**SUPPLEMENTARY DIGITAL CONTENT 1**

**TABLE S1.** Overview of the Patient-Reported Outcomes used to Assess Workplace Productivity and Functioning

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| **Work Limitations Questionnaire (WLQ)**  |
| **Objective** | To assess the impact of health problems, including major depressive disorder, on at-work performance and productivity (presenteeism)1,2 |
| **Rater** | Patient |
| **Recall period** | 2 weeks |
| **Domains** | Time management (five items assessing difficulty in working the required hours and managing time and scheduling demands)Physical demands (six items assessing ability to perform work-related physical activities)Mental-interpersonal demands (nine items assessing difficultly with cognitively demanding tasks and interactions with co-workers)Output demands (five items assessing difficulty with handling the workload and meeting deadlines) |
| **Scoring** | Items are rated on a scale from 1 (all of the time) to 5 (none of the time)Domain scores range from 0% (limited none of the time) to 100% (limited all of the time)The WLQ productivity loss score is derived from a weighted sum of the scores from the four WLQ domains (known as the WLQ Index Score), which is then converted to generate a percentage productivity loss estimate relative to healthy controls (range 0–25%), with higher scores indicating more severe impairment |
| **Reliability** | Cronbach’s α, ≥0.90 in patients with asthma, gastrointestinal diseases, psychiatric disorders (depression and/or generalized anxiety), and epilepsy1 |
| **Work Productivity and Activity Impairment (WPAI) questionnaire** |
| **Objective** | To assess the impact of a health problem and symptom severity on work productivity3 |
| **Rater** | Patient |
| **Recall period** | 7 days |
| **Domains** | Number of hours missed due to the health problemNumber of hours missed due to other reasonsHours actually workedDegree to which the health problem affected productivity while workingDegree to which the health problem affected non-work daily activities |
| **Scoring** | Based on validated algorithms, the WPAI yields four subscores, with higher scores indicating greater impairment: * Absenteeism (percent work time missed)
* Presenteeism (percent time impaired at work)
* Work productivity loss (percent overall work impairment)
* Percent activity impairment
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| **Reliability** | Evaluation of internal consistency reliability not applicable, as responses are obtained using a single construct (productivity at work)4 |
| **Sheehan Disability Scale (SDS)** |
| **Objective** | To assess the degree of functional impairment on work/school, social, and family life5,6 |
| **Rater** | Patient |
| **Recall period** | 7 days |
| **Domains** | Work/schoolSocial life/leisureFamily life/home responsibilities |
| **Scoring** | The degree of impairment for each domain is rated on a scale of 0–10, with higher values indicating greater impairmentScores for the individual domains can be combined to generate a measure of global functional impairment that ranges from 0 (unimpaired) to 30 (highly impaired)Functional remission is defined as an SDS total score of ≤6 |
| **Reliability** | Cronbach’s α, 0.83–0.89 in primary care patients, including those with depression8  |
| **World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0)** |
| **Objective** | Generic instrument to assess functioning and disability that can be used across all diseases, including mental health disorders9 |
| **Rater** | Patient |
| **Recall period** | 30 days |
| **Domains** | Cognition (understanding and communicating)Mobility (ability to move and get around)Self-care (hygiene, dressing, eating, and staying alone)Interpersonal actions (getting along with others)Life activities (work, domestic, and leisure activities)Participation (joining in community activities) |
| **Scoring** | Each of the 12 items is scored from 0 (no difficulty) to 4 (extreme difficulty/cannot do) to provide a global disability score ranging from 0 (no disability) to 100 (full disability)There is no agreed score for identifying good healthIn a 2016 Canadian study, the mean WHODAS score in an overall community population was 14.2 (95% confidence interval, 14.1 to 14.3)10 |
| **Reliability** | Cronbach’s α, 0.98 in patients with mental health disorders11 |

**REFERENCES**

1. Lerner D, Amick BC 3rd, Rogers WH, Malspeis S, Bungay K, Cynn D. The Work Limitations Questionnaire. *Med Care.* 2001;39:72–85.

2. Lerner D, Amick BC 3rd, Lee JC, et al. Relationship of employee-reported work limitations to work productivity. *Med Care.* 2003;41:649–659.

3. Reilly MC, Zbrozek AS, Duke EM. The validity and reproducibility of a work productivity and activity impairment instrument. *Pharmacoeconomics.* 1993;4:353–365.

4. Prasad M, Wahlqvist P, Shikiar R, Shih YC. A review of self-report instruments measuring health-related work productivity: a patient-reported outcomes perspective. *Pharmacoeconomics.* 2004;22:225–244.

5. Sheehan DV, Harnett-Sheehan K, Raj BA. The measurement of disability. *Int Clin Psychopharmacol.* 1996;11(Suppl 3):89–95.

6. Sheehan KH, Sheehan DV. Assessing treatment effects in clinical trials with the Discan metric of the Sheehan Disability Scale. *Int Clin Psychopharmacol.* 2008;23:70–83.

7. Leon AC, Olfson M, Portera L, et al. Assessing psychiatric impairment in primary care with the Sheehan Disability Scale. *Int J Psychiatry Med.* 1997;27:93–105.

8. Luciano JV, Bertsch J, Salvador-Carulla L, et al. Factor structure, internal consistency and construct validity of the Sheehan Disability Scale in a Spanish primary care sample. *J Eval Clin Pract.* 2010;16:895–901.

9. Ustün TB, Chatterji S, Kostanjsek N, et al. Developing the World Health Organization Disability Assessment Schedule 2.0. *Bull World Health Org.* 2010;88:815–823.

10. Sjonnesen K, Bulloch AG, Williams J, Lavorato D, Patten SB. Characterization of disability in Canadians with mental disorders using an abbreviated version of a DSM-5 emerging measure: the 12-Item WHO Disability Assessment Schedule (WHODAS) 2.0. *Can J Psychiatry.* 2016;61:227–235.

11. Ustün TB, Kostanjsek N, Chatterji S, Rehm J. *Measuring Health and Disability: Manual for WHO Disability Assessment Schedule (WHODAS 2.0).* Geneva, Switzerland: World Health Organization; 2010.