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Overview: Interpretation and Classification **Patient Health Questionnaire (PHQ-9)**

English Version

This overview of the Patient Health Questionnaire (PHQ-9) was generated using the Consensus AI platform (https://consensus.app) and has been reviewed and validated by Dr. Claudia Hackl-Zuccarella a qualified clinical expert to ensure accuracy and relevance. Please let us know about potential further contents or errors: info@multimorbidity.org

PHQ-9 Patient Depression Questionnaire (PHQ-9)
Table of Contents

Description 2
Structure and Application 2
Scoring and Interpretation 3
Reccomended Cut-off Scores 3
Diagnostic Cut-Point for MDD 3
Item 9 and Suicide Risk 3
Psychometric Properties 3
Key Research Findings 4
Clinical Applicability & Limitations 4
Advantages 4
Limitations 4
References 5

Description

The **Patient Health Questionnaire-9 (PHQ-9)** is a widely used **9-item self-report screening tool** for **major depressive disorder (MDD)** and **depressive symptom severity**. It aligns with the **diagnostic criteria for depression**in the **DSM-5** and is used in **primary care, mental health, and research settings** to identify and monitor depression over time.

The PHQ-9 serves **two primary purposes**:

1. **Screening for Major Depressive Disorder (MDD):** A score-based algorithm helps detect probable MDD.
2. **Assessing Depression Severity:** The total score indicates the degree of depression severity, ranging from **minimal to severe depression**.

Structure and Application

The PHQ-9 consists of nine items, each corresponding to one of the nine DSM-5 criteria for MDD. The questions assess the frequency of depressive symptoms over the past two weeks. Responses are rated on a 4-point Likert scale:

Response Option	Score
Not at all	0
Several days	1
More than half the days	2
Nearly every day	3

Scoring and Interpretation

The total **PHQ-9** score is obtained by summing the responses. A **higher score indicates more severe depressive symptoms**. Additionally, a **tenth question** assesses whether the symptoms lead to **impairments in daily life** (Spitzer et al., 1999).

Reccomended Cut-off Scores

Score	Depression Severity	Clinical Interpretation
0-4	Minimal depression	No intervention needed
5-9	Mild depression	Monitor; consider follow-up
10-14	Moderate depression	Further assessment; possible treatment
15-19	Moderately severe depression	Active treatment recommended
20-27	Severe depression	Immediate intervention needed

Diagnostic Cut-Point for MDD

- A **score of ≥10** is considered a **sensitive and specific cut-off** for **major depressive disorder**.
- A score **≥15** strongly indicates the presence of clinically significant depression.

Item 9 and Suicide Risk

- **Item 9** ("Thoughts that you would be better off dead or of hurting yourself in some way") assesses **suicidal ideation**.
- Any response **≥1** (i.e., "Several days" or more) warrants **further suicide risk assessment** and clinical intervention.

Psychometric Properties

The **PHQ-9** demonstrates high internal consistency (Cronbach's alpha > 0.8) and good test-retest reliability. Studies show high sensitivity and specificity for detecting major depression, making the **PHQ-9** a reliable instrument.

The key diagnostic properties of the **PHQ-9** are summarized below:

Metric	Value
Sensitivity (cut-off ≥10)	**0.88** (88%) (Kroenke et al., 2001)
Specificity (cut-off ≥10)	**0.88** (88%) (Kroenke et al., 2001)
Positive Predictive Value (PPV)	**0.75–0.85**, depending on population prevalence (Manea et al., 2012)
Negative Predicitive Value (NPV)	**0.92** (92%) (Manea et al., 2012)
Internal Consistency (Cronbachs Alpha)	**0.86–0.89** (Excellent reliability) (Kroenke et al., 2001)

Key Research Findings

- A **PHQ-9 score of ≥10** has **88% sensitivity and specificity** for **MDD diagnosis**, making it one of the most accurate **brief depression screening tools** (Kroenke et al., 2001).
- The PHQ-9 performs **comparably** to **longer depression measures**, such as the **Beck Depression Inventory (BDI-II)**, while being **shorter and more practical** for routine screening (Manea et al., 2012).
- The **PHQ-9 is validated in diverse populations**, including **adolescents, elderly adults, and different ethnic groups** (Levis et al., 2019).

Clinical Applicability & Limitations

The **PHQ-9** is frequently used in **primary care, psychiatry, and epidemiological** studies. Its simplicity makes it an efficient **screening tool**. However, **additional clinical assessments are necessary, especially for high scores** (Spitzer et al., 1999).

Advantages

- **Brief and Easy to Administer:** Takes **2-5 minutes** to complete.
- **Highly Validated:** Shows **high sensitivity and specificity** for MDD.
- **Useful for Symptom Monitoring:** Can track **treatment progress** over time.
- **Validated Across Multiple Settings:** Effective in **primary care, psychiatry, and community samples**.

Limitations

- **Not a Standalone Diagnostic Tool:** Requires **further clinical assessment** for formal MDD diagnosis.
- **Risk of Overdiagnosis:** In some settings, **false positives** may lead to **unnecessary treatment**.
- **Item 9 Requires Immediate Attention:** Suicide-related responses need **urgent risk assessment**.

References

1. **Kroenke K, Spitzer RL, Williams JB.** The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med. 2001 Sep;16(9):606-13. doi: 10.1046/j.1525-1497.2001.016009606.x. PMID: 11556941; PMCID: PMC1495268.

2. **Manea L, Gilbody S, McMillan D.** Optimal cut-off score for diagnosing depression with the Patient Health Questionnaire (PHQ-9): a meta-analysis. CMAJ. 2012 Feb 21;184(3):E191-6. doi: 10.1503/cmaj.110829. Epub 2011 Dec 19. PMID: 22184363; PMCID: PMC3281183.

3. **Levis B, Benedetti A, Thombs BD**; Depression Screening Data (DEPRESSD) Collaboration. Accuracy of Patient Health Questionnaire-9 (PHQ-9) for screening to detect major depression: individual participant data meta-analysis. BMJ. 2019 Apr 9;365:l1476. doi: 10.1136/bmj.l1476. Erratum in: BMJ. 2019 Apr 12;365:l1781. doi: 10.1136/bmj.l1781. PMID: 30967483; PMCID: PMC6454318.