

Understanding
Sleep Problems
with the
CAARS™ 2
and PROMIS®
Sleep Measures



It is recommended practice that ADHD evaluations include screening for sleep problems. Sleep-related impairments like difficulty paying attention, restlessness, and impulsive decision-making can look like ADHD symptoms. Because of this overlap, it can make it difficult to determine the cause.

The Conners Adult ADHD Rating Scales 2nd Edition (CAARS™ 2) includes Impairment & Functional Outcome Items that include content about sleep problems. If the sleep problems impairment item is elevated, follow-up is recommended to obtain additional information. As a follow-up tool on potential sleep problems, the PROMIS® (Patient-Reported Outcomes Measurement Information System) Sleep Disturbance and Sleep-Related Impairment tools can be accessed for free by CAARS 2 users. The measures were developed based on years of research¹, with a grant from the National Institutes of Health (NIH).



### How are ADHD and sleep problems linked?

Impaired sleep includes difficulty falling or staying asleep, sleep disturbances (e.g., nightmare, sleepwalking), or feeling tired or fatigued during the daytime<sup>2,3</sup>. Sleep-related impairments can certainly look like ADHD symptoms—for example, both can be associated with difficulty paying attention, restlessness, and impulsive decision-making. Because of this overlap, figuring out what is really beneath the surface can be difficult.

Sleep problems can also exacerbate ADHD symptoms, amplifying their effects, and in turn, pose greater difficulty in daily functioning, which ultimately



makes accurate diagnosis more challenging. For instance, struggling to arrive to work on time could result from an ADHD-related difficulty with time management, a sleep-related issue of a late bedtime, or a combination of these factors.

Disruptions to sleep can come from many sources—but the consequences are consistent. A limited quantity or low quality of sleep affects physical health (e.g., correlated with diabetes, obesity, hypertension, and heart problems<sup>4</sup>), along with cognition (e.g., focus, regulation of emotion) and mental health. The impairments associated with ADHD are further complicated by a lack of sleep, exacerbating executive dysfunction. Regardless, for individuals with ADHD, sleep problems are critical to explore, given their far-reaching effects.

## What is the PROMIS® Sleep Assessment?

### **Quick Reference**

Age Range:

18+ years

Administration Time (in min)

Sleep Disturbance: I-2 Sleep-Related Impairment: I-2

Administration Type

Adult Self-Report (ages 18+)

The PROMIS® (Patient-Reported Outcomes Measurement Information System) Sleep Disturbance and Sleep-Related Impairment tools consist of the following:

Sleep Disturbance – Short Form 8a: This eight-item short form measures an individual's experience about quality of sleep, depth of sleep, and feelings of restoration due to sleep. Difficulties falling or staying asleep and feelings about the quality of sleep are measured. The Adult Self-Report (ages 18+) is available in both English and Spanish.

Sleep-Related Impairment – Short Form 8a: This eight-item short form measures an individual's experience of impairments associated with poor sleep; for example, levels of alertness or being tired during the day. The Adult Self-Report (ages 18+) is available in both English and Spanish.

### **PROMIS® User Guide**

#### How can I access the PROMIS®?

The PROMIS is currently available for all CAARS users who enable CAARS 2, as well as new CAARS 2 users, on the MHS Online Assessment Center+ (MAC+).

#### Do I have to pay for this measure?

Both 8-item short forms of the PROMIS Sleep Assessment are available free of charge for all CAARS 2 users on the MAC+.

# How do I enable PROMIS on my MAC+ account?

While the PROMIS will be available to all CAARS users who are transitioning to CAARS 2 and new CAARS 2 users, it must first be enabled before the assessment can be conducted. To enable the PROMIS, follow these steps:

- Log in to the MAC+. Click Account Settings in the left menu, and then click Manage My Assessments.
- 2. Click the toggle switch underneath the PROMIS icon so that it changes to "Enabled."
- 3. Click SAVE.

You can now use the PROMIS Sleep Assessment.

## Is there a hand-scored version of this measure?

The PROMIS Sleep Assessment is only available online and can only be administered via an online link that is generated and sent to clients. There is no print version of the form.

# How do uses/inventory work? Is report generation free?

Report generation is free of charge. You can administer the assessment and generate the report without buying any uses.

### What languages is this measure available in?

The measure is available in English and Spanish.

### Do my sub-users also get this measure? Do I have to enable it for them?

If you have an administrator account on MAC+, and you have sub-users whose accounts you manage, you will need to enable the PROMIS for your sub-users before they can use the product.

### To enable the PROMIS for a single sub-user

- I. Log in to MAC+.
- 2. Click Manage Users in the left menu.
- 3. Click the name of the sub-user that you want to enable the product for. A list of the sub-user's products appears.
- 4. Click the toggle switch underneath the PROMIS icon so that it changes to "Enabled."
- 5. Click SAVE.

PROMIS is now enabled for that sub-user.

#### To enable PROMIS for multiple sub-users:

- I. Log in to the MAC+.
- 2. Click Manage Users in the left menu.
- 3. Click the checkboxes beside the sub-users you want to enable PROMIS for Alternatively, click the top box to select all your sub-users.
- 4. Click the I would like to dropdown menu and select Manage selected user(s) assessments.
- 5. Click Ok.
- 6. Click the toggle switch underneath the PROMIS icon so that it changes to "Enabled."
- 7. Click SAVE.



Scan or click here for more information regarding CAARS 2 and onboarding resources for existing CAARS users.



If you require further support, please reach out to our Customer Service team who will be happy to assist.

Email: CustomerService@MHS.com

**US:** 1.800.456.3003

CAN: 1.800.268.6011

**INTL:** +1.416.492.2627

### References

<sup>1</sup>Yu, L., Buysse, D. J., Germain, A., Moul, D. E., Stover, A., Dodds, N. E., Johnston, K. L., & Pilkonis, P.A. (2011). Development of short forms from the PROMIS™ Sleep Disturbance and Sleep-Related Impairment item banks. Behavioral Sleep Medicine, 10(1), 6–24. doi:10.1080/15402002.2012.636266

<sup>&</sup>lt;sup>2</sup> Cortese, S., Faraone, S.V., Konofal, E., & Lecendreux, M. (2009). Sleep in children with attention-deficit/hyperactivity disorder: Meta-analysis of subjective and objective studies. *Journal of the American Academy in Child & Adolescent Psychiatry*, 48, 894–908.

<sup>&</sup>lt;sup>3</sup> Kirov, R., & Brand, S. (2014). Sleep problems and their effect in ADHD. Expert Review of Neurotherapeutics, 14, 287–299.

<sup>&</sup>lt;sup>4</sup> Simon, C. (2020). *Insomnia in a pandemic*. https://news.harvard.edu/gazette/story/2020/04/sleep-problems-becoming-risk-factor-as-pandemic-continues/