



Kipu

AI: Friend, foe, or fad?

AI's place in Behavioral Health Treatment

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Artificial Intelligence (AI) is changing the way we interact with the world.

From creating detailed images, drafting content, and summarizing your video calls, AI is working towards making our lives more convenient.

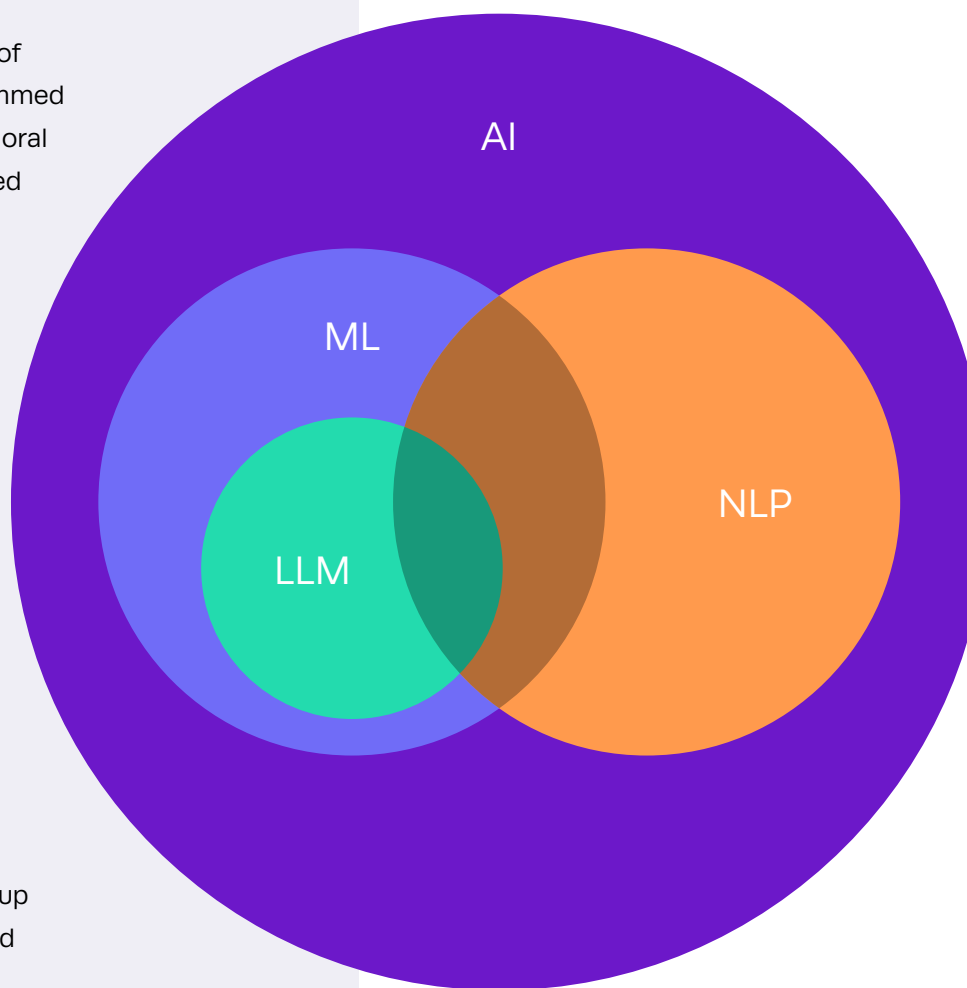
But there are still dozens of questions around AI and how to use it. Is it going to eliminate jobs? Is it safe to use, especially in a healthcare setting with protected patient data? Does it get in the way of patient and provider interactions? Is it going to make your life better?

Savvy tech-minded people are wrestling with the answers to those questions, but for the people making decisions about how tech is used in behavioral healthcare facilities, there's still a lack of clarity around what AI looks like in behavioral healthcare, how it's likely to evolve over time, and how—if at all—it could make patient experiences better.



Understanding what AI is—and what it isn't

- **Artificial Intelligence** is the simulation of human intelligence in machines programmed to think and act like humans. In a behavioral health environment, this might be applied as predictive analytics used to identify patients at risk, or to tailor treatment plans based on patient data.
- **Machine Learning** is a subset of AI where systems automatically learn and improve from experience without being explicitly programmed. This might be used to analyze patterns in patient behavior and responses to interventions to predict outcomes and optimize treatment strategies.
- **Natural Language Processing** focuses on having computers understand text and spoken words the same way humans do. This might show up as a way to analyze patient feedback and provider notes to identify risk factors.
- **Large Language Models** are designed to understand and generate human-like text based on vast amounts of data. This could help therapists to generate treatment plans or identify gaps or blind spots in therapy.



When it comes right down to it, it's still not clear how AI will impact behavioral health facilities.

But, we are seeing some emerging patterns and some answers that are helping to clear the fog. At Kipu, we're cautiously optimistic about the outlook for AI. There are many places where we believe it can genuinely improve how patients and therapists interact, reduce time spent on documentation, enhance revenue cycle management, drive enhanced operational business intelligence, and strengthen your practice overall.

We've discussed these areas with our colleagues at [Eleos](#), a leader for AI in behavioral health who has trained their AI on hundreds of thousands of hours of therapy sessions, and we hope this paper will help you get a stronger understanding of the current state of AI in behavioral health setting is, see how and where AI can impact the clinical journey, and help you understand if and when you should consider integrating AI into your workflows. We're at the beginning of seeing how AI will change the way we live and work—but expect evolution and improvements to come at an exponential rate.

This paper will give you the foundation you need to keep up with AI.

The changing landscape: The state of AI in BH today

ChatGPT, the generative AI writing assistant, has made huge waves in AI, and is probably the thing most people think of today when they think of a practical use of AI. I asked ChatGPT to define itself—including if it's an NLP or LLM—for this paper, and here's what it generated:

I am ChatGPT, an AI developed by OpenAI, based on the GPT architecture, and can be categorized as using machine learning (ML) and natural language processing (NLP). I am a large language model (LLM) designed to generate human-like text responses. Trained on diverse internet text, my knowledge is up to my last update in April 2023. I can engage in dialogues, answer questions, and create content, but i cannot access real-time information.

*Created using
ChatGPT 4 in
February 2024*

That's why tools designed for behavioral health settings must be trained on large volumes of high quality behavioral-health specific data, such as real-life therapy conversations, and tested by people who know and work in behavioral health settings. As Eleos shared in [a recent post](#), "Technologists alone cannot create behavioral health-specific AI—full stop. To train the AI for behavioral health tasks—and to fine-tune and validate the models—skilled clinical teams absolutely must be involved."

Understanding the tools and solutions out there today

So what kinds of tools and solutions are out there today? What do they do, and how well do they do it? Here's a breakdown of a few:

Early Intervention AI tools provide predictive analytics to identify signs of crisis and alert a care team; for example, Mindstrong and Quartet

Digital Therapeutics solutions are FDA-approved that help enhance outcomes alongside regular care

Documentation software like Eleos helps providers focus more on patients, while AI takes care of capturing transcripts and notes

Personalized Care/Machine Learning, similar to the one developed by Ellipsis Health, can help identify patient needs in real-time to help build a better care plan

Wearables/Patient Monitoring devices

tracks patient information and uses AI to analyze risks—and in this case documented by Cognito, can actually save lives

Chatbots such as Weobot can deliver immediate support when a human isn't available

Clinical decision support systems can help diagnose and develop a treatment plan

One thing to be very conscious of when looking at the tools above, or any kind of AI solution, is to ensure the solution is clinician-centered, built to serve as a complement, not a complication, to the therapeutic process. Never use a tool that streamlines operations at the cost of delivering quality care.

Making it work: The practical uses of AI throughout the clinical journey

Given that, let's take a look at the practical applications of AI in a Behavioral Healthcare setting are today—or at least in the very near future. We've assessed how and where AI can assist you across the continuum of care, from pre-admission to claims submissions and managing audits. Here's what we found:

Pre-admissions and admissions

Patient intake can be tedious, but AI can make the process flow more smoothly. One of the things AI can help with is listening in on a pre-admission call, or review the call's transcript, and pre-fill all required information on your admissions forms. That allows for the person doing the admission to spend more time focusing on their interaction with the client, rather than documenting during the meeting.

This is going to be a common refrain—one of AI's biggest benefits is essentially as a kind of note taker, with the big benefit of getting documentation and similar work out of the way of provider/patient interaction.

AI also has the potential to help increase the number of authorized treatment days for patients, starting with the admissions process. During intake, AI could assess medical necessity for patients and develop the script information that supports the need for medical intervention. This helps tell the patient's story to insurance companies, backed by appropriate information to justify medical necessity to get patients covered for the treatment time they need.





Clinical support

This is one of the strongest use cases for AI in a behavioral health setting. AI stands to improve or assist providers and patients in the diagnostic process, through clinical sessions, and in all therapeutic patient interactions. Let's take a closer look at those areas:

Improved diagnostics.

- AI has already proven helpful across the medical field in diagnosing all sorts of illness, and [it's true in mental and behavioral health as well](#). AI can access relevant information about patients from their medical records, and data from wearable devices and quickly assess and analyze relevant patterns in the data.

Better patient engagement and note taking.

- Balancing attention between listening to patients while also effectively documenting the interaction can lead to focusing less on the patient and more on the note taking. AI can listen in to live sessions—or recordings or transcripts of sessions—capturing not just the words said, but also the story they tell. AI can also optimize sessions notes for compliance and supporting medical necessity, recognizing and accurately documenting treatment techniques and patient responses. As [Eleos says](#), “this results in a richer, more accurate summary of the session that reflects its true therapeutic value.”
- One thing that's important to note here is that therapists still need to review and likely revise any notes and summaries AIs create to ensure accuracy and completeness. Even with that caveat in mind, it still means that clinicians, therapists, and other support providers don't have to copiously take notes, resulting in better, more personalized and connected engagement with the patient.

Improved clinical and therapeutic interactions.

- AI can help therapists [develop more personalized treatment plans](#), evaluating patient profiles and histories to recommend treatment modalities. In addition, AI can develop analyses on therapy themes, techniques, and talking versus listening time to recommend changes or improvements, helping drive better outcomes. AI can detect subtleties and trends in patient behavior—or symptoms that might be overlooked. This isn't about diminishing the therapist's role, but providing them with a broader, more detailed perspective on their clients' needs.

Discharge and follow up

Capturing follow up data isn't always the easiest task, for facility staff or for patients. But AI can create automated follow ups and outcomes reporting—and, unlike humans, it doesn't get tired or bored of routine tasks. And there are several apps and chatbots that can make follow up easier and can be less intrusive for patients.

There are tools, such as those developed by our colleagues at [Videra](#), that use AI to analyze voice, facial expressions, slurred speech, increased rate of speech and depressive talk that make it easier to truly understand the state of the patient than a typical self-reported survey. Also, we have seen that clients in one center preferred speaking to an AI chatbot to fill out an assessment by a ratio of 3:1.

Claims submissions and audits

According to [Experian](#), "AI technology can predict potential issues before they even occur by analyzing claims and denials and making suggested corrections or interventions in real-time. It can also assist in identifying fraudulent claims and denials, leading to improved claims processing accuracy and revenue cycle management." This is an area where AI can generate a real ROI for Behavioral Health Providers—but even more so, it's important to remember that payers are also deploying new AI solutions from powerhouses like Google to review and approve or deny claims.

We'll stop short of calling this an arms race for Behavioral Health facilities, but having your own AI that's helping to improve your claims and helping you when audits occur is going to become more and more critical over time.



When's the right time to invest and adopt an AI solution?

There's no easy path to knowing exactly if or when the time is right to add AI to your practice. There's a lot of costs and benefits to consider—below, we summarize some of the key considerations to keep in mind as you work through a decision.

- **Prioritize your needs.**
There's not currently a single AI solution that's going to touch every part of your practice. The AI trained to summarize and analyze patient sessions won't be able to handle your billing needs, and vice versa.
- **Make sure it's trained appropriately.**
Whenever assessing a solution, be sure to ask the vendor how clinical experts have been and continue to be involved in the development of the AI. A solution that works for helping EMRs in hospitals and health systems likely won't have the nuance or understanding of behavioral health needs.
- **Understand the competitive factor.**
Once clinical staff see and are comfortable with how AI can benefit them with diagnoses, documentation, and analysis, they may come to rely on it—and that could be the difference between keeping staff or losing them to a place that does or does not have AI.
- **Consider your scale.**
Think about this case: if an AI helps one patient get an additional day of residential treatment authorized, and the facility is running at 80% capacity, that one additional day could result in an additional \$800. If an AI solution costs \$600 a month, then the return is clear. And if you scale that up based on the number of additional days authorized, the value really starts to kick in.
- **Weigh the costs and the risks.**
We've put together some pros and cons of adopting AI now versus waiting—and it's a pretty balanced scale. AI is still new, and based on past technology trends, you can expect costs to come down and benefits to increase over the next months and years. But, early adoption can give you a leg up on competitors, strengthen your negotiation power with payers, improve patient care, and potentially decrease denied claims.

Where do you go from here?

We're not trying to make a case for or against AI here. We want you to understand where it can be really helpful, where it may not, and understand the benefits and the costs. Given that, if you are ready to move forward, we'd like to share some of the lessons we've learned from our interactions across the Behavioral Health landscape:

1. Create internal champions first. When you adopt, pick an individual or a small set of people who are willing to put the software through its paces. Use this group to help roll out the solution to the rest of staff—adopting new solutions like AI requires a cultural shift in addition to workflow shifts.
2. Have a strong plan. Remember that adopting AI is not about replacing, supplanting, or getting in the way of human interactions. You do not want to dehumanize care. Make a plan focused on using AI to liberate your staff to focus more on patient care and interaction.
3. Learn as much as you can. We've also put together a short article and a webinar on AI. We encourage you to check those out, and also seek out the perspectives of your colleagues and other voices in behavioral health.
4. Reach out to us. We are constantly interacting and integrating with the leading AI providers that we think are going to impact our industry. This is the biggest technology revolution since the smart phone.

Let's see if we can use AI to create better paths to behavioral healthcare together. Let us know your questions and thoughts—we always love to hear from you.

Love,
Kipu



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kipuhealth.com
to learn more**

Ben Dittman is the senior vice president of partnership at Kipu Health. In this role, he brings together strategic alliances that integrate or partner with Kipu to support a holistic technology environment for behavioral health providers.



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