

Brief Addiction Monitor (BAM)

What is the BAM?

The Brief Addiction Monitor (BAM) is a 17-item, multidimensional progress monitoring tool designed to support the provision of measurement-based care to patients commencing and matriculating through treatment for substance use disorders (SUD).

The BAM items assess: (1) Risk for relapse or worsening severity of SUD, (2) Protective behaviors that support recovery and resistance to relapse, and (3) Use of alcohol and other substances.

Why use the BAM?

The primary purpose of the BAM is to support individualized, measurement-based, SUD care (MBC) by providing reliable symptom monitoring in a format that yields clinically actionable data that is not a burden to collect. Patients' clinical progress can be assessed with the item-level data as well as via the BAM's three composite scores corresponding to the Risk, Protective, and Use domains.

The BAM is not intended for use as a screening tool for SUD case finding. It is intended to support the delivery of measurement-based SUD care among patients in (or enrolling in) SUD care. Patients and clinicians find the BAM an appropriate set of items to inform initial treatment planning and for ongoing measurement-based care. The language of some of the items, e.g., references to "recovery," might seem inappropriate to individuals who are pre-contemplative and/or not seeking SUD treatment.

Who can administer?

The BAM can be administered by clinical staff as an in-person or telephone interview; or it can be completed as a patient self-administered questionnaire.

NOTE: The BAM is in the public domain. Although the BAM is self-report, if you have concerns about your own or a loved one's use of substances, this should be discussed with a healthcare provider.

Versions of the BAM:

The **BAM Continuous** (aka BAM-R) retrospectively examines the patient's past 30-days allowing respondents to specify the actual number of days rather than intervals of days (e.g., 4 to 8, 9 to 15 days).

The **BAM-IOP** retrospectively examines the patient's past 7-days. It can be administered on a weekly, biweekly, or every 3-week basis.

The **BAM Categorical** which includes categorical responses, e.g., 16 to 30 days, is a modification of the original BAM Continuous (aka BAM-R) presented in a 2013 paper by Cacciola and colleagues (<https://pubmed.ncbi.nlm.nih.gov/22898042/>). Because the response options in the BAM Categorical use intervals of time rather than actual number of days/nights, the BAM Categorical might be less sensitive to change than the BAM Continuous (aka BAM-R). Consequently, the BAM Categorical is no longer used in VA. Both the BAM Continuous and BAM-IOP are used in VA SUD care.

BAM Scoring:

Formulas

All versions of the BAM use the same computational formulas for the Risk, Protective, and Use scores.

Risk=Sum of items 1, 2, 3, 8, 11, 15

Protective=Sum of items 9, 10, 12, 13, 14, 16

Use=Sum of items 4, 5, 6

Items 7a-g and 17 are not included in the computations of the scores.

Please note that the scores of each item differ across versions of the BAM.

For the BAM Continuous (aka BAM-R), each item ranges in value from 0 to 30. That yields the following ranges for each score:

Risk=0-180

Protective=0-180

Use=0-90

For BAM-R items with categorical responses, i.e., Items 1, 8, 9, 12, 15, & 17, each categorical response is scored as follows: 0, 8, 15, 22, and 30.

For BAM-R item 14 (Income), No=0, Yes=30.

For the BAM Categorical and BAM-IOP, each item ranges in value from 0 to 4. That yields the following ranges for each score:

Risk=0-24

Protective=0-24

Use=0-12

For item 14 (Income), No=0, Yes=4.

NOTE: The BAM does not generate a psychometrically refined total score. Please see “Scoring Guidelines” for more information on interpretation and utilization of BAM results.

Scoring Guidelines

1. **BAM Composite Scores.** The BAM’s three composite scores (Risk, Protective, and Use) have limited utility at this time because norms, cut-scores, or percentile rank correlations between the three BAM scores and other clinical outcomes are not available. Therefore, higher values on the Risk, Protective, and Use scores indicate greater presence of risk factors, protective factors, and substance use, respectively. Treatment should focus on minimizing Risk and maximizing Protective with the goal of zeroing out Use (because a zero score on Use is abstinence).

The three composite scores certainly can be part of the data that are shared with the patient, but the items identify what behaviors are contributing to Risk, where deficits in Protective behaviors may lie, and which substances are contributing to Use. In lieu of norms on clinically significant change, clinicians can use an ipsative approach wherein the patient’s current BAM data are compared against the patient’s prior assessments with the BAM. In an ipsative approach, all clinical changes and plateaus are reviewed with the patient.

Although the BAM’s three composite scores (Use, Risk, and Protective) need additional psychometric evaluation, there is evidence the scores are sensitive to clinical change. For example, a 2024 paper by Dams and colleagues (<https://pubmed.ncbi.nlm.nih.gov/38211367/>) reported that the three composite scores

showed “medium to large improvements” among Veterans who participated in residential treatment.

2. **BAM Items.** Clinicians are encouraged to attend to the BAM items to a greater degree than the composite scores because the items have stronger psychometric support and richer implications for treatment planning. For example, two patients could have a Risk score of 90 where one patient is experiencing physical health challenges (item 1), sleep disturbances (item 2), and mood challenges (item 3) while the other patient might be experiencing high levels of exposure to risky situations (item 11), bothersome craving (item 8), and interpersonal conflict (item 15) with no physical health, sleep, or mood disturbances. Hence, the items are key for identifying how to customize and collaborate on the treatment plan for mitigating sources of Risk and augmenting Protective sources.

The BAM in Level of Care Determinations

The BAM is not intended for level of care (LoC) determinations, but it could inform the process as part of a comprehensive biopsychosocial assessment. Although the BAM’s utility in diagnostic or LoC determinations has not been evaluated, BAM data can help inform the selection of LoC.

For example, several of the BAM items have relevance to the American Society of Addiction Medicine’s LoC assessment dimensions:

- 1) Intoxication/Withdrawal Status – BAM items 4 (alcohol use), 5 (heavy alcohol use), 6 (drug use)
- 2) Biomedical conditions and complications – BAM item 1 (Physical Health)
- 3) Emotional/Behavioral conditions – BAM items 2 (Sleep Problems) & 3 (Mood Disturbances)
- 4) Level of Treatment Acceptance – BAM item 17 (Satisfaction with recovery)
- 5) Risk of continued/resumed substance use and 6) Environmental support of recovery – BAM items 8 (Craving), 9 (Confidence to be abstinent), Item 10 (Self-help Involvement), 11 (Exposure to risky situations), 13 (Time spent at Work, School, Volunteering), 14 (Legal income), 15 (Interpersonal conflict), & 16 (Interpersonal support).

Using the BAM in Measurement-Based Care (MBC) and in Routine Outcomes Monitoring (ROM):

Use of the BAM in MBC:

The BAM is included in the core set of MBC tools identified by the Kennedy Forum (https://www.thekennedyforum.org/app/uploads/2020/02/MBC_supplement.pdf).

As detailed in a 2021 paper by Clarke and colleagues

(<https://pmc.ncbi.nlm.nih.gov/articles/PMC8240849/>), the BAM also is included in the

Addiction Medicine Practice-Based Research Network (AMNet) set of SUD assessment tools available in the American Psychiatric Association’s PsychPRO registry. A webinar on using the BAM in MBC for SUD is available for viewing on VHA TRAIN

(<https://www.train.org/vha/course/1098735/details?activeTab=reviews>).

VA-produced, brief videos are available on YouTube.com that present (1) how to introduce the BAM in MBC <https://www.youtube.com/watch?v=MsjN11aVNUU> and (2) how to conduct MBC in a group setting <https://www.youtube.com/watch?v=AjbHbt0Pn2o&t=73s>.

Use of the BAM in ROM:

The 2023 papers by Dams and colleagues (<https://pubmed.ncbi.nlm.nih.gov/36795425/>) and Byllesby and colleagues (<https://pubmed.ncbi.nlm.nih.gov/37014022/>) analyzed aggregated BAM-R data (including both individual items as well as Risk, Protective, and Use scores) to examine change in patients' clinical status from pre- to post-treatment. A 2024 paper by Burke and colleagues (<https://pubmed.ncbi.nlm.nih.gov/38258856/>) and a 2022 paper by Yi and colleagues (<https://pubmed.ncbi.nlm.nih.gov/34619714/>) examined change in aggregated BAM Categorical data. With respect to the BAM-IOP, 2014 papers by Gustafson and colleagues (<https://pubmed.ncbi.nlm.nih.gov/24671165/>) and Chih and colleagues (<https://pubmed.ncbi.nlm.nih.gov/24035143/>) report on data from the BAM adapted for weekly assessments. Chih and colleagues found that an analytic model based on weekly assessments, including BAM data, showed good predictability for lapses to substance use.