Clinician and Patient-Reported Outcome Measures (PROMs) Descriptions

Note: An overview of each tool is provided below for your reference. For PsychPRO users, tools are automatically scored, and brief interpretations are provided in the portal. This information is provided to indicate potentially significant and problematic areas for the individual that might warrant further assessment, treatment, and follow-up. *However, your clinical judgment should guide your use of patient assessments*. In addition, the use of the term 'initial visit' below refers to the first encounter with new patients and the first encounter with existing patients following enrollment in AMNet. Upon joining AMNet, begin by assigning the Brief Addiction Monitor **(BAM)** monthly to your patients. You may also assign other assessments according to the following recommendations as you see fit, either initially or as you grow more familiar with the portal. For detailed information on each tool, please see **appendix 2** for additional resources.

SCREENER

1. TAPS Tool (TAPS 1 & 2)
   - Tobacco, Alcohol, Prescription medication, and other Substance use
   - Two-step screening and brief assessment
     - TAPS-1 consists of a 4-item screen for alcohol, tobacco, drug, and prescription medication use over the past 12 months
     - TAPS-2 consists of 3 or 4 items per substance class assessing use over the past 3 months
   - We recommend assigning the TAPS 1 & 2 to all adult patients with Substance Use Disorders (SUDs) at their initial visit. The TAPS 1 should be re-assigned annually and the TAPS 2 should be re-assigned 3, 6, and 12 months following the initial visit (see **appendix 1** for more information)
   - Scoring: The TAPS Tool provides 7 scores, one for each substance. The scores range from 0 – 4 for alcohol, and 0 – 3 for other substances (cannabis, non-prescription stimulants (cocaine or methamphetamine), heroin, opioid, sedative, and prescription stimulants, with higher scores suggestive of greater severity.

2. PhenX Cigarette Smoking Status
   - An initial 4-item screen of lifetime and current cigarette consumption
   - A single follow-up item assessing current cigarette consumption
   - We recommend assigning the full measure to all adult patients with SUDs at their initial visit. The follow-up item should be assigned monthly (see **appendix 1** for more information)
   - Scoring: Based on responses to the first 2 items, patients can be classified as a never smoker, current every day smoker, current some day smoker, and former smoker.

3. PhenX Injection Drug Use
   - An initial 6-item screen of lifetime and current injection of nonprescription drugs
   - A single follow-up item assessing current injection of nonprescription drugs
   - We recommend assigning the full measure to all adult patients with SUDs at their initial visit. The follow-up item should be assigned monthly (see **appendix 1** for more information)

- Scoring: A total score is not generated from this measure. The purpose of this measure is to determine whether the patient has injected nonprescription drugs in his/her lifetime or is currently injecting nonprescription drugs.

GLOBAL DOMAIN

1. BAM
   - Brief Addiction Monitor
   - A 17-item questionnaire assessing alcohol and drug use, sleep disturbance, quality of life, drug and alcohol craving, and recovery over the past 30 days
   - This is a monitoring instrument that is appropriate for periodic re-administration
   - We recommend assigning the BAM to all adult patients with SUDs at their initial visit. It should be re-assigned monthly (see **appendix 1** for more information)
   - Scoring: The BAM generates 3 scores (risk score, protective score, and use score). The risk score ranges from 0-180, with a higher score associated with greater risk. The protective score ranges from 0-180, with a higher score associated with greater protection. The use score ranges from 0-90, with a higher score associated with greater use. Clinicians are strongly encouraged to attend to the item-level data because they have direct implications for treatment planning. They identify specific areas of need or resources for the patient's recovery. Treatment seeks to maximize the Protective to Risk ratio in an effort to initiate and maintain abstinence.

WITHDRAWAL

1. SOWS-Gossop
   - Short Opiate Withdrawal Scale
   - A 10-item patient-rated scale assessing withdrawal symptoms in the previous 24 hours
   - We recommend assigning the SOWS to adult patients experiencing opioid withdrawal symptoms at their initial visit. It can be re-assigned at the provider's discretion (see **appendix 1** for more information)
   - Scoring: Scores range from 0-30, with higher scores associated with greater withdrawal symptom severity.

Score	Interpretation
0	No withdrawal
1 – 10	Mild withdrawal
11 – 20	Moderate withdrawal
21 – 30	Severe withdrawal

2. COWS
   - Clinical Opiate Withdrawal Scale
   - An 11-item clinician-rated scale assessing opioid withdrawal symptoms
   - Providers can administer the COWS to patients experiencing opioid withdrawal at their initial visit in order to measure objective symptoms of withdrawal. It can be re-administered at the provider's discretion as needed during follow-up visits (see appendix 1 for more information)
   - Scoring: Scores range from 0–48, with higher scores suggestive of greater severity.

Score	Interpretation
5 – 12	Mild withdrawal
13 – 24	Moderate withdrawal
25 – 36	Moderately severe withdrawal
> 36	Severe withdrawal

RECOVERY

1. 1TEA
   - Treatment Effectiveness Assessment
   - 4 items assessing recovery outcomes
   - We recommend assigning the TEA to all adult patients with SUDs at their initial visit. It should be re-assigned monthly (see appendix 1 for more information) and serve as a starting point for discussion of their patient's recovery status.
   - Measures changes in four domains: substance use, health, lifestyle, and community
   - Scoring: Scores range from 4-40 with a higher score indicating treatment associated improvement in recovery.

CRAVING

1. VAS
   - Visual Analog Scale
   - Quantification of the subjective state of instant craving of opioids
   - Patients must indicate the extent of craving on a line labeled 'none' at one end and 'extremely' at the other end
   - We recommend assigning the VAS to all adult patients with an opioid use disorder (OUD) at their initial visit and re-assigning it monthly (see appendix 1 for more information)
   - Scoring: This is a slider scale from 1 to 10 with only 2 anchor points at 1 (none) and 10 (extremely). Patients mark the extent of craving experienced on the scale, with a higher value associated with greater craving.

DEPRESSION

1. PHQ-2+1
   - Patient Health Questionnaire
   - 3 items assessing depression symptoms and suicidal ideation in the past 2 weeks
   - We recommend assigning the PHQ-2+1 to all adult patients at their initial visit. It can be re-assigned monthly (see appendix 1 for more information)
   - Scoring: If the patient answers 2 (more than half the days) or 3 (nearly every day) to either of the first 2 items, it is recommended that the clinician administer the full PHQ-9 to the patient. If the patient answers 1 (several days), 2 (more than half the days), or 3 (nearly every day) to the final item on suicidal ideation, it is recommended that the clinician administer the Columbia Suicide Severity Rating Scale (C-SSRS).

2. PHQ-9
   - Patient Health Questionnaire
   - 9 items assessing depression symptoms in the past 2 weeks
   - We recommend assigning the PHQ-9 to adult patients that have answered 2 (more than half the days) or 3 (nearly every day) to either of the first 2 items of the PHQ-2+1 (see appendix 1 for more information)
   - Scoring: Scores range from 1 – 27, with higher scores suggestive of greater severity.

Score	Interpretation
1 – 4	Minimal depression
5 – 9	Mild depression
10 – 14	Moderate depression
15 – 19	Moderately severe depression
20 – 27	Severe depression

SUICIDE

1. C-SSRS+
   - Columbia-Suicide Severity Rating Scale 'Screen Version' plus the Intensity of Ideation Subscale of the 'Since Last Visit' version of the C-SSRS (i.e., C-SSRS+).
   - The 6 items on the Screen Version ask about wish for death, thoughts of suicide, suicidal thoughts with method without specific thoughts or intent, suicidal intent without and with specific plan, and suicide behavior. The intensity sub-scale items are 5 Likert-type items rated on a 5-point scale (1 = least severe; 5 = most severe).
   - Providers can administer the C-SSRS+ to adult patients that have answered 1 (several days), 2 (more than half the days), or 3 (nearly every day) to the final item on suicidal ideation in the PHQ-2+1 (see appendix 1 for more information)
   - Scoring: Each item on the Screen Version is answered using a binary response (yes/no). The Screen Version is scored as low, moderate, or high risk. Interpretation of the C-SSRS intensity of ideation sub-scale can be either item-level and/or based on an overall intensity score. The intensity of ideation sub-scale is scored in the following manner:
     - The highest numbers endorsed on the 5 intensity items (Frequency, Duration, Controllability, Deterrents, and Reasons for Ideation) are added.
     - The sum ranges from 2 to 25, with the higher number indicating more intense ideation.
     - There are no "cut off" score for intensity. However, data that looked at ranges of scores and risk ratios for suicide behavior found a 34X increase for the 21-25 range with lower odds ratios as the score range drops. These scores are best used to help inform clinical judgment when there is uncertainty about disposition and to assess change over time.

Score	Interpretation
6 – 10	Moderate (11x times the risk of suicide)
11 – 15	Moderately Severe (13x times the risk of suicide)
16 – 20	Severe (19x times the risk of suicide)
21 – 25	Very Severe (34x times the risk of suicide)
20 – 27	Severe depression

PAIN

1. PROMIS-Pain
   - PROMIS - Pain Interference – Short Form 3. V1.0
   - 8 items assessing the level of interference with social and daily activities due to pain
   - We recommend assigning the PROMIS-Pain to all adult patients at their initial visit. This tool can be re-assigned at the provider's discretion (see appendix 1 for more information)
   - Scoring: Scores range from 8 to 40, with higher scores suggestive of greater severity. The raw scores on the 8 items should be summed to obtain a total raw score. Next, the total raw score is converted to a T-score.

T-Score	Interpretation
< 55	None to slight levels of pain interference
55.0 – 59.9	Mild levels of pain interference
60.0 – 69.9	Moderate levels of pain interference
≥ 70	Severe levels of pain interference
20 – 27	Severe depression

APPENDIX 1.

FREQUENCY OF ASSIGNING PROMS AND ESTIMATED TIME FOR PROM COMPLETION

- Upon joining AMNet, begin by assigning the Brief Addiction Monitor (BAM) monthly to your patients. You may also assign other assessments according to the following recommendations as you see fit, either initially or as you grow more familiar with the portal.

At Initial visit*		
Measure	**Patient Population**	**Estimated Time Range for PROM Completion**
TAPS 1 & 2	All adults with SUDs	1-4 minutes
PhenX Cigarette Smoking Status	All adults with SUDs	10 seconds-1 minute
PhenX Injection Drug Use	All adults with SUDs	10 seconds-2 minutes
BAM	All adults with SUDs	5-10 minutes
SOWS	All adults undergoing opioid withdrawal	30 seconds-1 minute
COWS**	All adults undergoing opioid withdrawal	3-6 minutes
TEA	All adults with SUDs	1-2 minutes
VAS	All adults with an OUD	10-15 seconds
PHQ-2+1	All adults with SUDs	20-30 seconds
PROMIS-Pain	All adults with SUDs	30 seconds-1 minute
	Total Estimated Completion Time:	**11-28 minutes**
Monthly After Initial Visit		
Measure	**Patient Population**	**Estimated Time Range for PROM Completion**
PhenX Cigarette Smoking Status (only second item - "do you now smoke cigarettes")	All adults with SUDs	10-15 seconds
PhenX Injection Drug Use (only the fourth item - "how long ago has it been since you last used a needle to inject a drug not prescribed by a doctor")	All adults with SUDs	10-15 seconds
BAM	**All adults with SUDs**	**5-10 minutes**
TEA	All adults with SUDs	1-2 minutes
VAS	All Adults who use opioids	10-15 seconds
PHQ-2+1	All adults with SUDs	20-30 seconds
	Total Estimated Completion Time:	**7-13 minutes**

Other Schedule Following Initial Visit		
Measure	**Patient Population**	**Estimated Time Range for PROM Completion**
TAPS 1	All adults with SUDs every 12 months	1 minute
TAPS 2	All adults with SUDs at 3, 6, and 12 months following the initial visit	2-3 minutes
	Total Estimated Completion Time:	**1-4 minutes**
At Provider's Discretion		
Measure	**Patient Population**	**Estimated Time Range for PROM Completion**
COWS**	Adults undergoing opioid withdrawal	3-6 minutes
SOWS	Adult undergoing opioid withdrawal	30 seconds-1 minute
PHQ-9	Adults who answered 2 (more than half the days) or 3 (nearly every day) to either of the first 2 items of the PHQ-2+1	1-3 minutes
C-SSRS+	Adults who answered 1 (several days), 2 (more than half the days), or 3 (nearly every day) to the final item on suicidal ideation in the PHQ-2+1	1-2 minutes
PROMIS-Pain	Adults at provider's discretion	30 seconds-1 minute
	Total Estimated Completion Time:	**6-13 minutes**

* The term 'initial visit' refers to the first encounter with all new patients and the first encounter with existing patients following enrollment in AMNet.
** COWS is a clinician-rated scale

APPENDIX 2. ADDITIONAL RESOURCES

Measure	References
TAPS 1 & 2	• McNeely, J., Wu, L. T., Subramaniam, G., et al. (2016). Performance of the Tobacco, Alcohol, Prescription Medication, and Other Substance Use (TAPS) Tool for Substance Use Screening in Primary Care Patients. *Annals of Internal Medicine*, 165(10), 690–699. doi:10.7326/M16-0317 • Gryczynski, J., McNeely, J., Wu, L. T., et al. (2017). Validation of the TAPS-1: A Four-Item Screening Tool to Identify Unhealthy Substance Use in Primary Care. *Journal of General Internal Medicine*, 32(9), 990–996. doi:10.1007/s11606-017-4079-x
PhenX Cigarette Smoking Status	https://www.phenxtoolkit.org/protocols/view/30604
PhenX Injection Drug Use	https://www.phenxtoolkit.org/protocols/view/161101
BAM	Cacciola, J. S., Alterman, A. I., Dephilippis, D., et al. (2013). Development and initial evaluation of the Brief Addiction Monitor (BAM). *Journal of substance abuse treatment*, 44(3), 256–263. doi:10.1016/j.jsat.2012.07.013
SOWS	Gossop, M. (1990). The development of a short opiate withdrawal scale (SOWS). *Addictive Behaviors*, 15(5), 487-490.
COWS	Wesson, D. R., and Ling, W. (2003). The Clinical Opiate Withdrawal Scale (COWS). *Journal of Psychoactive Drugs*, 35:2, 253-259, DOI: 10.1080/02791072.2003.10400007
TEA	• Ling, W., Farabee, D., Liepa, D., and Wu, L. T. (2012). The Treatment Effectiveness Assessment (TEA): an efficient, patient-centered instrument for evaluating progress in recovery from addiction. *Substance Abuse and Rehabilitation*, 3(1), 129–136. doi:10.2147/SAR.S38902 • Ling, W., Nadipelli, V. R., Solem, C. T., et al. (2019). Measuring recovery in opioid use disorder: clinical utility and psychometric properties of the Treatment Effectiveness Assessment. *Substance Abuse and Rehabilitation*, 10, 13–21. doi:10.2147/SAR.S198361

VAS	Heinz, A.J., Epstein, D.H., Schroeder, J.R., et al. (2006). Heroin and Cocaine Craving and Use during Treatment: Measurement Validation and Potential Relationships. *Journal of Substance Abuse Treatment*, 31, 355–64. doi.org/10.1016/j.jsat.2006.05.009
PHQ-2+1	Mitchell, A. J., Yadegarfar, M., Gill, J., and Stubbs, B. (2016). Case finding and screening clinical utility of the Patient Health Questionnaire (PHQ-9 and PHQ-2) for depression in primary care: a diagnostic meta-analysis of 40 studies. *BJPsych Open*, 2(2), 127–138. doi:10.1192/bjpo.bp.115.001685
PHQ-9	Kroenke, K., Spitzer, R. L., and Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of general internal medicine*, 16(9), 606–613. doi:10.1046/j.1525-1497.2001.016009606.x
C-SSRS+	Posner K., Brown G.K., Stanley B., et al. (2011). The Columbia-Suicide Severity Rating Scale: initial validity and internal consistency findings from three multisite studies with adolescents and adults. *Am J Psychiatry*, 168(12), 1266-1277. doi:10.1176/appi.ajp.2011.10111704
PROMIS-Pain	Amtmann, D., et al. (2010). Development of a PROMIS item bank to measure pain interference. *Pain*, 150(1), 173–182. doi:10.1016/j.pain.2010.04.025