

The Significant Overlap of Asthma and Panic Disorder

There is growing awareness of the bidirectional association between asthma and lifetime anxiety disorders, such as panic disorder. Asthma can cause, or result in, anxiety disorders and vice versa.¹

The emotional burden of chronic respiratory illnesses like asthma and panic attack symptoms like impaired breathing can lead to panic disorder.² Conversely, hyperventilation arising from panic disorder can trigger the bronchoconstriction associated with asthma.³ The Meuret study estimates the prevalence of comorbid panic disorder and asthma in adult patients at 24%.

Panic disorder can increase already high asthma costs

In analyzing 2016-2018 data, the Wisconsin Department of Health Services estimated that asthma-related costs exceed \$75 million annually, with 17,981 emergency department visits and 2,011 hospitalizations.⁴

The presence of both panic disorder and asthma is linked to more frequent hospitalizations and emergency department visits. People with panic disorder and asthma also see their primary care providers more than people without panic and often are not adherent to asthma medication protocols.²

Treating panic attacks in patients with asthma and anxiety

Dysfunctional breathing occurs in both asthma and panic, though for different reasons. In people with panic disorder, chronic hyperventilation and/or other dysrhythmias result from underlying carbon dioxide hypersensitivity. People with asthma breathe irregularly due to airway narrowing with or without extra mucous.

Freespira, a digital therapeutic treatment, works by providing real-time analysis and feedback of respiratory rate and exhaled carbon dioxide levels and trains users to normalize their breathing in a 28-day, at-home, coach-assisted program. One year after treatment

1. Del Giacco SR, Cappai A, Gambula L, Cabras S, Perra S, Manconi PE, Carpinello B, Pinna F. The asthma-anxiety connection. *Respir Med.* 2016 Nov;120:44-53. doi: 10.1016/j.rmed.2016.09.014. Epub 2016 Sep 21. PMID: 27817815.
2. Meuret AE, Kroll J, Ritz T. Panic Disorder Comorbidity with Medical Conditions and Treatment Implications. *Annu Rev Clin Psychol.* 2017 May 8;13:209-240. doi: 10.1146/annurev-clinpsy-021815-093044. Epub 2017 Mar 27. PMID: 28375724.
3. van den Elshout FJ, van Herwaarden CL, Folgering HT. Effects of hypercapnia and hypocapnia on respiratory resistance in normal and asthmatic subjects. *Thorax.* 1991 Jan;46(1):28-32. doi: 10.1136/thx.46.1.28. PMID: 1908137; PMCID: PMC1020910.
4. Children's Health Alliance of Wisconsin. Wisconsin Health Plan. March 15, 2024. <https://www.chawisconsin.org/download/wisconsin-asthma-plan>.
5. Tolin DF, McGrath PB, Hale LR, Weiner DN, Gueorguieva R. A Multisite Benchmarking Trial of Capnometry Guided Respiratory Intervention for Panic Disorder in Naturalistic Treatment Settings. *Appl Psychophysiol Biofeedback.* 2017 Mar;42(1):51-58. doi: 10.1007/s10484-017-9354-4. PMID: 28194546; PMCID: PMC5344940.
6. Freespira. Internal data. 2020-2022.

with Freespira, 82% of panic disorder patients reported significantly fewer symptoms and 73% remained free of panic attacks.⁵

A review of asthma inhaler uses in a Wisconsin Medicaid population with asthma and panic attacks or PTSD symptoms showed a 35% reduction in days' supply for inhalers and a 12% reduction in inhaler costs 12 months pre- and post-Freespira treatment.⁶

Published studies on Freespira show high patient satisfaction rates, effectiveness, and adherence. **Freespira is a new way to address anxiety in patients with asthma and anxiety attacks and is now covered for eligible Security Health Plan members.**

Learn more or make a referral at freespira.com/for-providers.

1. Del Giacco SR, Cappai A, Gambula L, Cabras S, Perra S, Manconi PE, Carpinello B, Pinna F. The asthma-anxiety connection. *Respir Med.* 2016 Nov;120:44-53. doi: 10.1016/j.rmed.2016.09.014. Epub 2016 Sep 21. PMID: 27817815.
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