

Youth Medication-Assisted Treatment Literature Review and Tool

January 2024

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Purpose

Develop an instrument for youth/families receiving medication-assisted treatment (MAT). Allyson Kelley & Associates was asked by a client to create a tool that could be used for youth MAT program participants to track progress and outcomes associated with their treatment.

Phase 1: AKA conducted a brief literature review on MAT program evaluations and assessment tools to measure the progress of substance use treatments.

Phase 2: AKA created a self-assessment tool for youth at SBRRRC in the MAT program.

Background

Communities have advocated for culturally adapted MAT programs and culturally informed recovery care approaches for AIAN with OUD, and there are unique considerations for AIAN communities in the uptake of MAT ([Mpofu et al., 2021](#); [Venner et al., 2018](#)). However, there is a lack of uptake of MAT within SUD treatment programs that serve AIAN ([Rieckmann et al., 2017](#)) and a lack of evidence of the effectiveness of MAT on psychosocial outcomes in AIAN communities, specifically among youth. Despite its effectiveness, pharmacotherapy is underused among youth. Studies have found that youth who use MAT may be more likely to remain in care than those who only use behavioral health services ([Hadland, 2018](#)).

Literature Review

Eligibility Criteria

AKA conducted a literature review of validated recovery-related tools developed or validated for use with Native youth. During this phase, we searched Google Scholar for articles published in the last 10 years related to MAT program evaluations and recovery assessments with youth. Key terms used to identify articles included American Indian and Alaska Native (AIAN), Native American, MAT, recovery assessments, substance use, opioid use disorder, youth, adolescents, evaluation, and recovery capital.

Results

More than 20 articles were reviewed during the literature review phase. The initial portion of the literature review searched for the evaluation of MAT programs within AIAN communities. No MAT outcome studies within AIAN communities were identified in the peer-reviewed literature. The search was expanded to include all MAT outcome evaluations to understand the tools used to explore recovery outcomes.

Medication-Assisted Treatment Outcome Evaluations and Tools

Most evaluation and research studies of MAT with youth explored the clinical outcomes or effectiveness of MAT on opioid abstinence or treatment retention ([Committee on Substance Use and Prevention, 2016](#); [Levy and Camenga, 2019](#); [Matson et al., 2014](#)), while few explored the functional or psychosocial outcomes associated with MAT and concurrent behavioral health interventions ([Fishman et al., 2010](#); [Maglione et al., 2018](#); [Peck et al., 2020](#)). Among studies that did look at behavioral outcomes associated with MAT programs, one explored relationship quality and recovery attitudes on MAT for OUD among emergent adults 18-24 years ([Anderson-White, 2023](#)), and another explored the validity of the recovery assessment scale (RAS) for measuring recovery among youth with substance use disorder ([Gonzalez et al., 2015](#)), while another used a Revised Child Depression

and Anxiety Scale (RCADS) and Strengths and Difficulties Questionnaire (SDQ) to assess outcomes associated with MAT ([Gibbons et al., 2021](#)). While all these tools were validated for youth (see Table 1 for further details), we could not find specific instances of these tools being used or validated specifically with AIAN youth. One tool, the Youth Personal Balance Tool, a strengths-based, holistic measure of youth wellness, was developed by and validated for use with AIAN youth receiving a range of behavioral health-related services (prevention, treatment, recovery). A Youth Council at a California tribal health board developed the tool to explore wellness and help youth learn to balance their health using all four quadrants of the medicine wheel (physical, spiritual, emotional, and mental) ([Barraza et al., 2016](#)).

Table 1. Validated Youth Tools

Instrument	Measures	Recovery-related	AIAN-specific?	Link
Youth Personal Balance Tool	Strengths-based, holistic measure of youth wellness using the MW framework. Explores youth-driven holistic wellness goals of youth. (20 questions)	Validated tool used with youth in prevention, treatment, and recovery	Yes	23 3 2016 1 barraza.pdf (cuanschutz.edu)
Recovery Assessment Scale (RAS)	Measures “Personal Determination,” “Skills for Recovery,” “Self-Control in Recovery,” “Social Support and Moving Beyond Recovery.” (41 questions)	Validated for use with youth	No	Exploring the Factor Structure of a Recovery Assessment Measure among Substance-Abusing Youth - PMC (nih.gov)
Relationship quality and recovery attitudes	RAS-7 item questionnaire measures recovery attitudes; relationship quality	Measured among emergent adults/youth	No	Recovery attitudes scale
Revised Child Depression and Anxiety Scale (RCADS)	Assess symptoms of youth depression and anxiety, used as a measure of recovery outcomes.	Used to assess recovery in treatment with youth	No	rcads-childreported 8-18.pdf (corc.uk.net)
Strengths and Difficulties Questionnaire	Used to assess youth strengths and difficulties pre/post substance use treatment.	Used to assess recovery in treatment with youth	No	(PDF) The Strengths and Difficulties Questionnaire (SDQ) (researchgate.net)

Recovery Indicators for Youth/Families from the Research

An additional component of the literature review explored recovery indicators among youth and families involved in substance use treatment services to understand what outcomes to incorporate in the youth assessment. Youth are developmentally different than adults and much adult research

on opioid and substance use treatment is applied for use with youth. The onset of substance use disorder mainly occurs in adolescence and youth adulthood (Chambers et al., 2003), and neurodevelopment of the brain regions associated with motivation and impulsivity suggests that treatment engagement and prognosis for adolescents would differ from adults (Chang et al., 2017). Little is known about the prevalence, pathways, or predictors of long-term recovery for adolescents with SUD. The integrative review by Finch et al. recommends more research and understanding of MAT and recovery as well as harm reduction approaches for youth. Researchers argue that brain development, legal status, recovery capital, and family contexts are different for youth with SUD compared to adults, and therefore, adult recovery models are insufficient for this population (Finch et al., 2020). Therefore, it is important to understand what indicators are significant in recovery to assess youth outcomes associated with substance use treatment. AKA found that the following outcomes should be measured when working with youth and family populations and MAT.

Youth:

- Quality of life
- Tangible and perceived social support
- Hopelessness/hopefulness
- Beliefs about recovery

Family:

- Access to resources
- Ability to cope with loved one's substance use
- Relationships (e.g., disintegrating)
- Family cohesion
- Their own quality of life

Next Steps

AKA will work with the client to finalize the MAT tool for youth and families. This self-assessment below includes demographic questions, personal balance questions (adapted from Barraza et al., 2016), and two questions regarding beliefs about recovery. This tool may be used to assess youth's progress in the MAT program and understand the program's impact on key outcomes associated with recovery capital. Once an adequate sample of responses is collected, AKA will validate the reliability and validity of the scale with youth and family populations in the client community.

Method: Self-Assessment

Frequency: Every six months or intake/6-month follow-up/discharge

Demographic Questions (Optional)

Q1. Type of medication-assisted treatment.

Q2. Location of MAT services.

Q3. Participant age.

Q4. Past use, last 30 -days.

Personal Balance

Response Options: Likert Scale, 0 = Very Untrue to 4 = Very true

- Q1. I take responsibility for my mistakes and actions.
- Q2. I talk with elders about my options before making a decision.
- Q3. I belong and actively participate in clubs and afterschool activities (church, sports, Native gatherings/ceremonies, etc.)
- Q4. When my family and friends do well I try to tell them.
- Q5. I try to practice things I need to or can improve on, to reach my goals.
- Q6. I feel connected to my family.
- Q7. Each day I do something positive that I enjoy. I'm usually happy.
- Q8. I do things in my life just to help others (such as being there for someone in a tough time, volunteering, or helping elders).
- Q9. Most people like me, but if they don't, I'm okay with it.
- Q10. I'm not afraid to step up to be a leader, role model, or mentor in my community.
- Q11. There is something that I have in my life right now that I have a passion for and am excited to do it every day.
- Q12. I can usually control my reactions and emotions so that I don't do anything I will later regret.
- Q13. I feel safe, such as in the community, in my family, or at school.
- Q14. I make an effort to learn something new every day.
- Q15. I take care of my body, such as exercising, watching my diet, and/or choosing to be drug-free.
- Q16. I have dreams or visions that help guide me.
- Q17. I am quick to forgive others that have hurt me, and I try to place myself "in other's shoes" before making a judgment of them.
- Q18. When I find something I really enjoy, I do it in moderation. I try to balance it in my life so it doesn't take over everything I do.
- Q19. I am aware that my actions affect not only me but those around me.
- Q20. I believe that even though we can't see Creator or spiritual world, we know it exists.

Beliefs about recovery

- Q21. People in recovery sometimes have setbacks.
- Q22. I have my own plan for how to stay or become well.