

# Administration and Scoring of the Generalized Anxiety Disorder-7 (GAD-7)

PAR Staff





### **OVERVIEW**

The Generalized Anxiety Disorder-7 (GAD-7; 2006) scale was developed by Robert L. Spitzer, Kurt Kroenke, Janet B. W. Williams, and Bernd Löwe based on the diagnostic criteria for generalized anxiety disorder (GAD) in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV; American Psychiatric Association, 1994). The measure was originally composed of 13 items, but only the 7 items with the highest correlations were included in the final instrument. Since its inception, the GAD-7 has become increasingly popular in research (Dear et al., 2011) and clinical practice (Beard and Björgvinsson, 2014). Administration and scoring, available on PARiConnect, take approximately 2 minutes.

## **ADMINISTRATION**

The GAD-7 is administered using PARiConnect, PAR's online assessment platform. Examinees can complete the GAD-7 in-office or at a remote location via an email link, which launches the administration. Detailed information on the use of PARiConnect is available under All Help Topics in PARiConnect. Each of the 7 items are displayed one at a time with a progress bar displayed below the response options. Items cannot be skipped during administration. Therefore, an advantage to administering the GAD-7 via PARiConnect is the ability to capture a complete administration each and every time.

GAD-7 items reflect the *DSM-IV* criteria for GAD. Respondents are asked to rate each item for frequency of occurrence using a 4-point Likert scale (Not at all = 0, Several days = 1, More than half the days = 2, and Nearly every day = 3).

# SCORING

All responses are summed to calculate the total GAD-7 score. Scores range from 0–21 with increasing scores indicating greater severity of symptoms of anxiety.

### **GAD-7 Score Report**

### Severity Ranges

After generating a Score Report on PARiConnect, an examinee's GAD-7 score will be plotted along a number line with shading to represent changes in severity of symptoms of anxiety (see Figure 1). Severity ranges are based on guidance in the initial validation study by Kroenke and colleagues (2006).



### GAD-7

#### **Cut-off Recommendations**

In the extant literature, several recommended cut-off scores have been suggested. Kroenke et al. (2007) found mean GAD-7 scores were 14.0, 12.5, 13.0, 12.0 for GAD, panic disorder, social anxiety disorder, and posttraumatic stress disorder, respectively, compared to 3.0 for individuals with no anxiety disorder. They also examined the sensitivity, specificity, and positive likelihood ratios for GAD, panic disorder, social anxiety disorder, posttraumatic stress disorder, and any anxiety disorder using GAD-7



cut-off scores ranging from ≥5 to ≥10. They noted the sensitivity and specificity approached or exceeded 75% for all disorders and the positive likelihood ratio exceeded 3.0 when using a cut-off score of 8 or greater. Based on a recent meta-analysis, Plummer et al. (2016) recommended using a cut-off of 8 or higher to optimize sensitivity without compromising specificity. Table 1 shows the sensitivity, specificity, and positive likelihood ratios of the aforementioned diagnoses using a cut-off score of 8 or higher (Kroenke et al., 2007).

Table 1. GAD-7 Classification Statistics Using Cut-Off Score of Greate	er Than or Equal to 8

Diagnosis	Sensitivity % (95% Cl)	Specificity % (95% Cl)	Positive Likelihood Ratio (95% Cl)
Generalized anxiety disorder	92 (83–97)	76 (73–79)	3.8 (3.4–4.4)
Panic disorder	82 (70–90)	75 (72–78)	3.3 (2.8–3.8)
Social anxiety disorder	al anxiety disorder 78 (66–88)		3.0 (2.6–3.6)
Posttraumatic stress disorder	76 (65–85)	75 (72–78)	3.1 (2.6–3.6)
Any anxiety disorder	77 (70–82)	82 (80–85)	4.4 (3.7–5.2)

#### Treatment Recommendations

The GAD-7 Score Report includes treatment recommendations based on an individual's score. These proposed treatment actions, shown in Table 2, are based on recommendations by Spitzer et al. (2006). Individuals with a score of 8 or higher are considered likely to be diagnosed with an anxiety or related disorder.

#### Table 2. GAD-7 Recommendations

Score	Severity	Recommendations	
0-4	None to minimal	No follow-up is warranted at this time.	
5-7	Mild	It is recommended to monitor symptoms and follow-up as indicated.	
8–9	Mild	This individual is likely to be diagnosed with an anxiety or related disorder. Repeat administration of the GAD-7 every 4 weeks to monitor symptoms. Follow up to determine if current symptoms warrant a referral to a mental health professional.	
10–14	Moderate	This individual is likely to be diagnosed with an anxiety or related disorder. Their symptoms are clinically significant and warrant further assessment (including diagnostic interview and mental status examination) and/or referral to a mental health professional is recommended.	
15–21	Severe	This individual's symptoms of anxiety likely warrant active treatment. This individual is likely to be diagnosed with an anxiety or related disorder. Further assessment (including diagnostic interview and mental status examination) and/or referral to a mental health professional is recommended.	



GAD-7



## REFERENCES

- American Psychiatric Association. (1994). *Diagnostic* and statistical manual of mental disorders (4th ed.).
- Beard, C., & Björgvinsson, T. (2014). Beyond generalized anxiety disorder: Psychometric properties of the GAD-7 in a heterogeneous psychiatric sample. *Journal of Anxiety Disorders*, 28, 547–552. <u>https://doi.org/f6fm84</u>
- Dear, B. F., Titov, N., Sunderland, M., McMillan, D., Anderson, T., Lorian, C., & Robinson, E. (2011). Psychometric comparison of the Generalized Anxiety Disorder Scale-7 and the Penn State Worry Questionnaire for measuring response during treatment of generalised anxiety disorder. *Cognitive Behavior Therapy*, 40, 216–227. https://doi.org/d5k55v
- Kroenke, K., Spitzer, R. L., Williams, J. B. W., Monahan, P. O., & Löwe, B. (2007). Anxiety disorders in primary care: Prevalence, impairment, comorbidity, and detection. *Annals of Internal Medicine*, 146, 317–325. <u>https://doi.org/c8rk</u>
- Plummer, F., Manea, L., Trepel, D., & McMillan, D. (2016). Screening for anxiety disorders with the GAD-7 and GAD-2: A systematic review and diagnostic metaanalysis. *General Hospital Psychiatry*, 39, 24–31. <u>https://doi.org/f8chmc</u>
- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder the GAD-7. Archives of Internal Medicine, 166, 1092–1097. https://doi.org/d7z8rz



### **APPENDIX**

Generalized Anxiety Disorder-7 (GAD-7)

Over the last 2 weeks, how often have you been bothered by any of the following problems?

	Not at all = 0	Several days = 1	More than half the days = 2	Nearly every day = 3
lter	ns			
1.	Feeling nervous, a	nxious, or on edge		
2.	Not being able to stop or control worrying			
3.	Worrying too much about different things			
4.	Trouble relaxing			
5.	Being so restless that it's hard to sit still			
6.	Becoming easily annoyed or irritable			
7.	Feeling afraid as if something awful might happen			

**PAR** • 16204 N. Florida Ave. • Lutz, FL 33549 • 1.800.331.8378 • www.parinc.com

Copyright © 2020 by PAR. All rights reserved. May not be reproduced in whole or in part in any form or by any means without written permission of PAR.

#### **To cite this document, use:** PAR Staff (2020). Administration and Scoring of the Generalized Anxiety Disorder-7 (GAD-7) [technical supplement]. PAR.

