# Addressing a Crisis: How Evidence-Based Telemedicine Can Treat Unhealthy Alcohol Use

Reviewed by James Besante, MD September, 2021 joinmonument.com

# Abstract

Unhealthy alcohol use is a national crisis with devastating effects on individuals, families, the healthcare system, and the economy. At least 1 in 20 US adults meet the diagnostic criteria for alcohol use disorder (AUD), yet only 7.2 percent receive treatment in a given year. To understand how to bridge the treatment gap, this paper reviews the latest literature on national alcohol use, evidence-based treatment modalities, and the efficacy of telemedicine. This paper also shares how Monument, an innovative online treatment platform, has utilized a combination of leading evidence-based modalities in the treatment of AUD, and includes preliminary findings on its efficacy and cost-saving potential. Monument's approach shows promise and scalability, and additional research is needed to demonstrate its longterm effectiveness.

#### Unhealthy Alcohol Use in the United States

Unhealthy alcohol use is one of the leading preventable causes of death in the US. Despite the fact that over the last ten years roughly 95,000 deaths per year were directly attributable to alcohol,<sup>1</sup> heavy alcohol use has increased over the last two decades.<sup>2</sup> Between 2006 and 2014 rates of alcohol-related emergency room visits increased 47 percent.<sup>1</sup> Additionally, the COVID-19 pandemic has further exacerbated unhealthy alcohol use as demonstrated by alcohol sales and survey studies.<sup>3,4</sup>

While excessive alcohol use climbs, there is more widespread acknowledgement of the chronic medical condition known as alcohol use disorder (AUD). Many people who drink alcohol will develop AUD, defined by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) as "a medical condition characterized by an impaired ability to stop or control alcohol use despite adverse social, occupational, or health consequences".<sup>5</sup> According to the 2019 National Survey on Drug Use and Health (NSDUH), researchers estimate as many as 5.3 percent to 13.9 percent of American adults have AUD. However, only 7.2 percent of those with AUD receive treatment in a given year.<sup>6</sup> There is an urgent need to address AUD and reduce barriers to care by providing accessible, evidence-based treatment.

# Monument Uses Evidence-Based Modalities to Help Patients Achieve Their Goals

For decades, AUD treatment has not been integrated with mainstream healthcare or treated with the same clinical rigor as other health conditions. However, there is strong evidence that pharmacologic and non-pharmacologic interventions reduce excessive alcohol use, which has informed Monument's holistic treatment approach. Monument's treatment program includes three core modalities: psychotherapy, medication, and peer support.

#### 1. Psychotherapy

Monument connects patients to therapists specialized in treating substance use disorders. The Monument therapist network utilizes psychotherapy modalities including Cognitive Behavioral Therapy (CBT), Motivational Interviewing, and Contingency Management. CBT has been demonstrated to have a positive impact on alcohol related outcomes when compared to control conditions.<sup>7</sup> CBT can help reduce heavy drinking days by helping individuals build coping skills, manage urges to drink and negative thoughts, persevere through setbacks, and address co-occurring anxiety and depression.<sup>8</sup>

"The non-judgemental healthbased approach worked for me. I liked being able to check in when I felt like I needed the support. Most of all, my therapist was excellent. Her competence in the field, knowledge, compassion, and empathy really made a big difference for me."

- Monument member

#### 2. Medication

Monument connects patients to licensed physicians who can prescribe medication if appropriate. Medications such as naltrexone and acamprosate for AUD are supported by randomized controlled trials: a meta-analysis published in JAMA in 2014 revealed both medications reduce the risk of returning to any drinking as well as return to heavy drinking.9 While naltrexone has been demonstrated to reduce the likelihood of relapse irrespective of psychosocial intervention,<sup>10</sup> data suggests it works best in conjunction with CBT as evidenced by a reduced risk of heavy drinking days.<sup>11</sup> The combination of pharmacology and psychotherapy is widely acknowledged by substance use disorder experts as the gold standard in the treatment of AUD, and is the clinical basis of Monument's treatment program.

#### 3. Peer Support

Monument facilitates peer-to-peer connection through virtual support groups and an anonymous community forum. Monument's peer support groups differ from Alcoholics Anonymous (AA) and other groups based in Twelve Step Foundation (TSF) because they are moderated by a licensed therapist, inclusive of goals for abstinence and harm reduction, and are open discussions on a variety of topics. However, Monument groups do build upon the evidence from AA/TSF that shows peer encouragement and accountability can reduce heavy drinking.<sup>12</sup> Mutual help organizations like AA and TSF have demonstrated efficacy in sustaining abstinence from alcohol and in decreasing alcohol-related outcomes, such as drinking intensity and drinking consequences.<sup>13</sup> Participants in AA/TSF have also demonstrated lower healthcare costs after two years of follow up.

In addition to utilizing the leading evidencebased practices, Monument's treatment approach is also informed by the latest research on harm reduction. Research indicates that while the likelihood of avoiding excessive drinking is highest in abstinence-focused individuals, those with non-abstinence-focused objectives were also able to reduce their alcohol use.<sup>14</sup> Experts have therefore called for reduction in heavy drinking to be recognized as a meaningful clinical endpoint in the treatment of AUD given the health benefits of reducing the percent of time a person is drinking heavily and the dosedependent effects of alcohol.<sup>15</sup> That is why Monument's treatment approach is inclusive of abstinence-based goals and non-abstinence based goals. Individuals may be more likely to engage in treatment if they have the option for a non-abstinence endpoint.<sup>16</sup> There are significant benefits to reduction in alcohol use, as demonstrated by studies evaluating nonabstinence levels of reduction and the World Health Organization (WHO) alcohol risk levels framework.

It's also important to note that there is risk for wide variability in implementation of evidencebased practices. Monument's protocols ensure high-fidelity adherence to evidence-based practices and continuous improvement upon them.

#### Monument's Consumer-Centric Telehealth Platform Meets Patients Where They Are

Monument is innovating the delivery of evidence-based care through an elegant telehealth platform designed to increase access to treatment and improve patient engagement. Telemedicine is a rapidly evolving modality for effectively treating AUD, and by the nature of how services are delivered, it reduces barriers to care such as physical proximity, scheduling challenges, confidentiality concerns, and cost. Numerous studies have emerged over the last few years demonstrating that telemedicine has similar efficacy to in-person visits. Internetbased CBT has been demonstrated to be just as effective as face-to-face CBT in reducing alcohol consumption among patients with AUD.<sup>17</sup> A systematic review of studies examining real-time videoconference pharmacologic and non-pharmacologic interventions demonstrated positive findings for safe and effective treatment of AUD. One RCT found that individuals percieved telemedicine as an acceptable alternative to in-person intervention.<sup>18</sup>

"My anxiety makes it difficult for me to visit a clinician or support group in person, but this virtual service was so easy that it truly put me at ease."

- Monument member

Another study found that among individuals with AUD who participated in telemedicine in addition to standard in-person therapy, only 6 percent of telemedicine participants dropped out compared to 31 percent of in-person individuals at 180 days.<sup>18</sup> Moreover, a systematic review published in 2020 found that telemedicine is effective in reducing alcohol use and is a valuable resource for accessing the healthcare system.<sup>19</sup> Individuals who face stigma associated with in-person interventions may benefit from more anonymous interventions such as online communities to treat AUD. Additionally, telemedicine platforms have become particularly important during the COVID-19 pandemic given disruptions to in-person therapy.<sup>20</sup>

Telemedicine makes treatment more accessible. and it also enables patients to initiate and engage in treatment alongside their daily schedule. Monument's initial statistical results point to industry-leading rates of initiation and engagement in treatment among its members. 97.5 percent of Monument patients who enrolled in a Monument treatment plan in June 2021 initiated treatment within 14 days. 80.3 percent of Monument patients who initiated treatment with Monument in June 2021 engaged in treatment 2 or more times within 34 days. Qualifying engagements include booking or attending a second appointment, RSVPing to or attending a group session, or receiving a prescription for medication. Industry averages for initiation of treatment range from 41.6 percent in Medicaid

HMOs to 36.6 percent in Commercial HMOs. Industry averages for engagement in treatment range from 13.6 percent for Commercial PPOs to 4.6 percent for Medicare PPOs.<sup>22</sup>

Initiation and engagement in treatment are crucial to a patient's ability to achieve their alcohol reduction goals. At each therapy appointment, Monument patients are asked to report how many days in the last period they have drank heavily, taken their medications to treat AUD, and been abstinent from alcohol. Preliminary data from Monument patients demonstrates a trend towards fewer heavy drinking days, more days taking medications to treat alcohol use disorder, and more days abstaining from alcohol among patients who participate in a greater number of appointments.



Initiation and Engagement in Treatment on the Monument Platform Relative to 2018 HEDIS Measures.

51% Average decrease in heavy drinking days per week by the 4th clinician appointment

Average increase in medication adherence after the 2nd physician appointment

62%

**43%** Average increase in days abstinent

per week for all members who had a 3rd clinician appointment

Data is based on a total of 455 patients. Patients were asked about the average percentage of days spent heavily drinking, average number of days remaining abstinent from alcohol, and average number of days taking medications for alcohol use.

# **Implications & Future Directions**

Monument's evidence-based practices, accessible telehealth platform, and promising preliminary findings point to significant opportunities for improving health outcomes and reducing healthcare costs at scale. For Monument patients who participate in counseling sessions, patients report roughly a 50 percent decrease in heavy alcohol use over the last period. The FDA Critical Path Investigation meeting in 2018 found that reducing heavy drinking to moderate or low risk drinking resulted in a reduction in healthcare costs per patient from \$4,182 to \$1,994 after one year. Moreover, the annual costs of treating cirrhosis is estimated to be \$44,835 per patient. The costs are even more staggering at scale. A 2010 analysis revealed that unhealthy alcohol use cost the US nearly \$250 billion.<sup>20</sup> These costs include lost workplace productivity and alcohol-related healthcare costs, among others. Given Monument's industry-leading affordability (the Total Care Biweekly plan costs \$149 per month), expanding access to Monument's treatment through strategic partnerships is not only a clinically-effective initiative, but also a cost-saving one.

In addition to expanding access to care through strategic partnerships, Monument is continuing to redefine the alcohol treatment landscape by using rigorous data analysis to improve health outcomes, and building a robust proprietary dataset for the treatment of AUD.

Everyone deserves access to evidence-based care, and with collaboration, innovation, and clinical expertise, the treatment gap will begin to narrow. The over 90 percent of people living with AUD who do not receive treatment each year will have options that meet their needs and preferences, and everyone will have a chance to experience how reducing or abstaining from alcohol consumption can enable an improved quality of life.

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Get in touch

partnerships@joinmonument.com