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Original Research Reports

A Provisional Screening Instrument for Four Common Mental Disorders in Adult Primary Care Patients

John P. Houston, M.D., Ph.D., Kurt Kroenke, M.D.,
Douglas E. Faries, Ph.D., Caroline Carney Doebbeling, M.D., Lenard A. Adler, M.D.,
Jonna Ahl, Ph.D., Ralph Swindle, Ph.D., Paula T. Trzepacz, M.D.

Objective: *To develop an adult self-report instrument for provisional diagnosis of four common mental disorders in primary care patients.* **Methods:** *Primary care patients were evaluated during routine clinic visits with a self-report screening tool comprised of 85 DSM-IV symptom-based candidate questions. Patients with a physician-assessed provisional diagnosis for generalized anxiety disorder (GAD), major depressive episode (MDE), past/present mania, and adult attention-deficit/hyperactivity disorder (ADHD), or none of these, completed additional self-report clinical questionnaires, and then were interviewed on the telephone by a trained rater for a SCID/ACDS diagnosis. Responses to the symptom-based candidate questions were used to calculate sensitivity and specificity for a SCID/ACDS diagnosis (GAD, N = 24; MDE, N = 89; Mania, N = 24; ADHD, N = 65) and to select the optimal four questions for each diagnosis to be included in the instrument.* **Results:** *Analyses resulted in a 17-item instrument for provisional differential diagnosis of GAD, MDE, past/present mania, and ADHD. Comparison of limited symptom-based versus full DSM-IV criteria-based diagnosis showed minimal differences for relative diagnostic accuracy. Sensitivities and specificities, respectively, were 83% and 75% for GAD, 80% and 80% for MDE, 83% and 82% for mania, and 82%and 73% for ADHD.* **Conclusions:** *Based on this preliminary work, the Provisional Diagnostic Instrument-4 is a brief, easily scored, self-report instrument that may assist primary care physicians to identify potential cases of GAD, MDE, past/present mania, and ADHD.*

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In the National Comorbidity Survey Replication, mental disorders in the United States were estimated to be common among community-dwelling individuals, with a lifetime prevalence rate of nearly 50%[1]. Mental disorders commonly encountered in adults in primary care settings include generalized anxiety disorder (GAD), major depressive episode (MDE), bipolar spectrum disorders, and adult attention-deficit/hyperactivity disorder (ADHD). At least one out of five primary care patients has a mental disorder[2] and for many individuals these disorders go undetected and untreated.[2] In the primary care population, the estimated prevalence rates of these disorders are 7%–15% for GAD,[3,4] 4%–19% for MDE,[4,5] 10% for bipolar spectrum disorders,[6] and 8%–15% for adult ADHD.[7,8]

Accurate screening and differential diagnosis of these common mental disorders by primary care physicians can be quite challenging due to office visit time constraints, symptom overlap, comorbidity of disorders, and the need for extensive knowledge of psychiatric diagnostic criteria

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and symptom patterns. For example, major depression is missed by primary care physicians in 30%–50% of patients,[9,10] and many patients eventually diagnosed with bipolar disorder were initially diagnosed with unipolar depression, anxiety, or schizophrenia.[11] Further, in a survey of 400 primary care physicians, nearly half admitted that they did not feel confident diagnosing adult ADHD.[12] The consequences of not recognizing or misdiagnosing can be quite substantial, leading to clinical implications, inappropriate choice of treatment, and disruption of occupational, social, and family functioning. For instance, treating depression with an antidepressant in a patient with bipolar disorder carries the risk of non-response, worsening of symptoms, suicidality, or even precipitating a manic episode.[13]

There are a number of clinician-administered instruments available to screen for mental disorders, but they are lengthy and may require more time than is allotted for an office visit or may cover only a single diagnosis. It would be ideal to utilize a brief patient self-screening instrument that could be administered in the office prior to seeing the physician. Several valid patient self-report instruments screen for common mental disorders: the Generalized Anxiety Disorder-7 (GAD-7),[14] the Patient Health Questionnaire for depression,[15] the Mood Disorder Questionnaire (MDQ) for bipolar spectrum disorders,[16] and the Conners' Adult ADHD Rating Scale (CAARS).[17] However, there remains a need for a brief self-report diagnostic instrument to simultaneously and differentially assess for multiple nonpsychotic psychiatric diagnoses, including ADHD, in adults. Such a tool is not intended to provide a short-cut in making a psychiatric diagnosis; rather, it would enhance the capability of primary care physicians to assess whether additional assessment or referral to a mental/behavioral health specialist is needed.

In this study, we developed and conducted a preliminary evaluation of a self-report instrument to identify potential cases of GAD, MDE, past/present mania, and ADHD. The Provisional Diagnostic Instrument-4 (PDI-4) is intended to provide optimum sensitivity and specificity to assist primary care physicians to assess patients for these common psychiatric diagnoses.

METHOD

Study Design

This was a cross-sectional, multicenter study conducted at 21 primary care centers (Omnicare Clinical Research) in the United States over the course of 10 months. The study protocol was approved by the Institutional Review Board at each site. All patients provided written informed consent prior to study participation. The study consisted of two visits. At Visit 1, patients completed the Patient Self Assessment (PSA), an interview by the investigating physician, and five additional clinical rating scales. At Visit 2, patients participated in a telephone interview conducted by a trained rater to provide a diagnosis (or no diagnosis) based on the Structured Clinical Interview Research Version (SCID) for Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV) axis I disorders and the Adult ADHD Clinician Diagnostic Scale version 1.2 (ACDS).[18,19] Visit 2 could take place the same day or within 5 days of completing Visit 1.

Entry Criteria

Participants were nonpsychotic patients, at least 18 years of age, presenting to the primary care investigator's office. They had to have completed the sixth grade and be able to read English. They had to be willing to complete the PSA, five additional rating scales, and to participate in the interviews by the primary care physician and the SCID/ACDS rater. Patients were excluded if they were suicidal or homicidal.

Patient Selection Processes

Patients were selected in one of two ways: (1) every "*n*th" patient on selected clinic days or (2) every patient on selected clinic days. To limit excessive enrollment at individual sites, each site had an enrollment quota for each of the four diagnostic categories and for controls (patients not meeting any of the four diagnoses of interest).

After providing informed consent, study participants completed the PSA, which was scored by the clinical staff. The investigating physician reviewed the results on the PSA, then interviewed the patient if (1) the patient scored above the cutoff criteria for further assessment for any of the four diagnoses for which site quotas had not been met; or (2) the quota for patients with no diagnosis (controls) had not been met. Based on diagnostic quotas, if qualified for a follow-up telephone SCID/ACDS interview, the patient completed five additional self-rated scales, after which the site scheduled the interview within 5 days.

The PSA was an instrument comprised of 85 symptom questions, most of which were directly linked to the DSM-IV individual symptomatic diagnostic criteria for GAD (18 questions + 6 questions screening for related

diagnoses), MDE (20 questions), and past/present mania (22 questions), and to the Adult Self-Report Scale v1.1 (ASRS)[20] for ADHD (included all 18 Criterion A symptom questions and the additional "age of onset" criterion). These items also corresponded to questions on the SCID for DSM-IV axis I disorders for GAD, MDE, and past/present mania, and to questions on the ACDS for ADHD. Each diagnostic section on the PSA included a specified duration of time for symptoms, as well as implied functional loss, both of which are required by the DSM-IV, and symptom questions were rated with response categories of graded frequency. At least two symptoms had to be scored above a designated cutoff in one of the diagnostic sections in order to qualify for further assessment by the investigating physician.

In the follow-up, the investigating physician verified positive responses, and severity and duration of symptoms endorsed on the PSA, especially those that were absolutely required by the DSM-IV for each diagnosis. The investigator also ruled out physical factors or other mental disorders duplicating symptoms of the mental disorder being assessed and incompatible concurrent psychiatric diagnoses that were specified in the DSM-IV. Patients who met these additional requirements were referred for SCID/ACDS interview, and were asked to complete several additional clinical self-rated instruments: the Anxiety subscale of the Hospital Anxiety and Depression Scale (HADS-A)[21] to assess generalized anxiety, The Patient Health Questionnaire-9 (PHQ-9)[22] to assess depressive symptom severity, the Mood Disorder Questionnaire (MDQ)[23] to assess past/present mania, the CAARS to assess ADHD symptom severity, and the Medical Outcomes Study Short-Form Health Survey (SF-12)[24,25] to assess mental and physical functioning.

The raters conducting the centralized telephone SCID/ACDS interviews were blinded to the results of the PSA, the review by the investigating physician, and the results of the additional rating scales. The raters were trained and certified by MedAvante, Inc., Hamilton, NJ, USA.

Sample Size

The target sample size included at least 40 to 50 patients with GAD, MDE, past/present mania, and ADHD, and approximately 100 patients without any of these diagnoses. Patients with multiple diagnoses counted toward sample size targets in each diagnostic category. The target sample size was selected to provide an accurate estimation of sensitivity and specificity, and a high probability of selecting the optimal item combination for inclusion in the final instrument. Assuming sensitivity of 80%, a sample size of 50 patients would provide an estimate of the sensitivity with a 95% confidence interval of ±1%. For specificity, at least 200 anticipated non-cases would be available for each diagnosis (100 cases meeting no diagnoses plus approximately 100 meeting at least one of the diagnoses but not the particular diagnosis of interest). Assuming a specificity of 90%, this sample size provided for a 95% confidence interval of ±4%.

Statistical Methods for PDI-4 Development

Responses on the PSA provided by patients who received a SCID/ACDS assessment were statistically analyzed to determine the combination of screening questions for each diagnosis on the PDI-4 that would have optimal operating characteristics: sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV). An iterative search of all the candidate symptom items for each diagnosis was used to find the "optimum" combination of four or fewer symptom questions. Specifically, for each diagnosis, all possible combinations of relevant endorsed symptom questions were tested, as well as all possible individual symptom frequency cutoff values. For this study, "optimum combination" was defined as the set of items that maximized the value of "sensitivity + specificity" using the SCID/ACDS diagnosis as the gold standard. Confidence intervals for sensitivity and specificity were two-sided 95% intervals utilizing exact methodology (Blyth-Still-Casella method) and large sample normal-based intervals. In addition, prespecified constraints for the top ranked symptom question combinations required inclusion of core DSM-IV symptom items for each disorder, and the same final scoring criteria across all four disorders: "response at a given level on at least three of the four items."

Since patients who scored higher on PSA items were more likely to have a structured diagnostic assessment, the impact of this sampling process on the operating characteristics for these sensitivity analyses was assessed by re-weighting using the two-stage sampling process.[26] This approach adjusts for the fact that patients were selectively interviewed and were not a random sample. In addition, since positive and negative predictive values depend on the prevalence of the disease in the population, the predictive values were re-estimated assuming the mid-value of the prevalence rate ranges provided in the first introductory paragraph as opposed to the observed rates, because the observed rates reflect an enriched sample.

The frequency of functional impairment as measured by the Mental Component Score and the Physical Component Score on the SF-12 was assessed for all patients who received a SCID/ACDS interview.

Convergent validity was summarized by Pearson's correlation coefficients between the summed PDI-4 severity scores for: GAD, MDE, mania, ADHD, and the corresponding optimized cutoff scores for the clinical rating scales: HADS anxiety subscale, PHQ-9, MDQ, and CAARS-SR-SV-ADHD. Scores were assigned to the symptom frequency levels on the PSA: Never = 0, Rarely = 1, Sometimes = 2, Most of the time/Often = 3, All of the time/Very often = 4. Optimized cutoff scores for the rating scales were based on cutoffs which yielded maximum sensitivity + specificity against SCID/ACDS diagnosis.

RESULTS

Patient Disposition

A total of 898 patients gave informed consent and completed the PSA. Of these, 194 did not meet symptom cutoff criteria for any potential diagnosis or were not used to fill the quota of patients with no diagnosis (controls) and were discontinued. The remaining patients (N = 704) were interviewed by the physician and of these, 264 were discontinued following completion of physician assessment, due to diagnostic quotas having been met (including that of "no diagnosis"); 440 patients completed the additional clinical self-assessments, and 343 of these completed the SCID/ACDS v1.2 centralized telephone interview. The centralized interview identified 143 (41.7%) unique patients who were diagnosed with at least one of the four diagnoses, and 46 (32%) of these patients had more than one diagnosis. Overall, 24 (7.0%) patients were diagnosed with GAD; 89 (26.0%) with MDE; 24 (7.0%) with past/present mania; and 65 (19.0%) with ADHD.

Patient Characteristics

Most of the patients, who completed the PSA as well as those who completed the centralized telephone interview, were middle-aged (mean age of 50 years), Caucasian (>85%) females (>60%), who had visited a physician two to five times within the previous three months (>60%); approximately one-third were currently taking medication for depression, anxiety, or pain; and less than 15% of patients consumed alcohol (at least one drink per day) or used recreational drugs (<10%). Most (>70%) of the patients were either married/widowed or divorced, had a post-secondary education (>60%), and reported experiencing functional disability within the past 3 months (>60%), and about one-half were employed.

The PDI-4

The subset of four items, which maximized sensitivity plus specificity for each disorder subject to prespecified constraints, were identified and the operating characteristics are presented in Table 1. Fewer items per disorder were considered, but a maximum of four were chosen in consideration of potential respondent burden, and because the magnitude of improvement in operating characteristics lessened with additional items. For example, the optimal sensitivity + specificity for mania was 1.60 for two items, 1.67 for three items, and 1.70 for four items. For each

TABLE 1. The Psychometric Characteristics for Diagnoses on the PDI-4 and Clinical Rating Scales Compared with the SCID/ACDS v1.2

N	PDI-4 Diagnosis	Sensitivity % (95% CI)	Specificity % (95% CI)	PPV % (95% CI)	NPV % (95% CI)
24	GAD	83 (63, 95)	75 (70, 80)	20 (13, 30)	98 (96, 100)
89	MDE	80 (70, 88)	80 (74, 84)	58 (49, 67)	92 (87, 95)
24	Mania	83 (63, 95)	82 (77, 86)	26 (17, 38)	98 (96, 100)
65	ADHD	82 (70, 90)	73 (68, 79)	42 (33, 51)	94 (91, 97)
N	Rating scale cutoff scores				
24	HADS-A ≥ 14	54 (33, 74)	81 (76, 85)	18 (10, 29)	96 (93, 98)
89	PHQ-9 ≥ 12	79 (69, 87)	81 (76, 86)	60 (50, 69)	91 (87, 95)
24	MDQ ≥ 7	83 (63, 95)	63 (57, 69)	15 (9, 22)	98 (95, 99)
65	CAARS ≥ 28	54 (41, 66)	87 (82, 91)	49 (37, 61)	88 (84, 92)

PDI = Provisional Diagnostic Instrument; CI = confidence intervals; PPV = positive predictive value; NPV = negative predictive value; GAD = generalized anxiety disorder; MDE = major depressive episode; ADHD = attention-deficit/hyperactivity disorder; HADS-A = Hospital Anxiety and Depression Scale-Anxiety subscale; PHQ = Patient Health Questionnaire; MDQ = Mood Disorder Questionnaire; CAARS = Conners' Adult ADHD Rating Scale.

diagnosis on the PDI-4, the operating characteristics of endorsing three out of four symptom items at or above the minimum required levels were similar to the operating characteristics determined for the clinical rating scales using the optimized cutoff values as described in the Methods (Table 1). The operating characteristics for GAD and ADHD in the final PDI-4 were somewhat higher in sensitivity compared with those for the HADS Anxiety and CAARS, respectively.

Additional analyses showed that the operating characteristics were not greatly affected by the non-random sampling scheme, with adjusted estimates of sensitivity and specificity at most 5% below the unadjusted estimates. However, application of the scale in a sample with lower prevalence of each disease than observed in our sample would indeed reduce the PPVs. Using the midpoint range of estimated prevalence rates in primary care to calculate expected PPVs for each diagnosis resulted in lower values for MDE and ADHD on the PDI-4 and associated rating scales. With a prevalence rate of 11.5% for MDE, the PPVs estimated for the PDI-4 and the PHQ-9 were 33% and 36%, respectively. For ADHD with a prevalence rate of 10%, the estimated PPVs were 25% and 31%, for the PDI-4 and CAARS, respectively. However, the higher prevalence rates in primary care for GAD and mania resulted in higher PPV values: GAD (11% prevalence; PDI-4, 30% PPV; HADS, 26% PPV) and mania (10% prevalence; PDI-4, 34% PPV; MDQ, 20% PPV). In contrast, all NPVs on the PDI-4 and rating scales ranged from 93% to 98%.

The possibility of over-diagnosis with the PDI-4 was examined and was found most often due to not directly assessing loss of function. Specifically, over-diagnosis was more frequent in patients with a symptom-based diagnosis of ADHD because they did not meet the ACDS criterion of "impairment in two or more settings." To improve the capability of the PDI-4 for diagnosing ADHD, we assessed responses for "loss of function" and "impairment in two or more settings" in 149 patients who completed the ACDS. Of those patients who had impairment in two or more settings (N = 76), 97% had at least moderate impairment in general functioning, and in patients who did not have impairment in two or more settings (N = 73) only 19% had at least moderate impairment in general functioning. These results prompted adding a functional impairment question at the end of the PDI-4. An endorsement of "often" was estimated to be the minimum frequency level of impairment for a diagnosis of ADHD; and for the other diagnoses, it was estimated to be at least "sometimes."

TABLE 2. Results of the Pearson's Correlation Analyses Between Scores for a Diagnosis on the PDI-4 and Corresponding Optimized Clinical Rating Scale Scores

Diagnosis on the PDI-4	HADS-A	PHQ-9	MDQ	CAARS
GAD (N = 24)	**0.71**	0.71	0.32	0.57
MDE (N = 89)	0.63	**0.82**	0.30	0.48
Mania (N = 24)	0.50	0.45	**0.59**	0.57
ADHD (N = 65)	0.51	0.52	0.43	**0.74**

PDI-4 = Provisional Diagnostic Instrument; GAD = generalized anxiety disorder; MDE = major depressive episode; ADHD = attention-deficit/hyperactivity disorder; HADS-A = Hospital Anxiety and Depression Scale-Anxiety subscale; PHQ = Patient Health Questionnaire; MDQ = Mood Disorder Questionnaire; CAARS = Conners' Adult ADHD Rating Scale.

PDI-4 scores were obtained by assigning values of 0–4 for each of the first 16 questions on the PDI-4 and summing resulting values for each of the four sections.

The correlations between the sum of four items (each scored 0–4) for each disorder on the final PDI-4 and respective clinical rating scale scores are summarized in Table 2. The correlation coefficient (*r*) values were high for each disorder on the PDI-4 and its respective clinical rating scale score: GAD and HADS-anxiety (r = 0.71); MDE and PHQ-9 (r = 0.82); mania and MDQ (r = 0.59); and ADHD and CAARS (r = 0.74).

Functional impairment assessed by the SF-12 for patients who screened positive or negative after the SCID/ACDS interview are shown in Table 3. Patients screening positive for any of the four disorders had significantly greater mental impairment than those screening negative. Differences in physical impairment were seen only for patients screening positive for GAD.

The questions on the final version of the PDI-4 are shown in Figure 1. The diagnostic sections were arranged as follows: GAD, MDE, ADHD, and past/present mania. Each four-item combination in the GAD, MDE, and Mania sections included questions that assessed specific DSM-IV required symptoms. The GAD section contains assessments of excessive worry and inability to control worry. The MDE section contains questions for the presence of dysphoria and anhedonia. The Mania section contains a question for the presence of feeling high or irritable. The ADHD section contains two items among the six questions on the ASRS v1.1 screener; one item assesses difficulty starting projects and the other assesses driven behavior.

Patient responses are scored by placing a transparent overlay with shaded areas on the PDI-4 as shown in Figure 1 indicating the frequency level that must be endorsed for

a given symptom to count toward a provisional diagnosis. (The actual patient self-report form would not show gray shaded areas used for scoring.) For each diagnosis to be rated as potentially present, an X needs to appear in the gray shaded areas for three of the four symptoms.

DISCUSSION

The PDI-4 is an empirically derived patient self-report differential diagnostic instrument for four nonpsychotic psychiatric disorders commonly encountered in primary care practices: GAD, MDE, current/past mania, and ADHD. It is an easily scored 17-item screening instrument providing a provisional diagnosis for patients who have at least three of four positive symptom responses within a diagnostic category and having functional impairment associated with those symptoms. Functional impairment, together with psychological symptoms, has been shown to be a potent indicator of the likelihood of a psychiatric diagnosis during the validation studies of other mental health self-report questionnaires.[14,16,27]

The PDI-4 item scores subtotaled within each diagnostic category correlated well with the optimized cutoff scores for each of the respective clinical rating scales providing evidence of convergent validity. However, two of the diagnoses (GAD and mania) also had somewhat relatively high correlations with other clinical rating scales (PHQ-9 and CAARS, respectively), but comorbidity of diagnoses may have contributed to this. Screening positive to any diagnosis on the PDI-4 was also associated with significantly greater impairment as measured by the mental health component of the SF-12.

The psychometric properties for each of the diagnoses on the PDI-4 were similar to those reported for other relatively short PSA instruments that have been validated and are widely used. A diagnosis of GAD assessed by the GAD-7 had sensitivity of 89% and specificity of 82%;[14] MDE assessed by the PHQ-9 had a sensitivity of 73% and specificity of 93%;[22] mania assessed by the MDQ had sensitivity of 73% and specificity of 90%;[23] and ADHD assessed by the ASRS-6 had sensitivity of 68.7% and specificity of 99.5%.[20]

There are limitations to our dataset that may affect the generalizability or accuracy of the cutoffs we established. First, the data used to derive the instrument were mostly from middle-aged Caucasian women, so further validation of this instrument in a more diverse population is necessary. The psychometric operating characteristics of the item combinations for each diagnosis based on this somewhat small dataset could be expected to be lower in a larger independent validation sample. Further, it has been reported that ultra-short tests (one to four items) have only moderate sensitivity, are best utilized for ruling out a diagnosis, and should only be used when there are sufficient resources for second-stage assessment of those who screen positive.[28] Moreover, PPVs for GAD and mania were relatively low, so the items selected for these underpowered diagnostic categories may not be optimal. Although the number of patients with GAD and mania were somewhat low, the confidence intervals for their respective estimated sensitivities and specificities appear to be acceptable. Finally, the PDI-4 has not been cross-validated in another primary care population, and provides only provisional diagnoses that should be confirmed by further evaluation.

CONCLUSION

A brief self-report instrument may be useful to assist the time-constrained primary care provider in arriving at a behavioral health diagnosis or to guide referral for behav-

TABLE 3. Functional Impairment Scores (Mean and SD) in Patients with Positive Screen PDI-4 Scores Compared with Those Patients Who Screened Negative for a PDI-4 Diagnosis

Disorder	SF-12 Mental Component Scale					SF-12 Physical Component Scale				
	N	Positive Screen	N	Negative Screen	p Value, *t* Score	N	Positive Screen	N	Negative Screen	p Value, *t* Score
GAD	123	30.1 (10.6)	309	44.0 (10.8)	<0.001, t = 12.3	123	44.0 (13.9)	309	47.2 (12.2)	0.028, t = 2.2
MDE	144	28.8 (8.9)	288	45.7 (9.9)	<0.001, t = 17.8	144	44.8 (14.1)	288	47.0 (12.1)	0.118, t = 1.6
Mania	92	32.8 (10.8)	341	42.0 (12.2)	<0.001, t = 7.0	92	46.4 (13.6)	341	46.2 (12.6)	0.879, t = −0.2
ADHD	150	33.3 (11.0)	282	43.6 (11.7)	<0.001, t = 9.1	150	45.5 (13.9)	282	46.7 (12.5)	0.342, t = 1.0

SD = standard deviation; PDI = Provisional Diagnostic Instrument; SF = Medical Outcomes Study Short-Form Health Survey (SF-12); GAD = generalized anxiety disorder; MDE = major depressive episode; ADHD = attention-deficit/hyperactivity disorder.

FIGURE 1. **The four sections assess for GAD, MDE, ADHD, and past/present mania, respectively. For a provisional diagnosis in any of the four sections, at least 3 of 4 X's must be in gray-shaded regions. Interference with daily functioning must be endorsed at least "often" for ADHD and "sometimes" for the other diagnoses. (Adapted from the Provisional Diagnostic Instrument (PDI-4) showing diagnostic symptom frequency levels (shaded areas) as they would appear with a scoring overlay in place (Copyright © 2009, Eli Lilly and Company. Reprinted with permission. For permission please contact: Copyright@lilly.com.)**

Provisional Diagnostic Instrument (PDI-4)

Instructions: Answer each question below by placing an "X" under the ONE response that best describes you.

How often over the PAST 30 DAYS have you been bothered by . . .	**Never**	**Rarely**	**Some-times**	**Most of the Time**	**All of the Time**	**GAD total**
Having trouble controlling your worry?						
Becoming more fatigued than usual?						
Having trouble concentrating or with your mind going blank?						
Worrying much more than needed about everyday activities?						
How often over the PAST 2 WEEKS have you been bothered by . . .	**Never**	**Rarely**	**Some-times**	**Most of the Time**	**All of the Time**	**MDE total**
Having less interest and enjoyment than usual?						
Feeling so depressed nothing could cheer you up?						
Feeling worthless or guilty?						
Having trouble sleeping or with sleeping too much?						
How often over the PAST 6 MONTHS have you been bothered by . . .	**Never**	**Rarely**	**Some-times**	**Often**	**Very often**	**ADHD total**
Avoided or delayed getting started when you had a task that required a lot of thought?						
Felt overly active and compelled to do things, like you were driven by a motor?						
Made careless mistakes on boring/difficult tasks?						
Left your seat in meetings in which you should remain seated?						
How often DURING YOUR LIFETIME have there been periods of time FOR AT LEAST A WEEK when . . .	**Never**	**Rarely**	**Some-times**	**Often**	**Very often**	**Mania total**
You talked almost constantly?						
You were extremely active and productive?						
You felt so high or irritable you might lose control?						
You had too much energy to be able to concentrate?						
Have the symptoms in ***any*** of the sections above interfered with your usual daily functioning?						

ioral health services. Additional cross-validation of this instrument is needed.

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