

WHITE PAPER

Digital Tools: **Essential for SUD Treatment Success**



The Business Case for Addressing America's Treatment Crisis

THE SCALE OF THE CRISIS

According to Mental Health America's 2024 report¹, about 18% of adults reported having substance use disorder (SUD), 11% had an alcohol use disorder (AUD), and 9.5% reported an illicit drug use disorder. Of those reporting SUD, a staggering 77% did not receive any form of treatment.² With that many people in crisis and the lack of treatment options, it isn't surprising that over 80,000 Americans died from drug overdose in 2024, according to the Centers for Disease Control and Prevention.³

With the onset of the pandemic in 2020 and its corresponding stress and social isolation, drug and alcohol use increased while options for treatment decreased.⁴ Even now, years after the pandemic hit, people in crisis with mental health and SUD issues lack options for services, leaving them to end up in hospital emergency rooms or jails.⁵

The SUD Reality

- 18% of adults reported having substance use disorder (SUD)
- 11% of adults reported having an alcohol use disorder (AUD)
- 77% of people with SUD receive no treatment
- 80,000+ Americans died from drug overdose in 2024
- 160 million Americans live in mental health professional shortage areas

OPERATIONAL CHALLENGES AND MARKET INEFFICIENCIES



The pandemic's impact on treatment availability created lasting operational challenges. Even now, years after the pandemic hit, people in crisis with mental health and SUD issues lack options for services, leaving them to end up in hospital emergency rooms or jails—the most expensive and least effective intervention points.

The impact of reduced treatment options that began during pandemic lockdowns was felt nationwide and hit particularly hard in rural and underserved areas, where providers and services were already scarce. Even when care options are available, long wait times for the first appointment are typical, leaving people with SUD on their own without immediate access to resources.

Market Forces Driving Digital Transformation

THE RISE OF HEALTHCARE CONSUMERISM: MARKET FORCES DRIVING DIGITAL TRANSFORMATION

As healthcare technology rapidly advances, individuals are increasingly becoming more engaged in driving their care experience. This movement, known as healthcare consumerism, reflects an empowered population that wants to play a more significant role in making decisions for their own care. Additionally, it has impacted consumer expectations for care and influences their decisions on where to seek care.

CONSUMER-DRIVEN MARKET DYNAMICS

The foundation for this transformation is robust consumer readiness. Approximately 91% of Americans own a smartphone, up from 35% in the Pew Research Center's first survey of smartphone ownership, conducted in 2011.⁶ This widespread device ownership enables consumers to demand and access sophisticated digital health services previously unavailable.

Healthcare consumers now demonstrate clear preferences for digital-first experiences. For the first time, telemedicine surpassed in-person visits as consumers' preferred channel for prescription refills (61% of respondents reported preferring telemedicine) and minor illness care (51% of respondents reported preferring telemedicine).⁷ This preference shift indicates that consumers view digital tools not as emergency substitutes, but as superior options for routine care.

ORGANIZATIONAL RESPONSE TO CONSUMER DEMANDS

To meet these evolving needs, healthcare organizations are implementing digital tools that allow consumers to:

- Schedule their own appointments
- Complete online check-in
- View their records and visit reports
- Access virtual care, telehealth, and custom smartphone apps
- Pay bills online
- Receive more consistent and immediate access to support
- Take ownership, track, and complete tasks that are part of their care plan
- Navigate their health through consumer-facing educational resources
- Take more autonomy over their health journey, giving them greater control and ownership of their healthcare decisions



These rapid advances in healthcare technology have reset how consumers expect to receive care. Where the previous model was one-size-fits-all, digital technologies enable personalized, customized services accessed at the consumer's convenience.

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Consumer adoption rates create powerful market pressures, with 80% of respondents now having accessed telemedicine services, representing an 8 percentage point increase from 2021.⁸ This consumer demand has driven provider acceptance, with physicians' perceptions that digital health tools benefit patient care rising from 85% in 2016 to 93% by 2022.⁹ The economic scale is substantial—over 1.3 billion people will use digital health in 2024, including fitness trackers, online consultations, and digital treatment tools.¹⁰ Organizations that fail to meet these consumer-driven expectations risk losing market share to competitors offering more responsive digital experiences.

BREAKING DOWN TRADITIONAL HEALTHCARE BARRIERS

Healthcare organizations that fail to adopt digital solutions risk falling behind competitors and missing opportunities to improve both financial performance and clinical outcomes.

Digital transformation was cited as the issue most likely to impact global health systems in 2025.¹¹ Healthcare organizations that fail to adopt digital solutions risk falling behind competitors and missing opportunities to improve both financial performance and clinical outcomes.

Key performance indicators demonstrate the value proposition:

- **61%** of hospital leaders prioritize improved patient outcomes as the key ROI metric for digital health solutions¹²
- Health plans with 500,000 members could potentially **increase annual revenue by \$55 million to \$150 million** through reduced churn rates¹³
- Hospital systems could **save \$4 million to \$12 million annually** by automating calls with conversational AI¹⁴

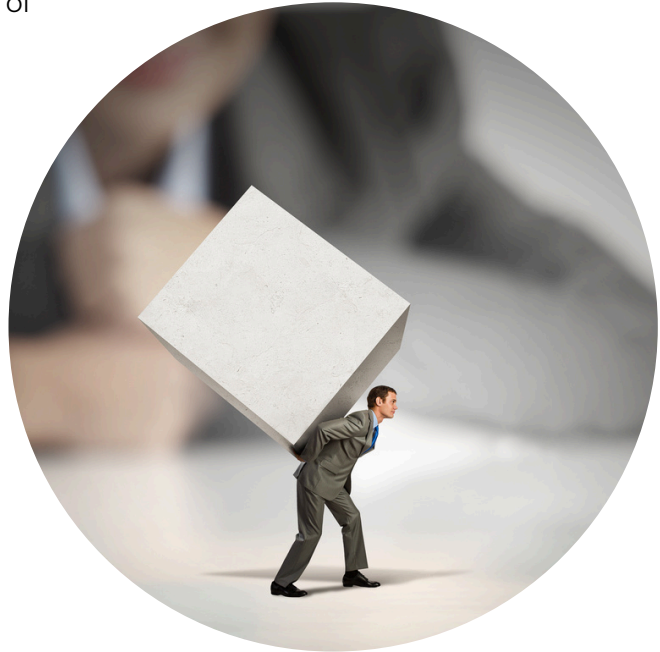
However, while 86% of healthcare executives acknowledge the potential cost reduction through digital health solutions, 7 in 10 have yet to see any ROI to date.¹⁵ This gap between potential and realized value often stems from poorly planned implementations that fail to address real operational challenges, combined with a lack of organizational commitment to fully adopt and integrate digital tools despite knowing their benefits to the business, workplace efficiencies, and clinical outcomes.

Addressing Workforce Shortages and Capacity Constraints

THE SCOPE OF THE WORKFORCE CRISIS

Healthcare organizations face critical workforce shortages, particularly in behavioral health specialties. As of March 2023, 160 million Americans live in areas with mental health professional shortages, with over 8,000 more professionals needed to ensure an adequate supply.¹⁶

The scope of this crisis extends beyond simple numbers. Nearly half (48%) of behavioral health workers say the impacts of workforce shortages have caused them to consider other employment options.¹⁷ Administrative burden compounds the problem, with a third of the workforce reporting spending most of their time on administrative tasks, with 68% of those who provide care to patients saying this takes away from time they could be directly supporting clients.¹⁸



RURAL AND UNDERSERVED AREAS

Many communities across the nation are challenged by not having a sufficient clinician capacity to conduct universal screening, initiate and support medication-assisted treatment (MAT), and offer and maintain treatment programs for the population who may need it.¹⁹ This challenge is particularly acute in rural communities. As of September 2024, 61.85% of Mental Health Professional Shortage Areas (Mental Health HPSAs) were located in rural areas.²⁰ Counties outside of metropolitan areas had one-third the supply of psychiatrists and half the supply of psychologists as their more urban counterparts.²¹

The rural workforce shortage creates cascading effects on treatment capacity. People in rural America are more likely to have SUD, particularly opioid use disorder; OUD mortality rates were significantly higher in nonmetro areas than in metro areas in 2021 (2.6% vs. 1.8%, respectively).²² Yet in smaller communities, these individuals often experience greater stigma toward addiction and are less likely to seek or receive specialized treatment.²³

DIGITAL SOLUTIONS AS CAPACITY MULTIPLIERS

Digital solutions directly address workforce bottlenecks by extending each clinician's capacity to serve more patients through automated screening, real-time monitoring, and 24/7 recovery support capabilities. Organizations can significantly expand their treatment capacity without hiring additional staff, while simultaneously improving patient engagement and retention.

Strategic Imperatives for Digital Health Implementation

ESSENTIAL BUSINESS IMPERATIVES

Digital health solutions are no longer optional, but essential, for SUD treatment organizations facing critical market and operational pressures:



Improving Treatment Retention and Completion Rates

Digital tools provide ongoing support that keeps patients engaged throughout their recovery journey, reducing dropout rates and improving treatment completion. This continuous engagement helps maintain stable census numbers while ensuring patients receive the full benefit of their treatment programs.



Building and Growing Census

Digital solutions act as a digital front door to attract new patients, support building a referral network, and demonstrate that an entity is providing comprehensive services to support individuals throughout their recovery journey.



Solving Capacity Constraints

Many communities, providers, and health plan programs are challenged by not having sufficient clinician capacity to conduct universal screening and medication induction and maintenance; digital tools extend provider reach without proportional staffing increases



Achieving Operational Efficiency

Digital tools automate routine tasks like record maintenance and appointment scheduling while improving communication flow between care teams and simplifying provider-client interactions



Meeting Quality Standards

Digital tools directly support Healthcare Effectiveness Data and Information Set (HEDIS) quality measures for behavioral health, with the National Committee for Quality Assurance stating digital technologies are "vital to quality" and will "close gaps and bring equity to care," while the Joint Commission's 2024 Telehealth Accreditation Program establishes digital delivery as a recognized standard of excellence



Enhancing Data Collection and Reporting

Digital solutions enable more accurate and efficient data collection, improving organizational performance on key quality metrics used by health plans and accrediting bodies while supporting real-time access to patient information



Delivering Proven Clinical Outcomes

Digital health interventions have been evaluated in SUD and reveal positive effects on SUD recovery metrics



Driving Cost Savings and Financial Sustainability

Digital solutions reduce administrative overhead, lower staffing costs through automation, and enable organizations to serve more patients while improving both clinical outcomes and financial performance.



Addressing Critical Access Barriers

Stigma can prevent a person from getting help, while digital solutions provide anonymous interventions that directly overcome treatment-seeking barriers

PREVENTION AS A COST-CONTAINMENT STRATEGY

The most effective approach to managing healthcare costs is preventing conditions before they require expensive interventions. However, current prevention efforts face significant obstacles. Research suggests more than 75% of people do not consider SUDs to be chronic illnesses like diabetes or heart disease, creating barriers to early identification and intervention.²⁴ Additionally, funding pressures are drastically limiting prevention initiatives, cutting into staff capacity, and reducing resources for data analysis and program implementation.

These funding constraints create a critical gap: while the need for screening and brief intervention grows, organizations lack the personnel to conduct universal screening and deliver SBIRT (Screening, Brief Intervention, and Referral to Treatment) at scale. Many healthcare settings struggle to implement consistent screening protocols due to staff time limitations and competing clinical priorities.

Prevention-focused digital tools can address both the knowledge gap and capacity constraints by providing cost-effective, scalable, and accessible automated education, screening, and early intervention capabilities that reach individuals before they require costly emergency services or long-term treatment. These tools can normalize conversations about substance use risk factors, automate SBIRT protocols, and provide immediate resources for those beginning to experience problems.

MEETING QUALITY STANDARDS AND PERFORMANCE REQUIREMENTS

Recognizing the threats communities were experiencing due to the scarcity of care and staff burnout, the Institute for Healthcare Improvement (IHI) added additional goals to its existing framework for improving healthcare. Initially created in 2007 as the Triple Aim, focused on costs and quality care, the IHI added goals addressing the need to develop sustainable service models in 2014 and comprehensive care access in 2022. With these new goals, the framework is now known as the Quintuple Aim.²⁵

Additionally, recent parity rulings have put further pressure on providers and service organizations to ensure equal treatment coverage. The Centers for Medicare & Medicaid Services' Framework for Healthy Communities²⁶ prioritizes expanding data collection on social determinants of health, closing gaps in programs and policies, and improving access to healthcare services for all, including underserved communities and individuals with disabilities. Meeting Quality Standards Digital tools directly support Healthcare Effectiveness Data and Information Set (HEDIS)²⁷ quality measures for behavioral health, with the National Committee for Quality Assurance stating digital technologies are "vital to quality" and will "close gaps and bring equity to care,"²⁸ while the Joint Commission's 2024 Telehealth Accreditation Program establishes digital delivery as a recognized standard of excellence.²⁹

Digital tools address many of these concerns, improving access to care and extending the reach of care providers in a cost-effective manner. In areas challenged by a lack of healthcare facilities and staffing shortages, these tools help fill key gaps, improving the quality of patient care.



Impact of Evidence-Based Digital Interventions

Digital Tools:

- Reduce emergency department utilization
- Decrease treatment dropout rates
- Improve medication adherence
- Extend the reach of existing clinical staff
- Provide 24/7 support capabilities

Digital health interventions are being widely evaluated in SUD and have generally shown positive effects on SUD recovery metrics.³⁰ The National Drug Abuse Treatment Clinical Trials Network has demonstrated that digital therapeutics can produce treatment outcomes comparable to traditional clinician-delivered care while significantly expanding treatment capacity.³¹

Research shows that when properly implemented, digital tools can reduce emergency department utilization³², decrease treatment dropout rates, improve medication adherence³³, extend the reach of existing clinical staff, and provide 24/7 support capabilities.³⁴

Implementation Strategy and Partner Selection: Selecting the Right Digital Partner

Choosing the right digital health partner is critical for implementation success and achieving meaningful outcomes. Focus on these essential criteria when evaluating potential vendors:

✓ Implementation Expertise and Ongoing Support

Evaluate vendors who provide structured onboarding processes, dedicated implementation teams, and realistic deployment timelines, followed by sustained post-implementation support. The best partners combine technical setup with change management strategies that ensure staff adoption and workflow integration, then provide dedicated support personnel and ongoing resources to continually support adoption and utilization of your technology investment. Look for partners who offer regular check-ins, performance optimization, troubleshooting assistance, and continuous training to maximize long-term value and ensure sustained success.



✓ Proven Clinical Outcomes

Look for partners with documented evidence of improving treatment retention, patient engagement, and recovery outcomes. Request specific data on metrics like program completion rates, emergency department utilization reduction, and long-term recovery sustainability from organizations like yours.

✓ **Turnkey Solutions with Marketing and Adoption Support**

Select partners that offer comprehensive resources, enabling staff to effectively engage with clients and drive platform adoption and utilization. The best vendors offer ready-to-use materials, training resources, and promotional strategies that support both internal staff engagement and external client onboarding.

✓ **Seamless Integration Capabilities**

Prioritize solutions that integrate smoothly with your existing systems, eliminating the need for manual workarounds. Your partner should transform fragmented data into actionable insights that enhance clinical decision-making and operational efficiency.

✓ **Compliance and Security Excellence**

Select organizations that demonstrate rigorous security standards, including HIPAA compliance and HITRUST certification. Your partner should provide comprehensive data protection, audit trails, and security protocols that meet or exceed the requirements of the healthcare industry, while ensuring patient privacy and regulatory compliance.

✓ **Staff-Centric Design**

Select platforms that demonstrably enhance staff efficiency and minimize administrative burdens. The right tools should automate routine tasks, provide clinical decision support, and enable staff to focus more time on direct patient care.

✓ **Scalability and Growth Support**

Select partners whose solutions can expand with your organization's success, accommodating increased patient volumes and evolving service needs without requiring platform replacement.

✓ **Financial Sustainability**

Demand clear documentation of return on investment through reduced operational costs, increased capacity, and improved clinical outcomes. The best partners provide detailed financial models showing implementation costs and projected savings.



Key Questions for SUD Digital Health Implementation:

- What are our current capacity constraints?
- How do our consumers prefer to access care?
- Which digital tools align with our quality metrics?
- What is our timeline for realizing the ROI?



The most successful partnerships combine proven technology with expert implementation support and a commitment to measurable, long-term outcomes.



Conclusion

The evidence is clear: digital health solutions have evolved from optional enhancements to essential infrastructure for effective treatment of substance use disorders. With 77% of individuals with SUDs not receiving treatment and workforce shortages affecting 160 million Americans, traditional care models cannot address the scale and complexity of the current crisis.

The convergence of multiple factors creates an unprecedented opportunity:

- Consumer demand for digital-first healthcare experiences
- Proven clinical outcomes from evidence-based digital interventions
- Quality standards that recognize digital delivery as excellence
- Financial pressures require operational efficiency
- Workforce constraints demand capacity multiplication

Organizations that embrace comprehensive digital health strategies position themselves to thrive in this transformed landscape. They can expand access, improve outcomes, reduce costs, and meet evolving consumer expectations while addressing critical workforce shortages.

“The question is no longer whether to implement digital health solutions, but how quickly and effectively organizations can integrate these tools to serve more individuals, deliver better outcomes, and achieve sustainable growth.”

Healthcare leaders who act decisively to implement evidence-based digital solutions will not only improve their competitive position but also fulfill their fundamental mission: ensuring that individuals struggling with substance use disorders receive the comprehensive, accessible, and effective care they need to achieve lasting recovery.

The technology exists. The evidence supports its effectiveness. The market demands it. The time for digital transformation in SUD treatment is now.

Sources

1. Mental Health America. (2024). The state of mental health in America: Prevalence data. <https://mhanational.org/wp-content/uploads/2024/12/2024-State-of-Mental-Health-in-America-Report.pdf>
2. Mental Health America. (2024). The state of mental health in America: Prevalence data. <https://mhanational.org/wp-content/uploads/2024/12/2024-State-of-Mental-Health-in-America-Report.pdf>
3. Centers for Disease Control. (2024). https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2025/20250514.htm
4. Vo, A. T., Patton, T., Peacock, A., Larney, S., & Borquez, A. (2022). Illicit substance use and the COVID-19 pandemic in the United States: A scoping review and characterization of research evidence in unprecedented times. *International Journal of Environmental Research and Public Health*, 19(14), 8883. <https://doi.org/10.3390/ijerph19148883>
5. Most, Becca. "People in mental health crisis have nowhere to go in parts of Pierce County. Here's why." *News Tribune*, August 12, 2024, <https://www.yahoo.com/news/people-mental-health-crisis-nowhere-123000233.html>
6. Sidoti, Olivia, and Wyatt Dawson. "Mobile Fact Sheet." Pew Research Center, <https://www.pewresearch.org/internet/fact-sheet/mobile/>
7. Rock Health. (2023, April 11). Consumer adoption of digital health in 2022: Moving at the speed of trust. <https://rockhealth.com/insights/consumer-adoption-of-digital-health-in-2022-moving-at-the-speed-of-trust/>
8. Digital Health Statistics. (2025, March 15). Digital health statistics 2025 by adoption, usage, impact. <https://media.market.us/digital-health-statistics/>
9. Digital Health Statistics. (2025, March 15). Digital health statistics 2025 by adoption, usage, impact. <https://media.market.us/digital-health-statistics/>
10. Statista. (2025). Digital health – Statistics & facts. <https://www.statista.com/topics/2409/digital-health/>
11. Deloitte. (2025). 2025 global health care outlook. Deloitte Insights. <https://www.deloitte.com/us/en/insights/industry/health-care/life-sciences-and-health-care-industry-outlooks/2025-global-health-care-executive-outlook.html>
12. Sage Growth Partners. (2024). Patient outcomes top measure of digital health solutions' ROI. TechTarget. <https://www.techtarget.com/virtualhealthcare/news/366614846/Patient-outcomes-top-measure-of-digital-health-solutions-ROI>
13. Kaye, Matt, and Dan Sabido. "Quantifying the value of digital transformation in health care." Deloitte Consulting LLP, 2024, <https://www.deloitte.com/us/en/Industries/life-sciences-health-care/articles/measuring-digital-transformation-roi.html>
14. Kaye, Matt, and Dan Sabido. "Quantifying the value of digital transformation in health care." Deloitte Consulting LLP, 2024, <https://www.deloitte.com/us/en/Industries/life-sciences-health-care/articles/measuring-digital-transformation-roi.html>

15. Ernst & Young. (2024, March 25). EY Health Pulse Survey: Digital health solutions boost efficiencies and automation, but ROI has yet to come. https://www.ey.com/en_us/newsroom/2024/02/ey-health-pulse-survey-digital-health-solutions-boost-efficiencies-and-automation-but-roi-has-yet-to-come
16. The National Council. (2024, June 21). New study: Behavioral health workforce shortage will negatively impact society. <https://www.thenationalcouncil.org/news/help-wanted/>
17. Rural Health Information Hub. (2024). Healthcare access in rural communities overview. <https://www.ruralhealthinfo.org/topics/healthcare-access>
18. Rural Health Information Hub. (2024). Healthcare access in rural communities overview. <https://www.ruralhealthinfo.org/topics/healthcare-access>
19. Marsch, L. A., Borodovsky, J. T., Solhkhah, R., Hancock, M., Lord, S. E., & Brewer, J. A. (2020). The application of digital health to the assessment and treatment of substance use disorders: The past, current, and future role of the National Drug Abuse Treatment Clinical Trials Network. *Journal of Substance Abuse Treatment*, 112, 4-11. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7134325/>
20. Rural Health Information Hub. (2024). Healthcare access in rural communities overview. <https://www.ruralhealthinfo.org/topics/healthcare-access>
21. Commonwealth Fund. (2023, May). Understanding the U.S. behavioral health workforce shortage. <https://www.commonwealthfund.org/publications/explainer/2023/may/understanding-us-behavioral-health-workforce-shortage>
22. AAMC Research Institute. (2024). Rethinking rural health. <https://www.aamcresearchinstitute.org/our-work/issue-brief/rethinking-rural-health>
23. AAMC Research Institute. (2024). Rethinking rural health. <https://www.aamcresearchinstitute.org/our-work/issue-brief/rethinking-rural-health>
24. Centers for Disease Control and Prevention. (2024, June 20). Stigma reduction. Stop Overdose. <https://www.cdc.gov/stop-overdose/stigma-reduction/index.html>
25. Nundy, S., Cooper, L. A., & Mate, K. S. (2022). The quintuple aim for health care improvement: A new imperative to advance health equity. *JAMA*, 327(6), 521-522. <https://doi.org/10.1001/jama.2022.0184>
26. CMS Framework for Healthy Communities." Centers for Medicare & Medicaid Services, <https://www.cms.gov/priorities/health-equity/minority-health/equity-programs/framework>
27. "HEDIS." National Committee for Quality Assurance, <https://www.ncqa.org/hedis/>
28. The Future of HEDIS." National Committee for Quality Assurance, March 13, 2025, <https://www.ncqa.org/hedis/the-future-of-hedis/>
29. The Joint Commission Launches Telehealth Accreditation." The Joint Commission, April 23, 2024, <https://www.jointcommission.org/resources/news-and-multimedia/news/2024/04/the-joint-commission-launches-telehealth-accreditation/>

- 30 Hampton, J., Mugambi, P., Caggiano, E., Eugene, R., & Covvey, J. R. (2024). Closing the digital divide in interventions for substance use disorder. *Journal of Psychiatric and Brain Sciences*, 9(1), e240002. <https://doi.org/10.20900/jpbs.20240002>
31. Marsch, L. A., Borodovsky, J. T., Solhkhah, R., Hancock, M., Lord, S. E., & Brewer, J. A. (2020). The application of digital health to the assessment and treatment of substance use disorders: The past, current, and future role of the National Drug Abuse Treatment Clinical Trials Network. *Journal of Substance Abuse Treatment*, 112, 4-11. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7134325/>
32. Pardes, A., Rene, R., Chun, P., & Cherson, M. (2022). Technology-enabled behavioral health integration decreases emergency department utilization. *Clinical Practice and Epidemiology in Mental Health*, 18, e174501792208150. <https://doi.org/10.2174/17450179-v18-e2208150>
33. Espírito-Santo, M., Santos, S., & Estêvão, M. D. (2024). Digital solutions available to be used by informal caregivers, contributing to medication adherence: A scoping review. *Pharmacy*, 12(1), 20. <https://doi.org/10.3390/pharmacy12010020>
34. Lin, L. A., Fernandez, A. C., & Bonar, E. E. (2022). Practical technology for expanding and improving substance use disorder treatment: Telehealth, remote monitoring, and digital health interventions. *Psychiatric Clinics of North America*, 45(4), 621-640. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9352538/>

CHESS Health as Partner

CHESS Health is a leading provider of effective, turnkey, evidence-based digital health solutions backed by peer support. These tools empower providers, health plans, and public sector organizations to address the substance use disorder crisis by enhancing prevention, facilitating care coordination, and improving adherence to care plans and treatment retention—ultimately resulting in better health outcomes.



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