

Supplementary Online Content

Carr E, Mahil SK, Brailean A, et al. Association of patient mental health status with level of agreement between patient and physician ratings of psoriasis severity. *JAMA Dermatol*. Published online March 3, 2021. doi:10.1001/jamadermatol.2020.5844

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This supplementary material has been provided by the authors to give readers additional information about their work.

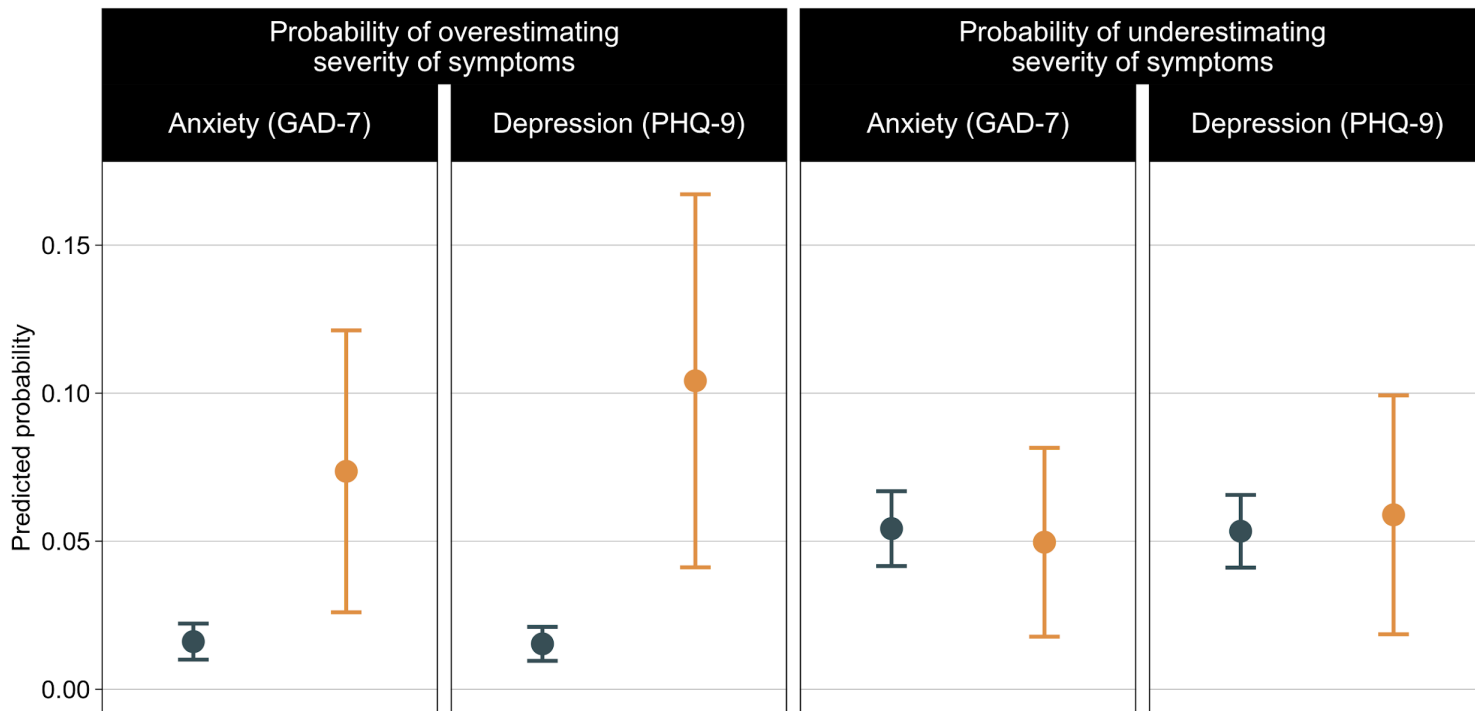
eMethods. Screening for depression and anxiety

All participants completed PHQ-2¹ and GAD-2², consisting of the first two items of PHQ-9 and GAD-7, respectively. Participants answering positively (‘More than half the days’ or ‘Nearly every day’) to at least one item went on to complete the remaining items of the corresponding measure. Probable major depressive disorder (MDD; ‘depression’ in the manuscript) was defined in accordance with the DSM-V criteria³ as (i) responding positively to one of the first two items (‘Little interest or pleasure in doing things’, ‘Feeling down, depressed, or hopeless’); and (ii) responding positively to a minimum of five other depression symptoms. If one of the reported symptoms was suicidality (“Thoughts that you would be better off dead, or of hurting yourself”), an answer of ‘Several days or more’ often would indicate a positive response. Probable generalized anxiety disorder (GAD; ‘anxiety’ in the manuscript) was defined as (i) responding positively to one of the first two items (“Feeling nervous, anxious, or on edge”, or “Not being able to stop or control worrying”); and (ii) a total score of ≥ 10 (out of a total of 21).

eReferences

1. Kroenke K, Spitzer R, Williams J. The Patient Health Questionnaire-2: Validity of a Two-Item Depression Screener. *Med Care*. 2003;41(11):10.
2. Spitzer RL, Kroenke K, Williams JBW, Löwe B. A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7. *Arch Intern Med*. 2006;166(10):1092-1097.
doi:10.1001/archinte.166.10.1092
3. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th edition. American Psychiatric Association; 2013.

eFigure 1: Predicted probabilities of discordance by mental health status for a difference of 2+ categories between patient and physician global assessments
 502 patients; 1985 appointments



Notes:

Adjusted for age, sex, ethnicity, BMI, smoking, psoriatic arthritis, current treatment, number of comorbidities.

95% CIs adjusted for clustering of repeated appointments per patient.

Discordance refers to a difference of 2+ categories between the patient and physician ratings.

eTable 1. Odds ratios for the interaction between mental health status and PASI score

	Depression (PHQ-9) ^a		Anxiety (GAD-7) ^a	
	Odds ratio	[95% CI]	Odds ratio	[95% CI]
Odds of overestimating severity^b				
PASI score	1.19	[1.13, 1.26]	1.17	[1.11, 1.23]
Depression (PHQ-9 caseness)	5.75	[2.82, 11.7]	--	--
PASI score × depression	0.83	[0.77, 0.89]	--	--
Anxiety (GAD-7 caseness)	--	--	2.93	[1.48, 5.78]
PASI score × anxiety	--	--	0.89	[0.82, 0.98]
Odds of underestimating severity^b				
PASI score	1.32	[1.25, 1.38]	1.28	[1.22, 1.35]
Depression (PHQ-9 caseness)	2.57	[1.29, 5.10]	--	--
PASI score × depression	0.81	[0.75, 0.87]	--	--
Anxiety (GAD-7 caseness)	--	--	1.34	[0.72, 2.50]
PASI score × anxiety	--	--	0.87	[0.80, 0.96]
N	1985	1985	1985	1985
<i>Notes.</i>				
^a Adjusted for age, sex, ethnicity, smoking status, BMI, psoriatic arthritis, current treatment, and number of comorbidities.				
^b Based on a difference of 1+ category for the Patient GA compared to Physician GA.				

eTable 2. Discordance in patient vs physician ratings, overall and by mental health status, based on a difference of 2+ categories

		Type of discordance (%)		
		Overestimate	Neutral	Underestimate
All patients (1985 appointments)		39 (2)	1839 (93)	107 (5)
Patients by depression (PHQ-9) depression caseness				
	PHQ cases only (129 appointments)	10 (8)	110 (85)	9 (7)
	Non-PHQ-9 cases (1856 appointments)	29 (2)	1729 (93)	98 (5)
Patients by anxiety (GAD-7) caseness				
	GAD-7 cases only (155 appointments)	9 (6)	137 (88)	9 (6)
	Non-GAD-7 cases (1830 appointments)	30 (2)	1702 (93)	98 (5)
<p><i>Notes.</i> Discordance indicated by differences of 1+ category for patient vs. physician ratings.</p>				