Executive Report: The Future of Behavioral Healthcare

By Dennis Morrison, PhD

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eleos

Foreword

There's an old Danish proverb that goes like this:

"Prediction is difficult, especially when dealing with the future."

Well, no offense to the Danes, but when it comes to behavioral health, we actually have a pretty solid idea of where things are headed. Advances in technology, changes in healthcare policies, and evolving client needs are all shaping the field in profound—and already visible—ways.

This report aims to make sense of all these different trends and their collective impact in a digestible way (with a little bit of color commentary from yours truly 😊).

Dig in below, and [drop me a line on social media](#) to let me know what you think!

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Overview

The Big Picture: Trends Affecting Behavioral Health

Before we dive into specific advancements that are emerging in behavioral health, let's set the scene by reviewing some of the biggest high-level trends driving innovation across the space.

1

Workforce Shortages

Too many patients, too few providers—'nuff said. I don't mean to oversimplify this issue, as we know the causes are many and complex, but the bottom line is that staff burnout is real—and recruitment and retention remain an uphill battle.

2

Administrative Burden

We can't talk about workforce challenges without talking about the overwhelming administrative burden placed on providers— namely, documentation requirements. Providers spend too much time and energy on paperwork rather than client care, and that takes a toll on their job satisfaction and wellbeing.

3

Inadequate Funding

Behavioral health is historically underfunded, and new policies may threaten even more cuts. At the same time, demand for services is higher than ever—pressuring providers to continually do more with less.

4

Telehealth Expansion

Virtual care continues to grow in popularity among clients and providers alike, and there is huge potential for it to make necessary care more accessible. But at the same time, it brings with it a host of regulatory and reimbursement challenges.

5

Consumer Expectations

Thanks in part to the rapid expansion of things like virtual care and health-focused apps, today's clients are demanding increasingly personalized, digital-first care experiences.

Behavioral Health Innovations on the Horizon

Okay, now for the meat of the sandwich: Eight of the top innovations making waves in behavioral health. I believe these areas of clinical and technological advancement will completely transform the way we deliver—and the way our clients receive—behavioral healthcare. Keep reading for a deeper dive into these innovations, including my personal take on why each one matters.

P.S. Want to skip to a specific section? Simply click the corresponding number or the tab on the right edge of the page.

1 | **The Integration of Primary Care & Behavioral Care** – The data clearly show that merging mental and physical healthcare saves money and drives better outcomes. In fact, this was a foundational principle in the development of the Certified Community Behavioral Health Clinic (CCBHC) model, and I foresee an even tighter connection between these two areas going forward.

2 | **Pharmacological & Biological Advances** – AI-driven drug discovery, psychedelics, and advancements in gut-brain research are poised to revolutionize psychiatric treatment approaches.

3 | **Measurement-Based Care** – The human services space has long been criticized for a lack of objective, standardized outcomes data—especially in comparison to the medical field. In reality, the data exist—just too fragmented to be of any real value at scale. But I believe that will change, especially as the shift to value-based care (VBC) speeds up.

4 | **Virtual Reality (VR) & Immersive Tech** – VR—and its cousin, augmented reality (AR)—are in the very early stages of adoption within human services. The data on these technologies are positive for several behavioral health problems, so we can reasonably expect to see an uptick in usage across clinical settings.

5 | **Digital Therapeutics (DTx)** – Consumer-facing mental health apps are booming, but challenges like clinical effectiveness, regulatory oversight, and user retention persist.

6 | **Digital Phenotyping** – Wearables and other mechanisms for passive data collection hold a lot of promise in predicting and preventing mental health issues before they escalate into bigger problems.

7 | **Invasive & Non-invasive Neurological Interventions** – We're seeing some interesting developments for both invasive and non-invasive neurological interventions—from devices that alter brain patterns without the need for surgery to deep implants that are placed in the brain or on major nerves. This could greatly expand options for addressing treatment-resistant conditions.

8 | **AI & Enhanced Computing Technologies** – This includes artificial intelligence and augmented intelligence, but it also spans a wide range of other technologies—some of which are described in this report. It might seem like a "no duh" prediction, but I think it still deserves a place here: technology will transform how we diagnose, treat, and manage behavioral health.

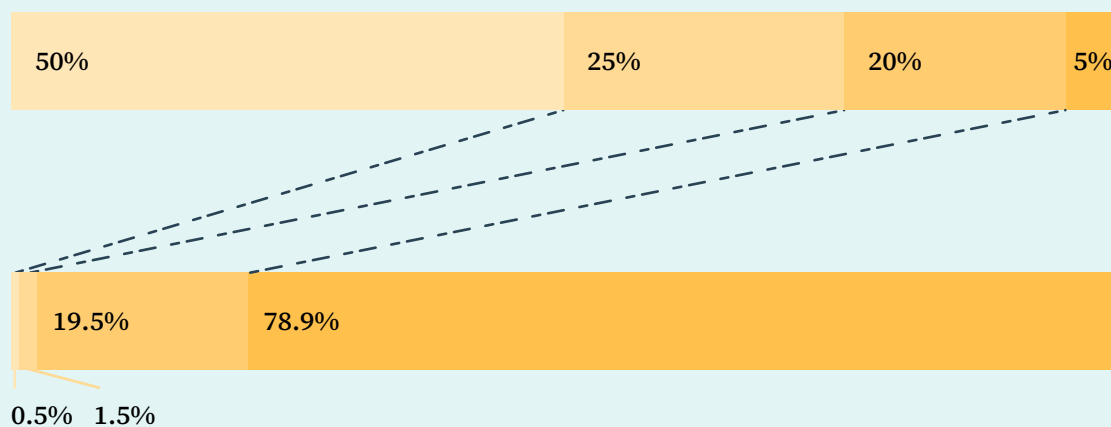# The Integration of Primary Care & Behavioral Care

For years, behavioral and physical healthcare have existed in silos, but that's changing.

See page 23 for references relevant to this section of the report.

The Current Reality

- **50% of mental healthcare** in the US happens in primary care settings.

- **Primary care doctors often prescribe psychotropic meds** but are unable to offer alternative treatments, potentially leading to overreliance on pharmacological intervention (particularly for individuals experiencing mild to moderate depression or anxiety).

- **Patients with serious mental illness receive poor medical care, leading to a 15–20 year shorter lifespan** due to untreated or poorly managed chronic conditions. This may be because those individuals typically receive care in a community mental health setting, where traditional medical care is lacking.

- **High–cost patients drive the majority of healthcare spending**—often due to unmanaged behavioral health needs, resulting in frequent emergency visits and hospitalizations. The graph below shows that in one Aetna health plan, 5% of beneficiaries accounted for 80% of costs—and 25% accounted for 98% costs. The key takeaway: Medical and behavioral health comorbidities are often the drivers of these disproportionate costs.

Percent of Members

50%	25%	20%	5%

19.5%	78.9%

0.5%   1.5%

Percent of Cost

Expectations for the Future

Considering the challenges above, we can expect to see the following developments with the integration of physical and mental healthcare:

On–site mental health professionals in primary care offices to facilitate timely referrals and intervention.

Primary care providers working in community mental health settings, helping drive more holistic care delivery for complex patients.

Electronic Health Records (EHRs) evolving to support integrated care models, improving communication between medical and behavioral health teams.

Policy changes and funding adjustments that incentivize integrated care models and make them more sustainable.

My Take on Why it Matters

Bringing behavioral and primary care together is more than just a nice idea; it's necessary from a clinical, ethical, and financial standpoint. Patients who fall through the cracks due to system fragmentation are more likely to suffer from undiagnosed conditions, unnecessary hospitalizations, and worsening mental health. Integrated care not only improves individual outcomes, but also reduces strain on emergency services and the healthcare system overall. This shift is critical for making mental healthcare as accessible and routine as physical healthcare—and for ensuring the financial sustainability of the entire US healthcare system.

Pharmacological & Biological Advances

Psychotropic medications have been a mainstay in the treatment of mental health disorders for decades. Over the years, research has advanced—albeit slowly—to bring forth new and better drugs.

Key Developments

- **AI–driven drug discovery** is accelerating medication development. It is estimated that by 2025, 30% of new drugs will be discovered using AI. This technology is also being used to identify new uses for existing drugs.

- **Psychedelic therapy** (e.g., LSD, MDMA, Ketamine, Psilocybin, Ayahuasca, and Ibogaine) is showing promise for PTSI, addiction, and end–of–life care.

- **Biological nanosystems** are naturally occurring entities in the body that are being harnessed for more targeted drug delivery, potentially reducing the side effects of psychiatric medications.

- **Gut–brain axis research** is uncovering links between the gut biome and mental well–being. The gut plays an important role in the production of brain chemicals like serotonin and dopamine—which greatly affect mental health.

- **Genomics research** has shown some success in identifying genetic variants for certain mental disorders. This work is also being combined with transcriptomics, proteomics, and metabolomics to search for complex molecular pathways and biological processes that contribute to mental illness and impact the effectiveness of certain treatments (e.g., variations in how individuals metabolize a particular medication may affect their response to the drug).

Challenges

Regulatory hurdles slow the development and adoption of psychedelics and other medications.

More research is needed to personalize treatments effectively.

Ethical concerns around access and equity in new treatments may hamper their development and use.

My Take on Why it Matters

We are moving into an era of true precision medicine in psychiatry. The drugs are getting better, sure—but the smarter, more targeted, more personalized application of those drugs is what's really driving advancement in the field. As we get closer to holistically understanding how the different body systems affect mental health and the effectiveness of various treatments, the way we approach our work will change forever.

Measurement-Based Care

Data–driven care is the future, but behavioral health has been slow to standardize measurement. As value–based care models gain traction, measurement–based care will be increasingly necessary.

Current Challenges

A plethora of measurement tools exist in behavioral health, but there is little standardization around their use.

Payers demand accountability, yet inconsistent measurement tools and processes across payers and care organizations create even more administrative burdens for providers.

Outcome measurement in behavioral health is complex, especially for chronic mental health conditions that require long–term management.

The Shift Toward Standardized Measurement

PHQ-9 and GAD-7 are becoming the go-to assessments for depression and anxiety, but this is only one step in the long journey toward standardization.

Outcomes data is crucial for organizations pursuing grants and other funding opportunities—including participation in emerging models and programs like CCBHCs.

Value-Based Care (VBC) is the end goal for the entire healthcare system, and organizations that shift to this paradigm for care management early will have a competitive advantage.

My Take on Why it Matters

Measurement-based care is the clearest path to consistently delivering the best possible care in the most efficient manner. This is how we scale quality care delivery and justify the cost to payers. Historically, mental healthcare has been seen as "more art than science." But if we can objectively prove that our interventions work—and foster consistency in the delivery and measurement of those interventions—then we can earn trust within the greater healthcare community. Standardization is key, and the sooner we embrace it, the better.

Virtual Reality (VR) & Immersive Tech

You might associate Virtual Reality (VR) with video games, but it's also a fascinating tool in the world of behavioral health. In fact, we're already seeing it being used in treatment for conditions like anxiety, Post Traumatic Stress Injury (PTSI, formerly known as PTSD), and phobias. Clients can be placed in controlled environments where they confront fears, practice coping skills, or simulate real-world challenges in a safe way.

Current Uses

Exposure therapy for PTSI and phobias.

Skill-building simulations for social anxiety and schizophrenia.

Cognitive training exercises for attention-deficit/hyperactivity disorder (ADHD) and dementia.

Pain and stress reduction through guided meditation and immersive relaxation.

The Challenges

Limited reimbursement models for VR therapy.

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Cost and accessibility concerns (VR headsets can be expensive).

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More research needed to standardize VR treatment protocols.

My Take on Why it Matters

VR represents a powerful tool to not only help bridge the gap in behavioral health access, but also improve client safety. It allows individuals with behavioral health issues to practice real-life skills in a low-risk way that traditional therapy just can't replicate. The challenge now is getting payers on board and making VR therapy more affordable.

Digital Therapeutics (DTx)

What Are Digital Therapeutics?

The Food and Drug Administration (FDA) has a specific definition for the term "digital therapeutics," referring only to tools that the agency has certified to assist with healthcare management—and that, presumably, are backed by clinical evidence. Here, we use the DTx label more generically to capture the larger ecosystem of client–facing apps targeting behavioral health disorders. The sheer number of DTx apps that are available on the Apple and Google stores (which we estimate to be over 20,000) would suggest that they are very popular. However, there have been a lot of problems with these tools, which has limited their utility and adoption.
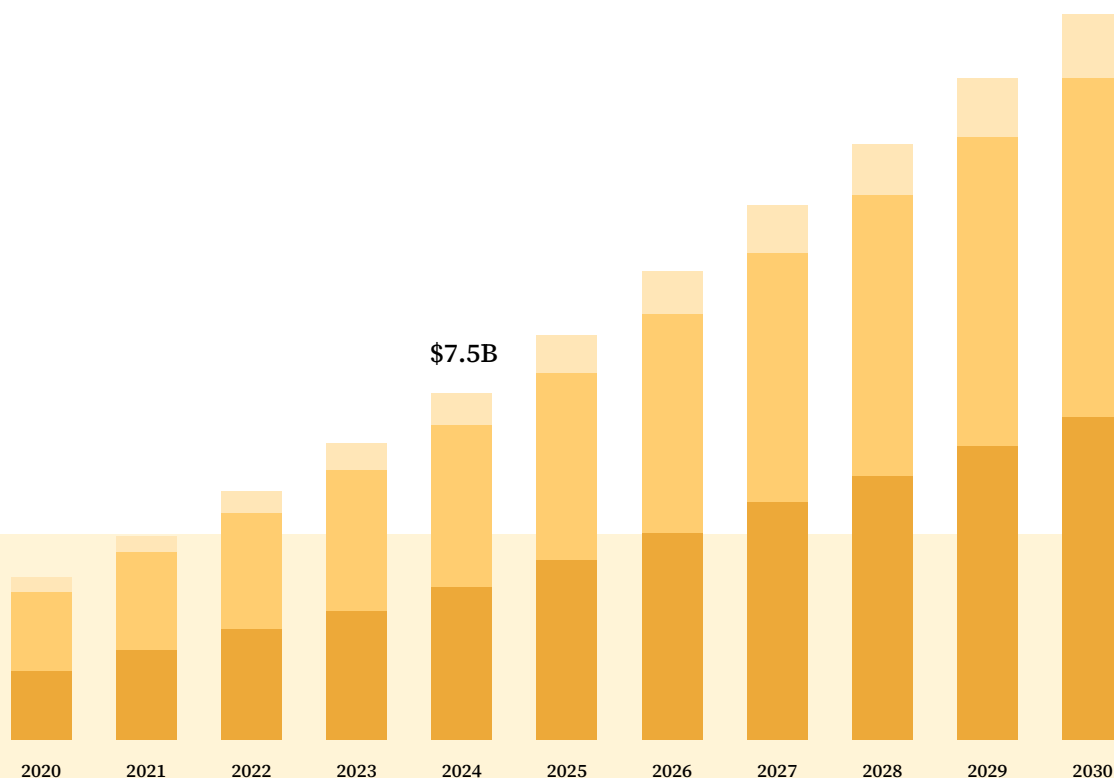
See page 27 for references relevant to this section of the report.

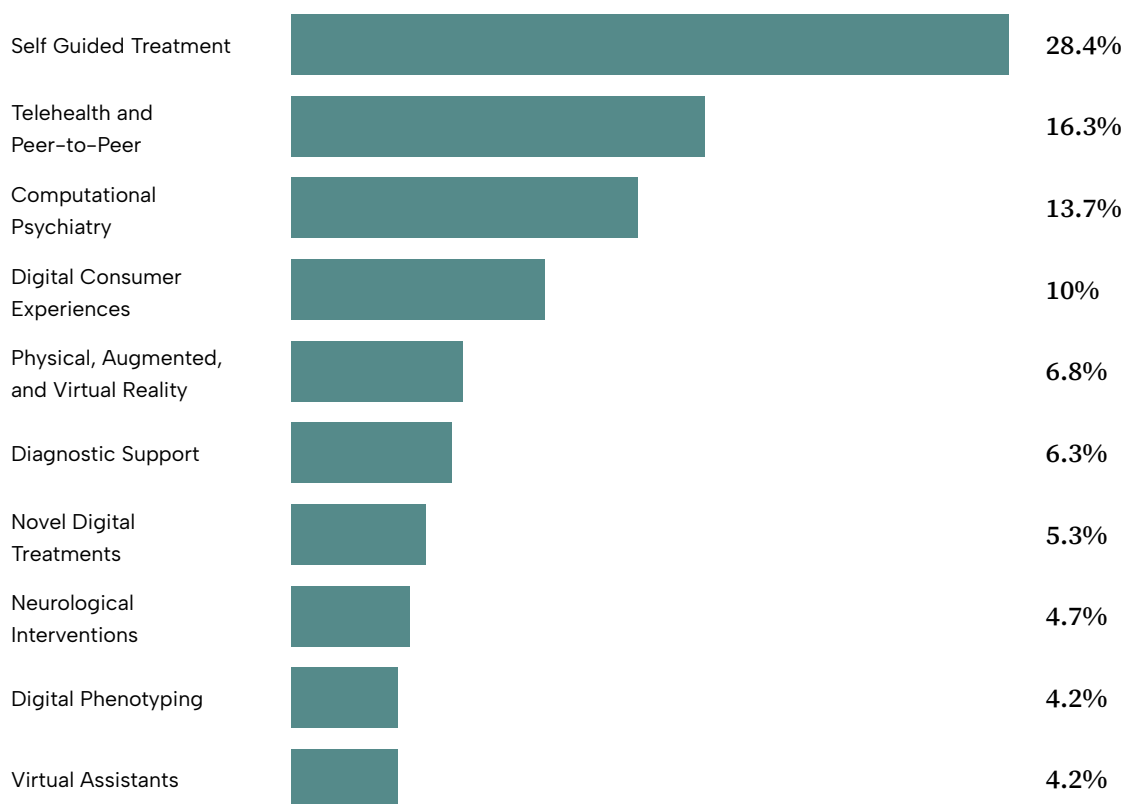**This graph sourced from Grandview Research shows the projected growth of this market.**

U.S. Mental Health Apps Market Size, by Platform Type, 2020–2030 (USD Billion)

● iOS ● Android ● Others

$7.5B

2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

And this graph shows the results of a Deloitte survey categorizing the 190 DTx apps with more than 10,000 downloads.

Category	Percentage
Self Guided Treatment	28.4%
Telehealth and Peer–to–Peer	16.3%
Computational Psychiatry	13.7%
Digital Consumer Experiences	10%
Physical, Augmented, and Virtual Reality	6.8%
Diagnostic Support	6.3%
Novel Digital Treatments	5.3%
Neurological Interventions	4.7%
Digital Phenotyping	4.2%
Virtual Assistants	4.2%

The Potential Benefits

Scalable and accessible from anywhere.

Have been shown effective in improving mental health outcomes (e.g., reducing stress, depression, and anxiety), though more research is needed.

Can complement or substitute traditional therapy, offering clients more support than what is possible through one-on-one sessions alone.

Tracks user engagement and offers real–time feedback on an individual's status during daily life—which may provide a more accurate representation of their progress.
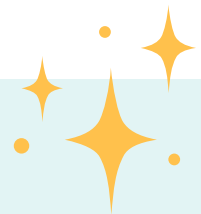
The Challenges

Low retention – Most users stop using mental health apps within two weeks, and long-term retention rates hover at or below 5%.

Lack of regulation – Many apps make claims without any scientific evidence to back them up. In one study, only 2.7% of apps provided any direct evidence from research involving the app itself.

Privacy risks – User data security remains a major concern, and in many cases, it is unclear who actually "owns" the data collected.

No EHR integration – As of the publication of this report, there was no known EHR offering any type of integration capabilities for DTx apps—limiting their ability to be used in conjunction with therapy treatment.

My Take on Why it Matters

The potential for DTx is huge, but right now, the field is messy. With thousands of apps available, separating the effective tools from the gimmicks is tough—for providers as well as the consumers the apps are marketed to. On that note, another problem with these tools—aside from their poor research base and lack of "stickiness"—is that they are being pitched as alternatives to traditional treatment, rather than adjuncts. If these tools were integrated with EHRs, clinicians could use them as one part of their course of therapy—but by and large, that is not the case in the current environment.

For example, rather than seeing a client every week, the therapist could see the client every other week—and during the "off" weeks, assign homework through the app for the client to complete on their own. While this is technically possible now, the lack of EHR integrations means app data does not currently show up in the client record. And even if such integrations were readily available, provider training and adoption could still present a barrier—though I believe that barrier is manageable, considering the speed with which providers are integrating AI tools into their documentation habits.

Digital Phenotyping

What is Digital Phenotyping?

Even when we aren't trying, we create a huge amount of data just living our lives. Add to that the use of devices like smart watches that track our steps, location, heart rate, and stress levels. All these data points create a digital signature that can be analyzed for patterns, which may offer clues about a person's mental health status—and flag the need for intervention before a crisis occurs.

Data Types

Data used for digital phenotyping can be collected actively or passively. Here are a few examples of both types of data.

Passive data are collected automatically without active user input—often from a smartphone or smartwatch. These includes:

- GPS location data
- Accelerometer readings
- Phone usage patterns
- Communication logs (e.g., calls and messages)
- Sleep patterns

Active data require the user to take some action to provide information via:

- Responses to in-app surveys or questionnaires
- Voice samples
- Self-reported mood or symptom logs

Useful Applications

Identifying early signs of depression and anxiety.

Detecting relapse risks for people with certain conditions, like bipolar disorder.

Monitoring behavior changes for those with certain conditions, like dementia.

Challenges

Ethical concerns about patient privacy and consent.

Integration into clinical workflows is still developing.

Need for standardized algorithms to ensure reliability.

My Take on Why it Matters

Imagine a future where your smartwatch warns you—or your behavioral health provider—of an impending depressive episode before symptoms fully set in. That's the promise of digital phenotyping. But for it to be effective, we need stronger safeguards around privacy—and better standards for clinical integration.

Invasive & Non-invasive Neurological Interventions

Everything you have ever thought, felt, or experienced is ultimately a neurological event. The science of the human brain—and how we address issues related to it—has advanced dramatically over the last several decades. (It's hard to believe that lobotomies were commonly performed from the 1930s all the way through the 1960s—but there were few alternative treatments for serious mental illnesses during this period.)

Today, there are many more treatment options—including both invasive and non–invasive neurological interventions.

Emerging Treatments

- **Transcranial Magnetic Stimulation (TMS)** – This treatment uses magnetic waves to affect brain function. It can be done as an outpatient procedure with few side effects, and it has shown effectiveness in treating major depression, anxiety, obsessive–compulsive disorder (OCD), and PTSI.

- **Deep Brain Stimulation (DBS)** – An invasive but effective treatment for OCD and treatment resistant depression (TRD), DBS involves precisely placing an electrode deep in the brain and artificially stimulating targeted areas.

- **Vagus Nerve Stimulation (VNS)** – A promising treatment for TRD, VNS involves wrapping an electrode around the vagus nerve in the neck. The electrode is connected under the skin to a controller that is implanted in the upper chest (much like a cardiac pacemaker).

- **Neuralink** – Instead of using a single cranial implant, Neuralink uses a grid of thousands of wires that are embedded on the surface of the brain. These are connected to a controller that reads and synthesizes the electrical signals and sends stimulating impulses back to the brain. Currently, this technology is mainly intended for people with physical disabilities.

Challenges

High cost and limited insurance coverage.	**Need for more research** (some of these treatments are still experimental).	**Ethical concerns** around brain implants and autonomy.

My Take on Why it Matters

We're entering an era where direct intervention in brain activity could be a game–changer in treating severe mental illnesses. But just because we can alter brain function doesn't mean we should rush into it without careful consideration—especially from an ethical standpoint.

AI & Enhanced Computing Technologies

You'd pretty much have to be living under a rock not to see how quickly and widely AI is spreading—both in general and in healthcare, specifically. But AI isn't replacing healthcare providers; it's helping them work better and more efficiently (which is why heavy-hitters in the space prefer to use the term "Augmented Intelligence" when describing this technology).

See page 30 for references relevant to this section of the report.

How AI is Being Used Today

Automating documentation to reduce administrative burden, freeing up providers to focus on delivering great care to their clients.

Scaling compliance review to protect organizations from costly penalties and clawbacks.

Supporting clinical decision-making and diagnosis through holistic data analyses and care insights—though diagnostic capabilities are currently more pronounced in fields like radiology, where the AI tools are largely image-based.

Enhancing Revenue Cycle Management (RCM) and billing processes to streamline provider workflows and improve financial performance.
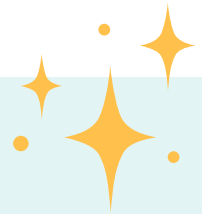
What's Next?

As specialized AI tools grow more sophisticated, we can expect to see:

AI-driven tools for care-pathing, treatment planning, and more sophisticated clinical decision support.

Predictive analytics to identify at-risk individuals before a mental health crisis occurs, enabling early intervention.

Personalized treatment plans based on historical data, leading to better care outcomes and higher client engagement and satisfaction rates.

My Take on Why it Matters

AI is one of the biggest game-changers of our time. This technology has the potential to fill critical gaps in behavioral healthcare by supporting—not replacing—human providers. Automating documentation alone is a huge win—it reduces burnout and allows clinicians to focus on what they do best: caring for clients. But AI's greatest promise lies in its predictive and analytical capabilities. If we can intervene before a crisis hits—or employ the best possible treatment approach for clients who are experiencing issues—we can significantly improve outcomes and overall system efficiency.

Ready to bring your organization into the future with AI built for behavioral health?

Request a demo of Eleos to see why we're the most-used and most-trusted AI platform in the industry.

Book a demo

> " *We made the right choice. We invested in the right product and the right team. Eleos has been super supportive in making sure that we have the training, the materials, and the information we need to utilize this technology to the maximum benefit.* "

Lauren Cohn | President and CEO, Meridian Healthcare

MERIDIAN HEALTHCARE

70%+
Less Time Spent on Documentation

Eleos generates more than 80% of note content within minutes of session completion, enabling providers to quickly build a full, compliant note.

3–4x
Better Client Symptom Reduction

When clients have their providers' undivided attention for the entire session, it shows. That means better outcomes for clients and more fulfillment for providers.

90%
Of Providers are Less Stressed

Our research shows that 90% of providers feel less job-related stress when they have access to AI-powered documentation through Eleos.

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