers with high levels of ADHD symptoms coupled by inhibitory control, shifting, or emotional control problems. To mitigate adverse effects of peer problems, early intervention efforts should be considered for individuals fitting these profiles.

47-Greater Sleep Problems in Children with ADHD are Associated with Less Cognitive Control and More Delay Discounting

*Alyssa DeRonda[1], Huda Alraddadi[2], Sarah Ann Duck[3], Adam Spira[4], Stewart Mostofsky[5], Susan Carnell[3], Keri Rosch[6]

[1]Kennedy Krieger Institute, [2]Taibah University, [3]Johns Hopkins University School of Medicine, [4]Johns Hopkins University, [5]Center for Neurodevelopmental and Imaging Research, [6]Kennedy Krieger Institute/Johns Hopkins

Hypothesis/Objective: Sleep disturbances are prevalent among children with attention-deficit/ hyperactivity disorder (ADHD) and linked to cognitive impairments like cognitive control (CC) and delay discounting (DD; immediate reward preference). We examined the association between parent-reported sleep problems and ADHD-related deficits in CC and DD in a cohort of children with and without ADHD.

Methods/Results: 180 8-12-year-old children (ADHD: n=111, Control: n=69) were included.Parent-reported sleep problems were assessed using the Children's Sleep Habits Questionnaire (CSHQ). A Go/No-Go (GNG) task, measuring reaction time variability (RTV), assessed CC. DD was assessed with a game-time task, involving decision-making for time spent playing a preferred game. Parents of children with ADHD reported greater sleep problems (p<.05). Across both groups, sleep problems positively correlated with game-time DD (r=.19; p=.010), indicating greater preference for immediate reward, and GNG RTV (r=.21; p=.006), indicating worse attention regulation. Sleep problems mediated the relationship between ADHD diagnosis and game-time DD (p=.032, 84.6% mediation).

Conclusions: Sleep problems are linked to the cognitive and motivational deficits associated with ADHD.

48-Doubling the Challenge?: First-Generation College Students Navigating ADHD

*Haley McBride[1], Kevin Antshel[1]

[1]Syracuse University

Hypothesis/Objective: Despite first-generation college students (FGCS) and students with ADHD being at elevated risk for adverse academic outcomes, no research has examined FGCS with ADHD as a group. We hypothesize that FGCS with ADHD will experience the greatest academic impairment, and lower academic self-efficacy (ASE) will be associated with greater impairment.

Methods/Results: Undergraduate students recruited from eight geographically diverse universities completed virtual self-report measures during the 2022-2023 academic year. Measures collected information about demographic and clinical information (e.g., first-generation status, parent education, ADHD diagnosis), ADHD symptoms, perceived academic impairment, and ASE. There are four groups of participants, FGCS with ADHD (n = 41), continuing-generation college students (CGCS) with ADHD (n = 297), FGCS without ADHD (n = 979), and CGCS without ADHD (n = 3,431). Ongoing analyses consider academic impairment and ASE between groups using ANOVA analyses, and ASE as a factor which impacts

academic impairment using a hierarchical linear regression analysis.

Conclusions: This project is the first to investigate the experience of FGCS with ADHD, focusing on constructs essential to college success, academic impairment and ASE. Findings are expected to provide actionable insights for campus health professionals, equipping them to better identify risks, tailor interventions, and strengthen academic confidence in this population.

49-Differences in Cortical and Subcortical Volumes in Girls and Boys with and without ADHD and Co-occurring ODD

*Alice Sperry[1], Alyssa DeRonda[1], Micah Plotkin[2], Stewart Mostofsky[3], Keri Rosch[4]

[1]Kennedy Krieger Institute, [2]Boston University Medical School, [3]Center for Neurodevelopmental and Imaging Research, [4]Kennedy Krieger Institute/Johns Hopkins

Hypothesis/Objective: ADHD and oppositional defiant disorder frequently co-occur, but whether their neurobehavioral features differ has been understudied. The current study addresses this question by examining cortical and subcortical brain morphology, expanding on our prior published study comparing clinical symptoms and executive function tasks across ADHD, ADHD+ODD and typically developing (TD) groups.

Methods/Results: Participants include 328 8–12-year-olds (32% girls), including 130 TD, 134 ADHD, and 63 ADHD+ODD with a 3T brain MRI scan. Results show lower anterior cingulate cortex volume in girls with ADHD (d=0.49), but not ADHD+ODD (d=0.26), relative to TD girls, whereas volume is lower among boys with ADHD+ODD (d=0.54), but not ADHD (d=0.27), relative to TD boys. Dorsolateral prefrontal cortex volume is reduced in ADHD, regardless of sex or ODD. Additionally, lower amygdala volume in girls versus boys was greatest within the ADHD+ODD group (d=0.72), with a smaller difference in ADHD only (d=0.41), and no difference in TD (d=0.16).

Conclusions: Volume of cortical and subcortical regions differed by diagnosis and sex, with dorsolateral brain regions consistently implicated in ADHD, whereas sex and ODD impact volume in more ventral brain regions. This pattern is consistent with previous behavioral findings showing differences in hot versus cold executive functions in ADHD with/without ODD.

50-A Meta-Analysis of Emotional Functioning in Adolescents with and without ADHD

*Jessica Tharaud, Marissa Goad[1], Keely Thornton[1], Molly Nikolas[1]

[1]University of Iowa

Hypothesis/Objective: We predicted large-sized differences in the emotional functioning of adolescents with and without ADHD and that differences would be largest for emotional lability and reactivity. We also planned to examine moderators and correlations between ADHD symptoms and emotional functioning for adolescents with ADHD.

Methods/Results: We conducted a systematic literature search to identify published articles and dissertations that compared the emotional functioning of adolescents with and without ADHD and/or that reported the association between ADHD symptoms and emotional functioning for adolescents with ADHD. A four-level random effects meta-analysis (73 effect sizes from 36 studies) found large-sized differences in the emotional functioning between adolescents with and without ADHD (d = .89). A three-level random effects meta-analysis (23 effect sizes from 14 studies) found a medium-sized association between emotional

functioning and ADHD symptoms for adolescents with ADHD (r = .37).

Conclusions: Findings indicate that ADHD is associated with lower emotional functioning in adolescence and that higher levels of ADHD symptoms are associated with lower levels of emotional functioning for adolescents with ADHD. Treatment for adolescents with ADHD should address emotional concerns in addition to symptom reduction.

51-Evaluating Healthcare Providers' Referral Patterns for Parent Training in Behavior Management (PTBM) in ADHD Across Different Age Groups

*GRIZELDA ANGUIANO[1], Arti lal[2], Elaine Taylor-Klaus[3], Diane Dempster[4]

[1]Anchored Pediatric Mental Health, [2]Baylor Scott and White, [3]ImpactParents.com, [4]ImpactParent

Hypothesis/Objective: We hypothesize that healthcare provider referrals for PTBM in ADHD vary by frequency, quality, and age group, reflecting inconsistent understanding and application of AAP guidelines. Referral practices may be influenced by vague PTBM definitions, limited awareness of evidence-based resources, and perceived barriers related to cost, time, and feasibility.

Methods/Results: An electronic cross-sectional survey (Google Forms) assessed provider referral patterns for PTBM in pediatric ADHD. Distributed via email and professional networks, it yielded 88 complete responses. Providers reported referral frequency, targets, recommended supports, and other practices. Most (82.6%) frequently referred across age groups, exceeding CDC's 2016 report (47%), though sampling bias was expected. PTBM definitions varied widely (e.g., websites, therapy, tutoring, occupational therapy), with informational resources most common (80%). Some providers expressed uncertainty. Findings suggest vague PTBM definitions, limited awareness, and cost/time barriers may hinder guideline-concordant referrals for ADHD-specific PTBM addressing Executive Function and Emotional Regulation.

Conclusions: Healthcare provider referrals for PTBM in ADHD vary in frequency and quality, reflecting inconsistent application of guidelines and underscoring the need for further study.Clearer definitions, stronger referral pathways, and minimum PTBM standards are required to support guideline-concordant ADHD care across all pediatric age groups.

52-Feasibility and Acceptability of a Four-Session Family Intervention to Prevent Substance Use Behaviors in Youth with Attention-Deficit/Hyperactivity Disorder

Virginia Peisch[1], *Josephine Landau[1], Julia Kausel[1], Marianne Pugatch[2], Elizabeth Ozer[3], Anne Arnett[1]

[1]Boston Children's Hospital, [2]Department of Psychiatry and Behavioral Medicine, Northwestern University Feinberg School of Medicine, [3]4University of California, San Francisco (UCSF) School of Medicine

Hypothesis/Objective: : Individuals with attention-deficit/hyperactivity disorder (ADHD) are three times more likely than their typically developing peers to develop substance use disorders (SUDs), which has lasting effects on life course health trajectories. We developed a 4-session, family-based curriculum for youth with ADHD to prevent substance use and tested its feasibility and

Methods/Results: At the time of submission, eight youth (Mage=12.46, SD=0.83; n=2 female;87% White) and their caregiver(s) had completed the study (N=30 families will complete the study by 01/2026). The 100% retention suggests strong feasibility. Thirty-eight percent of caregivers expressed at least some concern about their child's substance use. Post-intervention participant feedback suggested strong acceptability: mean ratings for the question "Are you happy that you participated in the PUMAA program?" were 6.38 for caregivers and 5.38 for youth (1=not at all; 7=yes, very much so). Additionally, caregivers reported "Loved learning new tools for the toolbox" and "Extremely helpful and informative."

Conclusions: Even though many youth with ADHD display problematic substance use behaviors, little is known about prevention efforts. Our preliminary results suggest strong feasibility and acceptability of our novel, short-term, strengths-based curriculum. Ongoing data collection will ascertain whether the curriculum holds similar promise in older youth (15–17 years) with ADHD.

53-Long-Term Safety of Centanafadine in Children and Adolescents With ADHD:Results From a Phase 3 Open-Label Extension Study

Osman Turkoglu[1], *CAROLINE WARD[2], Na Jin[3], Taisa Skubiak[4], Ann Childress[5], Judy van Stralen[6], Valerie Arnold[7]

[1]Otsuka Pharmaceutical Development & Commercialization, Inc., [2]Otsuka (OPDC), [3]Otsuka Pharmaceutical Development & Commercialization, Inc., Rockville, MD, USA, [4]Otsuka Pharmaceutical Development & Commercialization, Inc. (OPDC), [5]Center for Psychiatry and Behavioral Medicine, Inc., [6]Center for Pediatric Excellence, [7]University of Tennessee Center for the Health Sciences

Hypothesis/Objective: This phase 3, open-label extension trial (NCT05279313; trial is ongoing) determined the long-term safety and efficacy of once-daily extended-release centanafadine, a norepinephrine, dopamine, and serotonin reuptake inhibitor, for the treatment of ADHD in children and adolescents (ages 4-17 years; minimum trial duration, 52 weeks; maximum trial duration, 136 weeks).

Methods/Results: Overall, 680 participants (eligible rollover from previous trials/de novo; mean age 11.5 years, 59.3% male, 70.9% White) with a primary diagnosis of ADHD were enrolled; 675 were treated with centanafadine. The primary objective was to evaluate the long-term safety and tolerability of centanafadine. Overall, centanafadine had a favorable safety profile and was generally well-tolerated, with 6.5% of the participants discontinuing treatment due to adverse events (AEs). Most treatment-emergent AEs were mild to moderate in severity. Eight (1.2%) participants reported serious AEs (hallucination [visual], asthma, dehydration, scoliosis, limb injury [n=1 each], and suicidal ideation [n=3]). No deaths were reported.

Conclusions: Over at least a 52-week treatment period, centanafadine had a favorable safety profile and was generally well tolerated, with a low number of participants discontinuing treatment due to AEs. The rate of serious AEs was low, and most treatment-emergent AEs were mild to moderate in severity.

54-Treatment Patterns and Outcomes in Youth with ADHD and Autism Spectrum Disorder: Insights from Real-World Data

*Raman Baweja[1], Daniel Waschbusch[2], Margaret Weiss[3], Michael Murray[2], James Waxmonsky[4]

[1]Penn State University College of Medicine, Hershey, PA, [2]Penn State College of Medicine , [3]Cambridge Health Alliance, [4]Penn State College of Medicine

Hypothesis/Objective: ADHD and autism spectrum disorder (ASD) frequently co-occur in youth, leading to greater psychiatric complexity and treatment challenges. This study examined how ASD comorbidity influences psychotropic prescribing patterns and clinical outcomes in youth with ADHD.

Methods/Results: This retrospective cohort study used electronic health record data from the TriNetX Research Network, including 817,000 youth aged 3–18 years diagnosed with ADHD, of whom 143,540 (17.6%) had comorbid ASD. After controlling for relevant confounders, compared to youth with ADHD alone, those with comorbid ASD were less likely to receive CNS stimulants (relative risks (RR) 0.85) but more likely to receive non-stimulants (RR 1.40), as well as higher antidepressants, antipsychotics, and mood stabilizers (RR range 1.32–2.13). CNS stimulant use was associated with significantly better outcomes, including lower risk of inpatient hospitalization, emergency visits, and initiation of antipsychotics or mood stabilizers.

Conclusions: Conclusions: Youth with ADHD and ASD constitute a clinically complex, high-risk group with elevated psychotropic medication burden. Although clinicians preferentially prescribe non-stimulants, CNS stimulants are linked to superior long-term outcomes. These findings highlight the importance of evidence-based, tailored treatment guidelines for youth with comorbid ADHD and ASD.

55-Four-session crisis behavioral parent training program for aggression prevents emergency psychiatric service use

*Nicole Groves[1], Shino Aguilar-Someya[2], Cori Hamilton[3], Tyler Sasser[1], ERIN GONZALEZ[1]

[1]University of Washington School of Medicine, [2]University of Washington, [3]Seattle Children's Hospital

Hypothesis/Objective: Disruptive behavior (DB; e.g., defiance, aggression) accounts for half of pediatric psychiatric emergency department (ED) visits and is insufficiently treated with extant evidence-based treatments. We examined ED visits and symptoms/impairment before and after a rapid-access, 4-session crisis clinic parent training intervention ("Empowered Parenting;" EP) delivered via telemedicine for high-acuity DB.

Methods/Results: Caregivers of 236 children ages 5-12 were referred primarily from EDs and were eligible for EP; 165 attended at least one visit. Participating and non-participating families had equivalent numbers of ED visits in the 60 days before referral. EP completers had 45.4% fewer ED visits 60 days after treatment and 57.6% fewer visits a year later than families who did not participate. Caregivers who completed pre- and post-treatment measures reported decreased intensity and duration of severe DB episodes and use of physical restraint/punishment to manage DB (d=0.40-0.68); parenting strain (d=0.36); children's oppositional/defiant and ADHD symptoms (d=0.48-0.61); and overall impairment (d=0.74).

Conclusions: EP participation was associated with reduced use of emergency psychiatric services compared to families who were referred and did not participate. Both caregiver and child outcomes improved significantly. Results also suggest that caregiver self-regulation is a modifiable treatment target that should be considered in parent training interventions.

56-Stigma Toward ADHD: A Narrative Review and Conceptual Model for Support

*Chiharu Maeda[1], Taisuke Katsuragawa[1], Hiroaki Kumano[1]

[1]Faculty of Human Sciences, Waseda University, Japan

Hypothesis/Objective: This study reviews existing literature on stigma related to ADHD and aims to develop a conceptual model illustrating how different types of stigma affect psychological and social outcomes, with attention to cultural contexts in Japan and Western countries and implications for support.

Methods/Results: We conducted a narrative review of international studies on public stigma, self-stigma, and associative stigma toward ADHD. The review indicates that these stigmas interact and contribute to psychological distress, reduced self-esteem, and barriers to treatment. Based on these findings, a preliminary conceptual model was developed to illustrate processes linking stigma and maladaptation. The review also highlights the limited empirical research in Japan and suggests possible cultural differences in how stigma is expressed.

Conclusions: ADHD-related stigma appears to contribute to secondary difficulties and barriers to accessing support. The proposed model may guide future research and provide direction for interventions, while also informing the development of culturally sensitive approaches to reducing stigma and supporting individuals with ADHD.

57-Effect of Trigeminal Nerve Stimulation on Emotion Regulation and Frontal Alpha Asymmetry Response to Emotional Stimuli in ADHD

*Anjika Friedman-Jha[1], Giulia Salgari[2], Sandra Loo[3], Nastassia Hajal[4]

[1]University of California, Los Angeles, [2]University of California, Los Angles, [3]University of California, Los Angeles, UCLA School of Medicine, [4]University of California, Los Angeles

Hypothesis/Objective: Emotion dysregulation has long been recognized as a common trait in individuals with ADHD. This study investigated whether Trigeminal Nerve Stimulation (TNS) had significant treatment effects on emotion dysregulation and frontal alpha asymmetry (FAA), an EEG biomarker of emotion-related processing, in children aged 8-12 years diagnosed with ADHD.

Methods/Results: We examined the Affective Reactivity Index (ARI) and FAA in response to emotionally evocative imagery from a sample of 50 children in a clinical trial. Both child and parent-reported ARI did not change significantly between active and sham TNS ($p>.2$). A significant reduction in FAA during fearful faces relative to happy/calm faces was detected in the TNS active vs. sham group ($p<.05$). The FAA decrease was influenced by right frontal alpha power suppression, suggesting greater attentional processing of the fearful stimuli. Finally, no significant correlations were found between pre- to post-treatment changes in FAA and ARI measures.

Conclusions: These findings suggest that TNS may modulate neural responses related to emotional processing in children with ADHD, as evidenced by reduced late-FAA in response to fearful stimuli. The clinical relevance of FAA changes requires further research.

58-ADHD Coaching Since the COVID-19 Pandemic: Is there a New Wave of ADHD Coaches?

*Elias Graham, Carlos Yeguez[1], Melissa Dvorsky[2], Jillian Holbrook[3], Margaret Sibley[3]

[1]Seattle Children's Research Institute, [2]Children’s National, [3]University of Washington

Hypothesis/Objective: We conduct surveillance on emerging trends in the ADHD coaching ecosystem, specifically examining the impact of starting ADHD coaching pre- versus postCOVID-19 pandemic. We hypothesize post-pandemic coaches are more likely to self-identify as having ADHD, and report less professional engagement (ADHD coaching organization membership, connection to healthcare).

Methods/Results: We conducted a secondary analysis (N=465) of the U.S. National ADHD Coaching Survey. An influx of new coaches joined the profession accompanying the pandemic.Post-pandemic coaches were younger ($t=9.48$; $p<.001$), more likely to self-identify as having ADHD ($X^2=9.01$; $p=.003$), and less likely to have healthcare licensure ($X^2=5.90$; $p=.015$) or professional liability insurance ($X^2=11.1$; $p<.001$), discuss medication adherence ($X^2=18.06$; $p<.001$), substance use or addictions ($X^2=15.86$ $p<.001$), or suicide, abuse or harm to self/ others ($X^2=16.11$; $p<.001$) or to refer clients to mental health supports, including CBT providers ($X^2=8.63$; $p=.003$) and medication prescribers ($X^2=27.60$, $p<.001$).

Conclusions: Post-pandemic coaches may rely more on lived experiences with ADHD in sessions, and appear to be more professionally isolated from the broader healthcare ecosystem.Differences between pre- and post-pandemic coaches should be considered when evaluating the efficacy of ADHD coaching and when developing regulatory structures and clinical oversights for coaching.

59-Risk of Cardiovascular Outcomes in ADHD Patients Taking Stimulant vs Non-Stimulant Medications

*Mira Marwah[1], Jonathan Sayegh[2], Gurjot Marwah[2]

[1]University of Arizona College of Medicine, [2]University of Arizona College of Medicine-Tucson

Hypothesis/Objective: This study aims to compare the risk of hypertension, ischemic heart disease, heart failure, and cardiac arrhythmias in patients with ADHD who take stimulants versus non-stimulants.

Methods/Results: A retrospective cohort study was conducted using data from the TriNetX Database Research Network from 2007-2024. The study examined two cohort groups of patients with ADHD: those who took stimulant medications (methylphenidate, amphetamine, and dextroamphetamine) and those who took non-stimulant medications (guanfacine and atomoxetine), with each group having N = 121,059 patients after 1:1 propensity score matching for demographics and relevant psychiatric comorbidities such as schizophrenia, bipolar disorder, and anxiety disorders. Patients were followed for 10 years to assess the risk of hypertension, ischemic heart disease, heart failure, and cardiac arrhythmias.

Conclusions: Stimulant use was associated with a statistically significant higher risk of hypertension compared to non-stimulants. Non-stimulants had a statistically significant higher risk of cardiac arrhythmias compared to non-stimulants. The risk for ischemic heart disease and heart failure was not statistically significant between these two groups.

60-A phase 4, randomized, double-blind study of serdexmethylphenidate/dexmethylphenidate in children with attention-deficit/hyperactivity disorder

Ann Childress[1], Jeffrey Newcorn[2], Santhi Adusumilli[3], Ron Tashjian[3], *Meg Corliss[4]

[1]Center for Psychiatry and Behavioral Medicine, Inc., [2]Icahn School of Medicine at Mount Sinai, [3]Corium, LLC, [4]Corium Inc.

Hypothesis/Objective: To determine the efficacy and safety of serdexmethylphenidate/dexmethylphenidate (SDX/d-MPH) in children aged 4–12 years with attention-deficit hyperactivity disorder (ADHD) in a phase 4, randomized, double-blind study (March 2023–May 2024).

Methods/Results: Subjects (N=240) received SDX/d-MPH (n=116) or placebo (n=124). During the 28-day treatment phase, subjects aged 4–5 years (n=133) were titrated to SDX/d-MPH daily dose of 26.1/5.2mg or 39.2/7.8mg; subjects aged 6–12 years (n=107) to 26.1/5.2mg or 52.3/10.4mg. ADHD-RS total score significantly improved for SDX/d-MPH versus placebo (LS mean difference: 4–12 years, " 11.3, P<0.0001). At Day 28, hyperactivity/impulsivity, inattention, CGI-S/I, and CSHQ total sleep disturbance scores also significantly improved for SDX/d-MPH versus placebo (P<0.05). SDX/d-MPH was well tolerated with no serious adverse events. The most common treatment-related adverse events ("e5%) for SDX/d-MPH were insomnia, irritability, and decreased appetite.

Conclusions: SDX/d-MPH is effective and safe in managing ADHD symptoms in children aged 4–12 years. Even though the study was relatively short, SDX/d-MPH demonstrated efficacy and safety in younger children with ADHD and had an acceptable risk/benefit profile.

61-Mechanisms of Mind–Body Interventions for Attention-Deficit/Hyperactivity Disorder: A Systematic Review

*Josh Kaplan, Jillian Bjornson, Kayke Haynes[1], Jeff Whitaker[1], Peter Thronson[1]
[1]Northwest ADHD Treatment Center

Hypothesis/Objective: Mind–body interventions (e.g., mindfulness, yoga, tai chi) for ADHD show preliminary support, but mechanisms remain unclear. Identifying mechanisms is critical for tailoring interventions for subgroups for whom first-line treatments are ineffective. This systematic review synthesizes empirical evidence on psychological and neurobiological pathways to clarify how these interventions exert effects.

Methods/Results: Following PRISMA guidelines, we searched PubMed, PsycINFO, Scopus, CENTRAL, and Google Scholar through May 2025. Eligible studies included participants with ADHD or ADHD symptoms, a mind–body intervention, and analyzed mechanisms (e.g., causal modeling) or theorized mechanisms (e.g., identified, measured, and presented potential mechanisms without formal causal modeling). From ~404, 32 full texts are under review. Preliminary findings suggest frequently studied mechanisms include executive function, emotion regulation, and attentional control. Some studies assess neurobiological correlates, though results are heterogeneous. Few studies employed causal models, though early evidence suggests partial support for emotion regulation and attentional control as mechanisms.

Conclusions: Mind–body interventions for ADHD show preliminary evidence of operating through improved executive functioning and emotion regulation, with emerging neurobiological support. Current findings are constrained by methodological heterogeneity. Future work should prioritize theory-driven trials with causal modeling and standardized methods. Clarifying mechanisms will lay the scientific foundation for novel individualized treatments.

62-Does ADHD Impact Conversational Turn-Taking in Adolescents With and Without autism?

Sunghye Cho[1], Margaret Lyons[2], Elizabeth Fulop[2], Nasya Howard[2], Hannah Franke[2], Alexandria Mulqueen[2], Amanda Lee[3], Sarah Schillinger[4], Calliana Faulk[5], Juhi Pandey[1], Mark Liberman[1], Robert Schultz[1], *Julia Parish-Morris[1]

[1]University of Pennsylvania, [2]Children's Hospital of Philadelphia, [3]University of Georgia, [4]University of Connecticut, [5]Drexel University

Hypothesis/Objective: Turn-taking (“who speaks when and for how long”) is a key social skill that differs in autistic adolescents. However, little is known about conversational dynamics in adolescents with ADHD, or in autistic adolescents that have co-occurring ADHD (AuDHD). This study fills that gap.

Methods/Results: Participants (ADHD_only: n=44(18f), age=13.4±1.6years; Autism_only:n=20(8f), age=15±1.5years; AuDHD: n=23(9f), age=14.5±1.8years; Neurotypical: n=29(12f), age=14.1±1.9years) engaged in a natural 5-minute “get-to-know-you” conversation with a young adult interlocutor. Compared to neurotypical adolescents, there were fewer backchannels and/or turn exchanges in AuDHD (backchannel: p=0.014, turn-exchange: p=0.077) and Autism_only (turn-exchange: p=0.032). The ADHD_only group produced more overlapping speech (interruptions) than Autism_only (p=0.036) or AuDHD (p=0.036) adolescents (Fig.1). Interlocutor speech overlapped with neurotypical adolescents more often than AuDHD (p=0.068) or Autism_only (p=0.069) adolescents. Fewer interlocutor interruptions and fewer backchannels in Autism_only and AuDHD correlated with poorer communication skills in these groups (Fig.2).

Conclusions: Natural conversations with adolescents with and without ADHD and/or autism differed on several key turn-taking metrics including speech overlaps, backchannel counts, and turn exchanges. These differences correlated with social communication skills and could therefore serve as modifiable treatment targets in future personalized interventions aimed at enhancing social outcomes.

63-Viloxazine ER in Adults with ADHD and Depression and/or Anxiety Symptoms: Impact on Sleep

*MaryLin[3], Mark Stein[1], Gregory Mattingly[2], Andrea Formella[3], Jami Earnest[3]

[1]University of Washington, [2]Midwest Research Group, [3]Supernus Pharmaceuticals, Inc.

Hypothesis/Objective: Sleep problems commonly occur in both ADHD and depression. Here we evaluate changes in self-reported sleep quality from a decentralized, open-label trial of viloxazine ER in adults with ADHD and comorbid depression and/or anxiety symptoms [NCT06185985], rated using the Pittsburgh Sleep Quality Index (PSQI).

Methods/Results: Participants (n=161) were required to have a primary diagnosis of ADHD, AISRS score "e24, CGI-S score "e3,and MADRS and/or HAM-A score >22. Viloxazine ER (200-600 mg/day) was added to existing medications for 14 weeks. Participants completed the PSQI (secondary outcome) at baseline and week 14 (end of study). Improvement in self-reported sleep quality (PSQI global score, proportion of participants reporting “good” sleep quality, proportion of participants reporting no sleep problems) was observed at week 14 relative to baseline (Figure 1). Cannabis use and daily caffeine use were more prevalent among participants reporting worsening sleep quality (Figure 2).

Conclusions: Treatment with viloxazine ER was associated with improvement in sleep outcomes in this decentralized trial in adults with ADHD and depression and/or anxiety symptoms. The impact of cannabis use warrants further evaluation in this population.

64-Evaluation of viloxazine ER (Qelbree®) with and without concomitant stimulant use in a decentralized trial of adults with ADHD and symptoms of depression and anxiety

*MaryLin[3], Lenard Adler[1], Ann Childress[2], Andrea Formella[3], Jami Earnest[3]

[1]NYU School of Medicine, [2]Center for Psychiatry and Behavioral Medicine, Inc., [3]Supernus Pharmaceuticals, Inc.

Hypothesis/Objective: Viloxazine ER is a nonstimulant medication, FDA-approved for ADHD in pediatrics ("e6 years) and adults. We evaluated the safety and efficacy of viloxazine ER with and without concomitant stimulant use in a decentralized, open-label, phase IV trial enrolling adults with ADHD who also had substantial depression and/or anxiety symptoms (NCT06185985).

Methods/Results: Participants were primarily recruited via social media and had a primary diagnosis of ADHD (confirmed via MINI-AS), AISRS score "e24, CGI-S for ADHD score "e3, and MADRS and/or HAM-A score >22. Viloxazine ER (200-600 mg/day) was added to existing medications for 14 weeks. Participants using viloxazine ER with vs. without concomitant stimulants had similar baseline scores on ADHD, depression and anxiety measures, and similar improvement at week 14 (end of study) (Figure 1). AEs led to viloxazine ER discontinuation in 10.5% vs 16.5% of participants with and without concomitant stimulant use, respectively.

Conclusions: Adults in this trial experienced improvement in ADHD and symptoms of anxiety and depression following the addition of viloxazine ER to existing medications, regardless of concomitant

psychostimulant use. Viloxazine ER addition appeared generally well-tolerated both with and without psychostimulants; preliminary analysis of safety data showed no obvious concerns.

65-Efficacy and sleep outcomes of viloxazine extended-release (Qelbree®) in a decentralized trial of adults with ADHD and mood symptoms based on self-reported cannabis use

Gregory Mattingly[1], Lenard Adler[2], Mariely Hernandez[3], Andrea Formella[4], *Mary Lin[5], Jami Earnest[4]

[1]Midwest Research Group, [2]NYU School of Medicine, [3]Heathen Health Collective, [4]Supernus Pharmaceuticals, Inc., [5]Supernus Pharmaceuticals, Inc.

Hypothesis/Objective: Patients who self-report cannabis use are often excluded from clinical drug trials, limiting the generalizability of findings. We compared treatment response patterns for cannabis users and non-users in an open-label, decentralized, phase IV clinical trial of viloxazine ER (Qelbree®) in adults with ADHD and depression and/or anxiety symptoms.

Methods/Results: Participants (n=161) had a primary diagnosis of ADHD, AISRS score "e24, CGI-S score "e3, and MADRS and/or HAM-A score >22. Viloxazine ER (200-600 mg/day) was added to existing medications for 14 weeks. Cannabis use (any frequency) was reported by 30.4% (n=49) of participants at screening. Baseline and end-of-study measures of ADHD, depression, and anxiety symptoms were similar regardless of cannabis use (Figure 1); sleep quality (PSQI) showed greater improvement in those participants without cannabis use (Figure 2). Participants with vs without cannabis use had higher discontinuation overall (55.1% vs 26.8%) and due to adverse events (24.5% vs 10.7%).
Conclusions: Viloxazine ER treatment in this decentralized phase IV trial was associated with improvement in ADHD, anxiety and depression regardless of self-reported cannabis use. Participants with cannabis use had higher rates of treatment discontinuation, and negligible improvement in sleep quality.

66-Bioavailability and Tolerability of Lisdexamphetamine Dimesylate Oral Solution Vs Lisdexamfetamine Dimesylate Capsules in Healthy Volunteers

*Gregory Mattingly[1], Joel Young[2], Andrew J. Cutler[3]

[1]Midwest Research Group, [2]Rochester Center for Behavioral Medicine, [3]SUNY Upstate Medical University, Neuroscience Education Institute

Hypothesis/Objective: Lisdexamfetamine dimesylate (LDX) is a long-acting prodrug of dextroamphetamine (d-AMP) approved for attention-deficit/hyperactivity disorder. A new oral solution (OS) formulation of LDX has been developed. This study assessed the bioavailability (BA), safety, and palatability of LDX OS 10 mg/mL versus LDX 70 mg capsules, under fasting conditions in healthy subjects.

Methods/Results: This randomized, cross-over study assessed the BA, safety, and palatability of LDX OS 10 mg/mL versus LDX 70 mg capsules in healthy volunteers. Pharmacokinetic (PK) parameters, area under the curve (AUC), maximum concentration (Cmax), and time to Cmax (Tmax) were calculated using non-compartmental analysis. LDX OS demonstrated a comparable absorption rates of d-AMP to LDX capsules with geometric mean ratios (GMRs) of 110.8% (AUC0-4hrs) 97.2% (AUC4hrs-t), 98.7% (AUC0- infinity), and 100.8% (Cmax), all within the FDA's bioequivalence range. Organoleptic evaluation showed high acceptability. There were 52 AEs reported across both treatments (all mild or moderate); no serious AEs occurred.

Conclusions: The results from this cross-over study indicated that LDX OS and LDX capsules were bioequivalent (PK parameters were within the FDA acceptance range). LDX OS was well tolerated and

well accepted in taste, supporting its potential as an alternative formulation for patients who have difficulty swallowing capsules.

67-Efficacy of Centanafadine in Children and Adolescents With ADHD and High Baseline Emotional Dysregulation: Post Hoc Analysis of a Phase 3 Trial

CAROLINE WARD[1], Zhen Zhang[2], Taisa Skubiak[3], Gregory Parks[1], Judy van Stralen[4], Ann Childress[5], *Gregory Mattingly[6]

[1]Otsuka, [2]Otsuka Pharmaceutical Development & Commercialization Inc., Princeton, NJ, United States, [3]Otsuka Pharmaceutical Development & Commercialization, Inc. (OPDC), [4]Center for Pediatric Excellence, [5]Center for Psychiatry and Behavioral Medicine, Inc., [6]Department of Psychiatry, Washington University School of Medicine, St Louis, MO, USA

Hypothesis/Objective: Two phase 3 clinical trials assessed the safety and efficacy of once-dailyextended-release centanafadine, a norepinephrine, dopamine, and serotonin reuptake inhibitor, for the treatment of ADHD in children (NCT05428033) and adolescents (NCT05257265). This post hoc analysis assesses efficacy in a subgroup of children and adolescents with high-baseline emotional dysregulation (ED).

Methods/Results: Overall, 188 participants were treated with centanafadine (n=92) or placebo (n=96) with a Conners 3–Parent Short (PS) Defiance/Aggression T-score "e70 at baseline (proxy for ED), indicating a very elevated score. ADHD-RS-5 and Conners 3–PS Content Scales were analyzed in this subgroup. P-values were not adjusted for multiplicity. In the ADHD-RS-5 total score and Conners 3–PS Inattention, Executive Function, and Learning problems content scales, participants with high-baseline ED saw greater improvements at each timepoint measured over Weeks 1-6 ($p<0.05$) when compared to placebo. P-values (<0.05) were achieved at most, but not all, time points for Hyperactivity/Impulsivity and Defiance/Aggression.

Conclusions: Children and adolescents with very elevated levels of ED at baseline and who were treated with centanafadine saw greater improvements in core symptoms and associated features of ADHD when compared to placebo.

68-Efficacy of Centanafadine in Children and Adolescents With ADHD and High Baseline Executive Functioning Deficits: Post Hoc Analysis of a Phase 3 Trial

Timothy Wilens[1], Ann Childress[2], Zhen Zhang[3], Taisa Skubiak[4], Gregory Parks[5], Judy van Stralen[6], *Gregory Mattingly[7], CAROLINE WARD[5]

[1]Massachusetts General Hospital, [2]Center for Psychiatry and Behavioral Medicine, Inc., [3]Otsuka Pharmaceutical Development & Commercialization Inc., Princeton, NJ, United States, [4]Otsuka Pharmaceutical Development & Commercialization, Inc. (OPDC), [5]Otsuka, [6]Center for Pediatric Excellence, [7]Department of Psychiatry, Washington University School of Medicine, St Louis, MO, USA

Hypothesis/Objective: Two phase 3 clinical trials assessed the safety and efficacy of once-daily extended-release centanafadine, a norepinephrine, dopamine, and serotonin reuptake inhibitor, for the treatment of ADHD in children (NCT05428033) and adolescents (NCT05257265). This post hoc analysis assesses efficacy in a subgroup of children/adolescents with high-baseline executive functioning (EF) deficits.

Methods/Results: Overall, 435 participants treated with centanafadine (n=210) or placebo (n=225) had a Conners 3–Parent Short (PS) EF T-score "e70 at baseline (very elevated score). ADHD-RS-5 and Conners 3–PS Content Scales were analyzed; P-values were not adjusted for multiplicity. For ADHD-RS-5 total score and Conners 3–PS Inattention, Hyperactivity/Impulsivity, EF, and Learning Problems content scales,

participants with high-baseline EF deficits had greater improvements at each timepoint measured over Weeks 1-6 (p<0.001) when compared to placebo. Over Weeks 1-6, more participants treated with centanafadine than placebo shifted to a T-Score <65 for Conners-PS EF, indicative of average/mildly elevated EF deficits.

Conclusions: When treated with centanafadine, children and adolescents with very elevated levels of EF deficits at baseline saw greater improvements in core symptoms and associated features of ADHD when compared to placebo.

69-Safety and Tolerability of Once-Daily Extended-Release Centanafadine for the Treatment of ADHD in Children Aged 4–5 Years: Results From a Phase 3 Randomized Clinical Trial

Osman Turkoglu[1], Na Jin[2], CAROLINE WARD[3], Taisa Skubiak[4], *Ann Childress[5]

[1]Otsuka Pharmaceutical Development & Commercialization, Inc., [2]Otsuka Pharmaceutical Development & Commercialization, Inc., Rockville, MD, USA, [3]Otsuka, [4]Otsuka Pharmaceutical Development & Commercialization, Inc. (OPDC), [5]Center for Psychiatry and Behavioral Medicine, Las Vegas, Nevada, USA

Hypothesis/Objective: A phase 3, randomized, double-blind, placebo-controlled trial (NCT05428033) aimed to determine the safety of once-daily extended-release centanafadine, a norepinephrine, dopamine, and serotonin reuptake inhibitor, for the treatment of ADHD in children aged 4–12. Presented here are data for preschool-aged children (ages 4 5 years) over 6 weeks of treatment.

Methods/Results: A total of 94 participants (mean age 4.6 years, 61.7% male, 68.1% White) with a primary diagnosis of ADHD were treated with centanafadine or placebo; 76.6% of the population completed the trial. Discontinuation rates due to adverse events (AEs) were 4.8% (centanafadine) and 0.0% (placebo). The most common treatment-related AEs ("e2% in centanafadine group and greater than placebo) were decreased appetite (4.8%), rash (4.8%; AE of special interest), influenza (3.2%), and insomnia (3.2%). Severe AEs (3.2%; centanafadine group) were deemed not related to centanafadine.
Conclusions: Centanafadine had a favorable safety profile and was generally well tolerated in preschool-aged children (ages 4 5 years) over 6 weeks of treatment.

70-Treatment Outcomes With Centanafadine in Preschool-Aged Children (4–5 Years) With ADHD: Results From a Phase 3 Randomized Clinical Trial

CAROLINE WARD[1], *Ann Childress[2], Dorothee Oberdhan[3], Na Jin[4], Taisa Skubiak[3], Robert L. Findling[5]

[1]Otsuka, [2]Center for Psychiatry and Behavioral Medicine, Las Vegas, Nevada, USA, [3]Otsuka Pharmaceutical Development & Commercialization, Inc. (OPDC), [4]Otsuka Pharmaceutical Development & Commercialization, Inc., Rockville, MD, USA, [5]Department of Psychiatry, Virginia Commonwealth University, Richmond, VA, United States

Hypothesis/Objective: A phase 3, randomized, double-blind, placebo-controlled trial (NCT05428033) aimed to determine the efficacy and safety of once-daily extended-release centanafadine, a norepinephrine, dopamine, and serotonin reuptake inhibitor, for the treatment of ADHD in children. Presented here are data for preschool-aged children (ages 4–5 years) over 6 weeks of treatment.

Methods/Results: Overall, 94 participants (mean age 4.6 years, 61.7% male, 68.1% White) with a primary diagnosis of ADHD were treated with centanafadine or placebo. The primary and key secondary endpoints were change from baseline in the ADHD-RS-5, and CGI-S-ADHD and Conners 3–Parent Short form at Week 6, respectively. When compared to placebo, centanafadine showed numerical improvements in inattention

and hyperactivity/impulsivity symptoms of ADHD, although this cohort was not powered to see statistical significance for efficacy. Moreover, a numerical reduction in overall severity of ADHD as measured by the CGI-SADHD was observed in those treated with centanafadine when compared to placebo.

Conclusions: In children 4 to 5 years of age, relative to placebo, centanafadine showed numerical improvements in core symptoms of ADHD and a numerical reduction in ADHD severity as measured by the CGI-S-ADHD.

71-Pediatric and Adult Treatment of Attention-Deficit/Hyperactivity Disorder With Viloxazine Extended-Release, a Multimodal Medication: Expert Panel Guidance

*Ann Childress[1], Jo Hughes[2], Stephen Faraone[3], Darius Shayegan[4], Michael Steinman[4], Jeffrey Newcorn[5]

[1]Center for Psychiatry and Behavioral Medicine, [2]Piedmont Partners for Mental Health, [3]Norton College of Medicine at SUNY Upstate Medical University, [4]Arbor Scientia Group, [5]Icahn School of Medicine at Mount Sinai

Hypothesis/Objective: Viloxazine extended-release (ER) is a nonstimulant norepinephrine reuptake inhibitor and serotonin modulator that received US Food and Drug Administration approval for adult and pediatric treatment of attention-deficit/hyperactivity disorder (ADHD) within the past 5 years. We developed expert guidance to support prescribers who have limited experience using this medication.

Methods/Results: We used a modified Delphi method with 2 surveys and 2 meetings that included 11 experienced viloxazine ER prescribers. Agreement with a survey statement was measured using a 5-item Likert scale, and consensus was reached when "e70% of participants aligned. A viloxazine ER guidance table was based on outcomes. The panel broadly agreed that viloxazine ER offers safe and effective ADHD treatment and is a suitable first-line agent for certain patient types. It reached a consensus on 90 clinical principles, of which 19 key or overarching principles were prioritized from “low priority” to “high priority.”

Conclusions: This guidance, which in many cases is based on clinical experience rather than clinical data, may offer inexperienced prescribers of viloxazine ER the opportunity to more successfully leverage this treatment option for their appropriate patients. Ongoing and future trials will lead to refinement of these recommendations.

72-A Phase 3, Double-Blind, Randomized, Placebo-Controlled, Multicenter, Fixed-Dose Study of CTx-1301 (Dexmethylphenidate) in Children and Adolescents with Attention-Deficit/Hyperactivity Disorder

*Ann Childress[1], Matthew Brams[2], Michael Cattaneo[2], Raul Silva[2]

[1]Center for Psychiatry and Behavioral Medicine, [2]Cingulate Therapeutics

Hypothesis/Objective: Changes in body habitus and lifestyle demands may influence a medication’s efficacy and safety profile across pediatric age groups. This analysis of data from a phase 3 study evaluated treatment with an investigational, trimodal, long-acting dexmethylphenidate formulation (CTx-1301) in children (6-12 years) and adolescents (13-17 years) with attention-deficit/hyperactivity disorder (ADHD).

Methods/Results: Patients treated with a once-daily, fixed-dose CTx-1301 regimen (18.75, 25, or 37.5 mg/day) or placebo were stratified by age: children (n=64) and adolescents (n=39). The primary endpoint was change from baseline to week 5 in ADHD rating scale 5 (ADHD-RS-5) score. ADHD-RS-5 improvement was numerically greater in patients treated with CTx-1301 compared with placebo in both age groups, with the largest mean difference observed in the highest dose group (children: –14.90 [95%

CI: –24.45, –5.35]; p=0.003; adolescents: –12.79 [95% CI: –23.76, –1.82]; p=0.024). Secondary endpoint and safety findings for both age groups were consistent with the overall study population.

Conclusions: CTx-1301 demonstrated dose-related improvements in ADHD symptoms with a favorable safety profile in both children and adolescents. The consistency of efficacy and safety findings reinforce the potential for CTx-1301 as a once-daily treatment option for patients with ADHD aged 6 years and older.

73-Determining the Optimal Dose of JORNAY PM® in Adolescents and Adults with ADHD in a Real-World Psychiatric Setting

Joel Young[1], Richard Powell[2], Anna Powell[1], *Lauren Granata Carollo, Lisa Welling[3], Jaime Saal[1], Margot Nash[4]

[1]Rochester Center for Behavioral Medicine, [2]The Rochester Center for Behavioral Medicine, [3]Oakland University, [4]MedaData/MindMetrix

Hypothesis/Objective: JORNAY PM® is a delayed/extended-release methylphenidate for ADHD patients "e6 years old. As no published studies evaluate optimal dosing in adolescents (age 13-17) or adults (age "e18), this study applies predictive regression to real-world data to identify effective doses.

Methods/Results: A regression curve analysis of de-identified data from a large regional psychiatric practice examined JORNAY PM prescriptions for adolescents (n = 912) and adults (n = 1694) with ADHD (64% female; age: M = 28.9 years; SD = 14.3; 98% white). A cubic model best fit both groups (adolescents: R^2 = .042, F(3,909) = 13.429; adults: (R^2 = .22, F(3,1691) = 159.229), with stabilization at 60 mg for adolescents and 80 mg for adults. Analysis of mean effectiveness and tolerability measurements at these doses indicated mild symptom severity and doses were well-tolerated.

Conclusions: In this retrospective analysis, JORNAY PM was effective and well-tolerated.Regression predicted optimal stabilization at 60 mg for adolescents and 80 mg for adults. Real-world data informs dosing strategies, but are limited by sample homogeneity, highlighting the need for broader demographics.

74-Evaluation of the Risks and Benefits of JORNAY PM® in Adolescent and Adult Patients with ADHD Compared to Concerta

Joel Young[1], Richard Powell[2], Anna Powell[1], *Lauren Granata Carollo, Lisa Welling[3], Jaime Saal[1], Margot Nash[4] [1]Rochester Center for Behavioral Medicine, [2]The Rochester Center for Behavioral Medicine, [3]Oakland University, [4]MedaData/MindMetrix

Hypothesis/Objective: JORNAY PM® and Concerta are extended-release methylphenidate HCl formulations. JORNAY PM's delivery system delays release of methylphenidate up to 10 hours, allowing evening dosing and extended daytime release. The study evaluates the non-inferiority of JORNAY PM versus Concerta in efficacy and tolerability using real-world data from adolescents and adults.

Methods/Results: This single-site, retrospective study analyzed patient records from 187 ADHD patients (aged 13-69) prescribed JORNAY PM, Concerta, or generics with "e2 psychiatric visits at a large regional outpatient psychiatric practice. Patients completed ADHD (ASSET), depression (PHQ-9), and anxiety (GAD-2) assessments. Providers rated Clinical Global Impression of Severity (CGI-S). Primary endpoints were ASSET and CGI-S; secondary were PHQ-9 and GAD-2. One-sided paired t-tests assessed non-inferiority to Concerta (;B< .03). JORNAY PM was non-inferior on all outcomes overall and by age group. Adults showed superior improvement in motor tic frequency within the non-inferiority margin.

Conclusions: Analyses demonstrate that JORNAY PM may elicit improvements comparable to Concerta in ADHD, depression, and anxiety symptoms. Side effects were non-inferior to Concerta. Findings support

its use in adolescents and adults who may benefit from evening dosing. Results were limited by low patient diversity and small sample size.

75-Changes in Morning and Evening Functioning in Children and Adolescents with ADHD taking JORNAY PM® versus Concerta®

Joel Young[1], Richard Powell[2], Anna Powell[1], *Lauren Granata Carollo[3], Lisa Welling[4], Jaime Saal[1], Margot Nash[5]

[1]Rochester Center for Behavioral Medicine, [2]The Rochester Center for Behavioral Medicine, [3]MedaData, LLC, [4]Oakland University, [5]MedaData/MindMetrix

Hypothesis/Objective: JORNAY PM® is a delayed-release methylphenidate for ADHD in patients "e 6 years, enabling evening dosing with extended daytime coverage. Comparative efficacy data are limited. This study compared JORNAY PM with Concerta® for managing morning and evening ADHD symptoms in children and adolescents.

Methods/Results: This study compared JORNAY PM to Concerta in patients aged 6-17 years using parent surveys from two groups: an online panel (Group 1; n = 60) and an outpatient/social media sample (Group 2; n = 48). Group 1 completed single-session surveys on ADHD, depression, anxiety, and morning/evening functioning. Group 2 completed repeated measures over 3 alternating days. Group 1 showed no differences between groups. In Group 2, JORNAY PM was associated with less morning functional impairment ($F = 7.83$, $p = .01$), whereas evening scores were comparable.

Conclusions: Children and adolescents taking JORNAY PM or Concerta showed similar ADHD, depression, and anxiety symptom severity. JORNAY PM may lessen the impact of morning ADHD symptoms while maintaining evening functioning. Results are limited by small sample size, preventing detection of small to moderate effects.

76-Changes in Depression and Anxiety Severity in Adults with ADHD Treated with JORNAY PM®: A Retrospective Real-World Analysis

Joel Young[1], Richard Powell[2], Anna Powell[1], *Lauren Granata Carollo[3], Lisa Welling[4], Jaime Saal[1], Margot Nash[5]

[1]Rochester Center for Behavioral Medicine, [2]The Rochester Center for Behavioral Medicine, [3]MedaData, LLC, [4]Oakland University, [5]MedaData/MindMetrix

Hypothesis/Objective: JORNAY PM® is a methylphenidate for ADHD in patients "e 6 years. Its delivery system delays release up to 10 hours, allowing extended daytime release and evening dosing. Given frequent depression and anxiety comorbidity in ADHD, this study compared JORNAY PM's impact on these symptoms with Adderall XR.

Methods/Results: Analyses examined records from 138 matched pairs of adult ADHD patients (matched on age, stimulant history, number of visits, and time on medication) prescribed JORNAY PM or Adderall XR with "e2 visits in 6 months at a single-site regional outpatient psychiatric practice. Patients completed depression, anxiety, and ADHD assessments; providers recorded Clinical Global Impression of Severity. Trajectories were modeled using change from baseline (CFB) and first visit (CFF). No differences emerged in CFB, but medication type correlated with depression and anxiety (all $p < .022$) CFF. JORNAY PM showed decreasing depression and anxiety trajectories, whereas Adderall XR showed slight increases.

Conclusions: In this retrospective database analysis, JORNAY PM was associated with favorable symptom trajectories in depression and anxiety compared to Adderall XR. The potential for JORNAY PM to improve comorbid symptoms merits further exploration. Analyses are limited by visit interval and frequency variability, small sample size, and potential confounds.

77-Mothers Experience More Severe Impact of ADHD, Depression, and Anxiety Symptoms than Non-Mothers: Results from a Retrospective Real-World Study

Joel Young[1], Richard Powell[2], Anna Powell[1], *Lauren Granata Carollo[3], Lisa Welling[4], Jaime Saal[1], Margot Nash[5]

[1]Rochester Center for Behavioral Medicine, [2]The Rochester Center for Behavioral Medicine, [3]MedaData, LLC, [4]Oakland University, [5]MedaData/MindMetrix

Hypothesis/Objective: Parenting stress may exacerbate psychiatric symptoms, especially in women. Previous research has found effects of mothers' psychopathology on children's outcomes, but little is known about whether parenting affects symptom severity of mothers across common mental health concerns. This study compares ADHD, depression, and anxiety symptom severity between mothers and non-mothers.

Methods/Results: Retrospective de-identified data from a large outpatient psychiatric center were sampled from 03/01/2025 - 09/01/2025. Adult mother (n = 257) and non-mother (n = 4868) outpatient psychiatric patients were included in the analyses. Before each office visit, patients completed digital self-rated scales assessing ADHD (ADHD Symptom and Side Effect Tracking [ASSET]), depression (PHQ-9), and anxiety (GAD-7) symptom severity. MANOVA of least-squared means of scale scores demonstrated a larger impact across all assessments in mothers compared to non-mothers ($p < .001$), with follow-up ANOVA revealing greater symptom severity on the ASSET, PHQ-9, and GAD-7 (all $p < .001$) in mothers.

Conclusions: Results show that mothers experienced heightened severity of ADHD, depression, and anxiety mental health symptoms compared to non-mothers. Interpretation is limited by the reliability of intake paperwork to confirm motherhood status and low sample diversity. Factors leading to exacerbated symptoms in mothers should be explored in future research.

78-Auditory Change Detection and Cortical Habituation During Early and Middle Childhood in Attention-Deficit/Hyperactivity Disorder

*Marija Pranjic[1], Emeline Palfrey[2], Josephine Landau[3], Jirapat Likitlersuang[4], Anne Arnett[3]

[1]Boston Children's Hospital, Harvard Medical School, [2]Boston Children's Hospital & Harvard University, [3]Boston Children's Hospital, [4]St. Jude Children's Research Hospital

Hypothesis/Objective: Auditory perception emerges from the dynamic integration of bottom-up sensory encoding with top-down control, a process that appears disrupted in attention-deficit/ hyperactivity disorder (ADHD). Using an auditory oddball paradigm, we investigated auditory event-related potentials in 186 children, including 115 in early childhood (2:6-4:11 years) and 71 in middle childhood (7-11:11 years).

Methods/Results: Across both samples, children with a research diagnosis of ADHD showed altered mismatch negativity (MMN) responses to auditory deviance and variable maturation of attentional habituation (novelty-P3) compared to typically developing (TD) children. In early childhood, atypical MMN in the ADHD group was driven by a lack of habituation to repeated stimuli (B=0.20, SE=0.09, p=.026), suggesting immature sensory adaptation. Similarly, ADHD was marked by reduced habituation of novelty-P3 responses (B=" 0.52, SE=0.21, p=.016), suggesting inefficient adaptation to irrelevant novelty. In

middle childhood, MMN but not P3 amplitudes were attenuated in ADHD (B=" 8.61, SE=2.41, p<.001), indicating persistent vulnerabilities in preattentive processing.

Conclusions: Together, these findings indicate that both maturational lag and maturational deviance mechanisms contribute to ADHD pathophysiology. Our results advance a systems-level account of ADHD in which impaired integration of ascending sensory input with descending predictive signals undermines flexible adaptation to changing environments.

79-Alpha Modulation During Encoding in Working Memory in Adults with ADHD

*Talia Roman Lopez[1], Fang Yu Chang[2], Holly Truong[2], Timothy Kelley[2], Joel P Diaz-Fong[2], Andrea Dillon[3], Sandra Loo[4], Agatha Lenartowicz[5]

[1]UCLA, Semel Institute for Neuroscience and Human Behavior, [2]UCLA Semel Institute, [3]UCLA, [4]University of California, Los Angeles, UCLA School of Medicine, [5]University of California Los Angeles

Hypothesis/Objective: We tested whether occipital alpha (8–12 Hz) alterations previously found in children with ADHD persist in adulthood. Younger children had weaker alpha ERD, while older children resembled TD peers. We hypothesized that group differences would no longer be present in adulthood.

Methods/Results: A total of 136 adults (mean = 23.45 years old, F:52/ M: 84) completed a visuospatial Sternberg task (loads 1–7 items) with EEG recorded; age was covaried. Groups were defined by current ADHD diagnosis and symptom counts. Behaviorally, ADHD and TD adults performed similarly; increasing load slowed responses and reduced accuracy. Neurally, no group differences emerged in occipital alpha power. However, Load 1 consistently produced weaker ERD than higher loads, confirming task sensitivity.

Conclusions: Developmental differences in occipital alpha ERD observed in childhood ADHD did not persist into adulthood. Findings suggest that neural markers may normalize over time, indicating possible developmental “catch-up” in adults with ADHD compared to their TD peers.

80-The True Cost of ADHD Care Today: Patient & Caregiver Survey Regarding the Financial Impact of Diagnosing & Treating ADHD

*Ann Rodgers[1], Carole Fleck[2]

[1]WebMD, [2]ADDitude Magazine/WebMD

Hypothesis/Objective: ADDitude surveyed its audience of caregivers and adults with ADHD regarding the dollar amounts they paid out-of-pocket for ADHD evaluations and diagnoses, treatment appointments, and ongoing ADHD care, including the costs of prescription medication and non-pharmacological treatments, to quantify the financial impact of the condition on patients.

Methods/Results: ADDitude deployed a 34-question survey to a segment of its opt-in email subscribers, 1,785 of whom answered in SurveyMonkey. Key findings regarding average out-ofpocket costs include: ADHD evaluations and diagnoses cost $3,387 per child and $1,945 per adult; ongoing clinical appointments cost $2,695 for children in the household and $1,790 for adults each year; ADHD medication costs $901 for children and $836 for adults each year; nonmedical interventions and approaches cost $4,991 for children and $2,101 for adults each year - this included therapy, coaching, dietary changes, supplements. 25% said cost limited or changed their use of ADHD medication.

Conclusions: Each year, the average family is spending more than $8,500 on ADHD care for children and $4,700 for adults. Cost is a determining and/or limiting factor for one-quarter of families; 16% said

their medications are not covered at all by insurance; and 21% said ongoing care is not covered.

81-Time Trends in ADHD Symptoms: Distribution of ADHD Symptoms Across Children Born in Years 2000-2023 in a United States ECHO Cohort

*Julie Schweitzer[1], Anna Ross[2], Catrina Calub[3], Meghan Miller[4], Bianca Acevedo[5], Jennifer Ames[6], Judy Aschner[7], Deborah Bennett[8], Susan Carnell[9], Lisa Croen[6], Viren D'Sa[10], Luke Grosvenor[6], Abdulmumin Ibrahim[11], Donghai Liang[12], Courtney Lynch[13], Kristen Lyalll[14], Grier Page[15], Lauren Shuffrey[16], Noya Galai[2], Rebecca Schmidt[17]

[1]University of California, Davis, [2]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, [3]MIND Institute, Dept Psychiatry, University of California Davis Sch Med, [4]University of California, Davis MIND Institute, [5]Feinstein Institutes for Medical Research, Northwell Health, Great Neck, NY, [6]Kaiser Permanente Division of Research, Oakland, CA, [7]Department of Pediatrics, Hackensack Meridian School of Medicine, Nutley, NJ, [8]UC Davis, [9]Johns Hopkins University School of Medicine, [10]Warren Alpert Medical School of Brown University, Providence, RI, [11]Department of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine, Baltimore, MD, [12]Gangarosa Department of Environmental Health, Rollins School of Public Health, Emory University, Atlanta, GA, [13]Department of Obstetrics and Gynecology, The Ohio State University College of Medicine, Columbus, OH, [14]A.J. Drexel Autism Institute, Dornsife School of Public Health, Drexel University, Philadelphia, PA, [15]RTI International, [16]Department of Pediatrics, NYU Langone Medical Center, New York, NY, [17]Department of Public Health Sciences, UC Davis

Hypothesis/Objective: To examine within the NIH ECHO study if the prevalence of ADHD symptoms changed for children born between each birth year 2000-2023 utilizing parent-ratings from a scale measuring symptom distribution in children. We also investigated whether demographic factors and enriched recruitment sites modified the degree of presence of ADHD symptoms.

Methods/Results: Birth year served as a proxy for calendar time. ADHD symptoms were measured using parent-rated CBCL Attention Problem T-scores, selecting the rating closest to age 7. The sample included 10,878 preschool (43.3%) and 14,227 school-age children (56.7%).We fitted piecewise linear models for continuous scores with random effect for recruitment site. Main results for the general population cohorts, stratified by form type, showed modest declines (-0.45/year, p=0.013) emerging in 2020 over 9,783 preschool scores, whereas 12,528 school-age children exhibited similar declines (-0.39, p=0.002) starting in 2015. Trends were adjusted for child age and sex.

Conclusions: ADHD symptoms modestly declined across recent ECHO birth cohorts. Other studies on U.S. diagnostic trends found ADHD diagnosis increased from 1997-2016, plateauing between 2017-2020. Future analyses will explore diagnostic trends in the ECHO sample and associations with clinically elevated ADHD symptoms as ADHD remains a significant public health concern.

82-VRAM: Investigating Attention in Children with ADHD using Virtual Reality Technology

Saeedeh Komijani, Catrina Calub[1], Jared Borden[2], Jeramiah Bunac[3], Dipak Ghosal[2], Joy Geng[4], *Julie Schweitzer[5]

[1]MIND Institute, Dept Psychiatry, University of California Davis Sch Med, [2]UC Davis, [3]UC Davis MIND Institute, [4]UC Davis Center for Mind and Brain, [5]University of California, Davis

Hypothesis/Objective: Distractibility, the tendency to focus on irrelevant stimuli rather than the primary task, is a key challenge in learning environments, particularly for individuals with attention-deficit/hyperactivity disorder (ADHD). Distractibility is highly associated with academic challenges. Despite its impact, few methods quantify distractibility in realistic academic settings relevant to ADHD.

Methods/Results: Thirty children with significant distractibility (ages 7–13) completed academic and attention-control tasks in a 360° virtual reality (VR) classroom with auditory and visual distractions. We measured gaze allocation (on-task vs. off-task) and task performance.Distractors reduced attention, but re-orientation times varied greatly from child to child. Salience and unpredictability, more than duration of the distractor, influenced disruption. Auditory distractors, especially speech and unpredictable sounds, prolonged off-task gaze and increased errors more than visual stimuli. Further analyses will examine links between gaze patterns, task accuracy, and response times.

Conclusions: Findings may inform precise measures of distractibility and inspire adaptive learning technologies that dynamically respond to attentional lapses in ADHD. By revealing how different distractions affect attention and performance, this work can guide the creation of learning environments that foster sustained engagement and stronger academic outcomes.

83-Co-Occurring Polycystic Ovarian Syndrome and Attention Deficit Hyperactivity Disorder: Ethnic and Racial Trends in Prevalence

Maggie Markgraf[1], *Emily Norris[1], Henney Hambrose[1], Emily Cranmer[1], Stephen Faraone[2], Nevena Radonjic[3], Yanli Zhang-James[3]

[1]Upstate Medical University, Norton College of Medicine, [2]Norton College of Medicine at SUNY Upstate Medical University, [3]SUNY Upstate Medical University

Hypothesis/Objective: Maternal polycystic ovarian syndrome (PCOS) has been linked to attention deficit hyperactivity disorder (ADHD) in offspring. However, little is known regarding whether ADHD is associated with increased risk of PCOS. Our objective was to investigate the prevalence of PCOS in women with and without ADHD of varying races and ethnicities.

Methods/Results: We conducted a retrospective cohort study using electronic health record data from the TriNetX research network, comparing incidence of PCOS in women with ADHD to those without using Kaplan-Meier survival analyses. Cohorts were matched for age, socioeconomic stressors, and analyzed across race and ethnic groups. Women with PCOS diagnosis prior to ADHD diagnosis, or an equivalent healthcare encounter in the non-ADHD cohort, were excluded. Across all races and ethnicities, risk of PCOS was higher in women with ADHD compared to those without, especially in Pacific Islanders and Native Americans. Hispanic women had the highest rates of ADHD with PCOS overall.

Conclusions: Our findings suggest that ADHD in women is associated with increased risk of PCOS across all race and ethnic cohorts, but with a significant disparity in Hispanic, Pacific Islander, and Native American women. This highlights the need for comprehensive clinical observation among certain populations of patients.

84-Patient experience of diagnosis and treatment for Adult ADHD: A scoping review

*Jenn Miller[1], Ray Corcoran[2], Zhuyu Dong[3], Ava Gaddis[2], Elias Graham[3], Jillian Holbrook[3], Mikayla Maleh[3], Marushka Rout[2], Melisa Shafiee[3], Aleta Baldwin[1]

[1]Sacramento State, [2]Seattle Children's Hospital, [3]University of Washington

Hypothesis/Objective: To our knowledge, no review exists to describe the patient perspective of adults seeking diagnosis and treatment for ADHD. This scoping review assesses the literature, organized around a six-stage conceptual model: (1) Awareness/Questioning; (2) Seeking Advice;
(3) Seeking Diagnosis; (4) Seeking Treatment; (4) Repair/Reframing; and (6) Maintenance.

Methods/Results: Following PRISMA-ScR methods, n=44 articles were selected for analysis, most of which were qualitative (n=35). Data were extracted and coded both inductively and deductively. Results provide support for a six-stage patient journey. However, findings indicate that adults seeking diagnosis and treatment for ADHD may not proceed through the stages sequentially, and may revisit stages throughout the lifespan. Key themes that emerged include: 1) adults proactively seek and share information about ADHD; 2) patients are highly engaged in the diagnosis and treatment process; and 3) the patient journey varies greatly at intrapersonal, interpersonal, institutional, and systems levels.

Conclusions: Published evidence highlights heterogeneity in the experience of adults seeking care for ADHD. Further research is needed to identify factors contributing to variability in the U.S. context, as only n=12 of selected studies were explicitly situated in the United States. This project lays the groundwork for an upcoming mixed-methods study.

85-Executive Function Improvement for Individuals with ADHD Starting College: Scientifically Proven Methods

*Maria Ramirez Valdes[1], Esther Ranero Carrazana[2], Marien Gonzalez [1], Dr. Rolando Santana

[1]Albizu University, [2]Albizu University

Hypothesis/Objective: Attention-Deficit/Hyperactivity Disorder (ADHD) affects about 5% of people worldwide and creates challenges for college students, such as procrastination, inattention, and poor organization. Research shows evidence-based interventions improve executive function and increase graduation success. This poster reviews peer-reviewed studies on effective supports for college students with ADHD.

Methods/Results: Our findings indicate that combining prescription medication with evidence-based interventions significantly strengthens executive functioning. Medication improves focus and information processing but works best alongside complementary strategies. Executive function training, such as academic planners with reminders, aids organization, planning, and memory while reducing procrastination. Mindfulness practices foster self-awareness and concentration, and physical activities like team sports support attention, persistence, and discipline. Additionally, digital tools have emerged as effective interventions; examples include FDA-approved video games like EndeavorRX and electronic calendars designed to improve planning and task management. Together, these approaches provide college students with ADHD a holistic pathway toward academic success.

Conclusions: These strategies enhance executive functions in college students with ADHD by promoting awareness and acceptance of the diagnosis. They strengthen organization, communication, and time-management skills, leading to improved academic performance, greater self-efficacy, and higher self-esteem, ultimately empowering students to succeed in their educational journey.

86-Predictors of teacher adherence to a daily report card for students with ADHD

*Alice Mullin[1], Joshua Langfus[2], Pevitr Bansal[3], Linda Pfiffner[4]

[1]University of California, San Francisco , [2]University of California, San Francisco, [3]Montclair State University, [4]University of California San Francisco

Hypothesis/Objective: Daily Report Cards (DRCs) are evidence-based tools for students with ADHD, but inconsistent teacher adherence limits effects. In this study, we evaluated teacher characteristics, clinician and principal support, and parent DRC adherence in predicting teacher DRC adherence in the context of a

multicomponent school-home treatment for ADHD.

Methods/Results: A linear mixed model, using the Restricted Maximum Likelihood method, examined the effects of teacher characteristics, clinician and principal support, and parent DRC adherence on teacher DRC adherence (ranging from 20%-100%, m=0.73, sd=0.19), accounting for variability across schools in a sample of 71 students. The overall model was significant, F(1, 29.08)=11.18, p=.002. A significant effect of years of teaching experience (m=11.7, sd=7.65) was found, F(1, 58.04)=4.44, p=.040, indicating that individuals with more teaching experience were more likely to complete the DRCs. The remaining constructs did not significantly contribute to teacher adherence.

Conclusions: These findings have clinical implications for school-based clinicians supporting teachers with DRC implementation. Clinicians may need to provide additional support to newer teachers. The insignificant role of principal support diverges somewhat from existing school mental health literature, but indicates that the DRC may be relatively robust to this factor.

87-Neighborhood and Family Predictors of ADHD Risk: A Machine Learning Approach Using ECHO Data

*Catrina Calub[1], Maxwell Armand Mansolf[2], Shaili Ganatra[2], Deborah Bennett[3], Irva HertzPicciotto[3], Julie Schweitzer[4] [1]MIND Institute, Dept Psychiatry, University of California Davis Sch Med, [2]Northwestern University, [3]UC Davis, [4]University of California, Davis

Hypothesis/Objective: Neighborhood and family demographic factors have been linked to ADHD risk, but most research is cross-sectional or examines exposures in isolation, leaving unclear which are most influential. This study is the first to compare the relative contributions of neighborhood- and family/child-level variables in predicting ADHD symptoms using machine learning.

Methods/Results: Data were analyzed from 8,974 Environmental Influences on Child Health Outcomes (ECHO) participants (median age = 11.6; 52% male; 67% White). Youth were included if they had residential address data and ADHD symptom ratings in adolescence (ages 10–17) from either the Child Behavior Checklist or Conners 3 ADHD Index-Parent. Early childhood (ages 2–5) exposures included the Child Opportunity Index (COI) 3.0 and family/child demographics.Random forest analyses showed COI overall and domain scores were the strongest predictors of ADHD symptoms, followed by age at assessment and gestational age, while family demographics (e.g., income, education) were least predictive.

Conclusions: Findings highlight the importance of neighborhood contexts in shaping ADHD symptoms, underscoring the need for future research into specific neighborhood-level factors that may play an influential role in the development of ADHD, independent of known risk factors such as shared genetics and household environment.

88-Online CME Improves Clinician Knowledge of Emerging ADHD Therapies and Mortality Risks Associated With Comorbidities

*Soumya Staton, Meghan Wilson[1], Clinton Wright

[1]Medscape

Hypothesis/Objective: This study evaluated the efficacy of online CME in updating psychiatrists and primary care physicians (PCPs) on emerging non-stimulant ADHD therapies and the mortality risks of untreated comorbidities. The objective was to address persistent knowledge gaps regarding novel mechanisms of action and real-world safety data.

Methods/Results: Educational impact was assessed via pre/post-questions (February–May 2025). Analysis included 557 psychiatrists and 117 PCPs. Both cohorts achieved significant gains (P<.001) with moderate-to-

robust effect sizes (Psychiatrists d=0.66; PCPs d=0.60).Knowledge of novel therapy profiles improved (Psychiatrists: 50% to 68%; PCPs: 39% to 50%). Crucially, recognition of mortality risks associated with comorbidities increased, with PCPs demonstrating a 52% relative increase. Confidence regarding emerging treatment strategies rose for 43% of psychiatrists and 35% of PCPs.

Conclusions: Online CME effectively closed knowledge gaps among specialists and primary care. The intervention successfully translated complex clinical trial data into practice-relevant knowledge. Most notably, the education drastically improved awareness of the mortality risks inherent in ADHD comorbidities, highlighting the potential for CME to drive urgency in optimal patient management.

89-ADHD Coaching for Adults: A Prospective Study

Elizabeth Ahmann[1], *Micah Saviet[2]

[1]Maryland University of Integrative Health, [2]Springer Institute

Hypothesis/Objective: This quantitative component of a single-group, prospective, mixed-methods study—exploring outcomes of a 12-session individual ADHD coaching engagement for adults—hypothesized that coaching would be related to improvements in: 1) ADHD symptoms, 2) executive functions, and 3) functional impairment at both post-coaching and at a six-week follow-up. Goal attainment was also explored.

Methods/Results: Experienced, credentialed, independently practicing ADHD coaches, meeting defined criteria, recruited clients through their private practices, screening them for study eligibility. They provided a 12-session coaching engagement following a manualized approach, previously developed. Data collection from 43 clients pre- and post-coaching, and at a 6-week post-coaching follow-up, included widely-used, validated measures of ADHD symptoms, executive functioning, and functional impairments. Coach-client working alliance and fidelity to the manualized approach were high. Goal attainment was explored, with positive outcomes. Both statistically and clinically significant improvements were found in ADHD symptoms, executive functioning, and functional impairment post-coaching, and improvements continued at the 6week follow-up.

Conclusions: One of few studies of ADHD coaching for adults, this study demonstrated significant improvements in ADHD symptoms, executive functioning, and functional impairment, increasing through 6-weeks post-coaching. ADHD coaching has a role to play as an effective support service, providing significant value in the multimodal care of adults with ADHD.

90-Effects of Instructional Context on Attention during Learning Activities in Children with and without ADHD

*Fang Yu Chang[1], Xinyi Zoe Mao[2], Andrea Dillon[3], Sandra Loo[4], Jennie K. Grammer[2], Agatha Lenartowicz[5]

[1]UCLA Semel Institute, [2]School of Education & Information Sciences, University of California, Los Angeles, CA, USA, [3]UCLA, [4]University of California, Los Angeles, UCLA School of Medicine, [5]University of California Los Angeles

Hypothesis/Objective: There exists a need to understand factors that support attention in naturalistic settings, like classrooms, especially for children with ADHD. Here we asked: (1) Does instructional context affect attention? (2) Does this differ for children with ADHD? (3) How does lab task performance correlate with attention measured during learning activities?

Methods/Results: We assessed attention in 55 participants (age: 8.5 yr; M:F = 30:25;ADHD=13) during cognitive tasks and four learning activities. The activities varied across two dimensions – amount of

interaction (In-person versus Individual, In-person versus Zoom) and learning management (teacher-led versus student-led). Visual attention was assessed using alpha-band (8-12Hz) oscillations, derived from electroencephalography (EEG) recordings. Other behavioral measures included task performance and video-coded behavior. Attention was significantly greater during Individual than In-person or Zoom contexts, and weakest in the Video context. There were no significant effects of ADHD diagnosis. Lab task performance was not significantly correlated with neural measures during

Conclusions: Instructional context has a significant effect on attention and behavioral engagement during learning activities, regardless of ADHD diagnosis. Furthermore, correlations between lab task performance and learning activity metrics of attention suggest that there exists a need to tease apart multiple factors contributing to attention in naturalistic environments.

91-Developing an Integrative Model of Emotional Suppression in Adults with ADHD: A Narrative Review

*Elijah Bautista[1], Beck Peterson[1], Fiona MacLeitch[1]

[1]UCLA

Hypothesis/Objective: We propose a theoretical model grounded in Gross's Process Model of Emotional Regulation, introducing emotional suppression as a precursor to response-focused regulation strategies to combat emotional impulsivity while mitigating the effects of long-term emotional suppression in individuals with ADHD.

Methods/Results: This narrative review involved an extensive literature search using peer-reviewed sources from Google Scholar and PubMed. The focus was on emotional regulation strategies in individuals with ADHD, particularly emotional suppression. ADHD is associated with emotional impulsivity, often due to an overactive amygdala and underactive prefrontal cortex, which together lead to intense emotional responses and poor inhibition. While suppression is typically seen as less effective than strategies like cognitive reappraisal, research suggests it may offer short-term relief. When used to inhibit immediate emotional reactions, suppression can reduce distress, provided the emotion is later processed, as chronic suppression may worsen outcomes.

Conclusions: We aim to implement emotional regulation earlier during emotional processing, and to investigate in future research studies both how this can be most effectively accomplished and whether utilizing immediate emotional suppression in combination with subsequent appropriate emotional regulation strategies is effective.

92-Comparison of ADHD Patient Outcomes Between Two Starting Doses (25mg/day vs 45mg/day) of PRC-063 (Extended-Release Methylphenidate Formulation) as Measured in a Clinical Trial Program

JOAN FLOOD[1], Graeme Donnelly[2], Jodan Ratz[3], *Indira Maharaj[3]

[1]POSSIBILITIES CLINIC, [2]Purdue Pharma (Canada), [3]Elvium Life Sciences

Hypothesis/Objective: Efficacy, withdrawals and adverse events (AEs) from two randomized, placebo-controlled Phase 3 studies conducted with PRC-063 were compared by starting dose (25mg/day: adolescents (n=213), adults (n=223); 45mg/day: adolescents (n=70), adults (n=74). Clinician-led dose optimization followed in a 6-month open-label extension.

Methods/Results: During the first week of treatment, changes in ADHD-5-RS score was -7.2 (25mg/day), -

8.9 (45mg/day) and -5.1 (placebo) for adolescents, and -6.4 (25mg/day), -6.0 (45mg/day) and -4.3 (placebo) for adults. Common AEs reported for adolescents initiated on 25mg/day compared with 45mg/day were decreased appetite (9.5% vs 12.5%), headache (8.6% vs 8.3%) and insomnia (1.8% vs 6.9%), and for adults, insomnia (8.5% vs 10.8%), decreased appetite (5.8% vs 9.5%) and dry mouth (3.6% vs 8.1%). During open-label clinician-led dose optimization, 89.5% of adolescents and 83.6% of adults were initiated on 25-45 mg/day.

Conclusions: In studies where investigators had freedom to dose optimize patients, starting doses of PRC-063 were mostly between 25 and 45 mg/day. No differences in efficacy or safety outcomes were observed between 25 or 45 mg/day starting doses. Future research should examine whether higher starting doses of PRC-063 improve medication adherence.

93-Economic Evaluation of Extended-Release Amphetamine (Dyanavel XR) from a United States Societal Perspective: A Cost-Benefit Analysis /

Ishveen Chopra[1], *Jennifer Horng[2], Melanie Krause[3], Elli Martens[3], Jim Potenziano[4]

[1]Tris Pharma, Inc, [2]Tris Pharma, Inc., [3]Tris Pharma, [4]industry

Hypothesis/Objective: In the treatment of attention-deficit/hyperactivity disorder (ADHD), supplemental use of immediate-release (IR) stimulants can lead to fluctuating plasma levels that impede symptom control and are more prone to diversion. The negative implications of IR stimulant supplementation are broad, leading to extra costs and harm to individuals and society.

Methods/Results: This analysis quantifies the impact of reduced immediate-release (IR) supplementation on individual and population-level outcomes by assessing the one-year cost-benefit of Dyanavel XR versus other extended-release (ER) stimulant formulations. A decision-tree model compared these interventions across direct medical, non-medical, and indirect costs from a United States societal perspective. The average per-person cost for Dyanavel was $43,219 versus $51,071 for other ER stimulants, resulting in an average savings of $7,852 per person over one year. Nationally, Dyanavel XR resulted in approximately $44.6 billion in aggregate savings. The cost-benefit ratio of Dyanavel XR was 12.59, indicating that benefits may outweigh treatment cost.

Conclusions: In a one-way deterministic sensitivity analysis, Dyanavel XR remained cost-saving, highlighting the robustness of the economic benefit. Dyanavel XR’s potential to reduce IR supplementation and end-of-dose crashes mitigates its downstream costs, making it a compelling ADHD treatment option.

94-Not Just Sedation: A Rare Adverse Effect of Clonidine in Youth

Jingxiong Pu[1], *Junaid Bhatti[2], Jennifer Dorr[3]

[1]DC DBH Saint Elizabeths Hospital, [2]St Elizabeth's Hospital, [3]Children's National Medical Center

Hypothesis/Objective: Clonidine, an alpha-2 agonist, is commonly used in the treatment of ADHD, Tourette’s syndrome, and substance withdrawal. While typical side effects include sedation, xerostomia, and orthostatic hypotension, rare endocrine-related side effects have been reported. This case report highlights a rare presentation of galactorrhea following clonidine initiation in a pediatric patient.

Methods/Results: Methods We present the case of a 12-year-old female who developed spontaneous galactorrhea shortly after starting clonidine for behavioral symptoms. A comprehensive endocrine workup was completed, including serum prolactin, thyroid function tests, and brain imaging with magnetic resonance imaging (MRI) to rule out pituitary pathology. Results All laboratory and

imaging studies were within normal limits, and no other medications or medical conditions could account for the symptoms. The patient's galactorrhea resolved completely following the discontinuation of clonidine, supporting a probable causal relationship.Literature review identified a small number of similar isolated case reports.

Conclusions: This case underscores the importance of recognizing rare and atypical side effects associated with psychotropic medications in pediatric populations. Clinicians should maintain a high index of suspicion when evaluating new symptoms after medication changes.Further research may help clarify the potential endocrine effects of clonidine.

95-Objective ADHD Improvements Align with Patient-Reported Outcomes following Remote Treatment Pathway

Ragini Sanyal[1], Simon Larsson[1], Nuria Casals Casals[1], Murdock Tom[2], Rebecca Whelan, Mikkel Hansen[1], Phil Anderton[3]

[1]Qbtech, [2]ADHD360, [3]Fellow of Institute of Leadership and Management

Hypothesis/Objective: ADHD360, an evidence-based remote service in UK, provides comprehensive assessment, treatment and symptom management service for those with ADHD.The study aim is to assess treatment effectiveness in a wide health context and test whether improvement in QbCheck-derived objective ADHD metrics is associated with improvement in patient health and well-being.

Methods/Results: All subjects completed baseline and follow-up QbCheck between September 2023 and June 2025 (N=994, aged 6-60, mean=31.9 years, 55.5% females), diagnosed with ADHD and optimized on stimulant ADHD medication. Average time between assessments (baseline-optimization) was 148.42 days. Post-treatment, QbCheck Total Symptom Score (TSS; scale 0-100) decreased by mean of 32.1 points ($p<0.001$). Significant correlation was found between the change in TSS and PHQ-9 ($r=0.27$, $p<0.001$) as well as with ASRS/SNAP ($r=0.33$, $p<0.001$). A significant reduction of alcohol and nicotine dependence was found from baseline to follow-up ($d=0.49$, $p<0.001$ and $d=0.28$, $p<0.001$, respectively). Sample sizes varied based on completeness of assessments.

Conclusions: These data shows that proper treatment and management of ADHD symptoms is associated with better patient-reported health and well-being, as evidenced by the significant correlations between changes in objective ADHD performance (measured by QbCheck) and changes on validated mental health and substance use questionnaires.

96-Response and remission in a phase IV, decentralized, open-label study of viloxazine ER in adults with ADHD and depression and/or anxiety symptoms

Lenard Adler[1], Gregory Mattingly[2], *Jami Earnest[3], Yuan Li[3], Andrea Formella[3]

[1]NYU School of Medicine, [2]Midwest Research Group, [3]Supernus Pharmaceuticals, Inc.

Hypothesis/Objective: Prespecified analyses of a viloxazine ER phase IV, decentralized trial of adults with ADHD and mood symptoms showed significant improvement in ADHD, depression, and anxiety on validated clinician- and patient-rated scales. Here we evaluate the proportion of participants who met protocol-defined or established response/remission criteria on these rating scales.

Methods/Results: 161 participants enrolled. Response rates were calculated for participants with valid ratings at week 14/end-of-study (EOS). For clinician-rated AISRS, MADRS, and HAM-A scales, 45.6% (n/N=47/103), 57.5% (n/N=69/120), and 70.8% (n/N=85/120) experienced "e 50% score improvement from baseline; 18.6% (n/N=19/102) and 63.1% (n/N=65/103) scored 1 or 2 on CGI-S and CGI-C. For corresponding patient-rated ASRS, PHQ-8 , and GAD-7 scales, 48.6% (n/N=36/74), 78.4% (n/N=58/74), and 67.6% (n/N=50/74) respectively, experienced 50% score improvement. Overall, 66.0% (n/N=68/103), 28.3%

(n/N=34/120), and 24.2% (n/N=29/120) met AISRS<24, MADRS"d10 and HAM-A"d7 remission thresholds; 48.6% (n/N=36/74) and 21.3% (n/ N=32/150), met PHQ-8"d5 and GAD-7"d4 remission thresholds.

Conclusions: In addition to significant improvement on clinician- and patient-rated ADHD, depression, and anxiety rating scales, a substantial proportion of participants in this Phase IV, decentralized, “real-world” trial met accepted criteria for symptom reduction/remission on these scales, suggesting robust treatment response.