



5 healthcare trends we're following in 2025

Introduction

The healthcare landscape is transforming before our eyes as we head into 2025, as emerging technologies, innovative delivery models, and new financial pressures redefine how care is delivered, accessed, and managed.

In this year's edition of our annual forecast, we're exploring 2025 healthcare trends that we believe will meaningfully impact the market:

- 1 Artificial intelligence continues to be a transformative force in healthcare
- 2 Life science companies step into the direct-to-consumer market
- 3 Mental health ventures into the urgent care space
- 4 Non-opioid therapies reshape pain management
- 8 Medical cost growth rises to its highest level in 13 years

In each section, we'll share insights and analysis from our extensive research—along with a number of takeaways from our own healthcare commercial intelligence—and uncover what these developments mean for patients, providers, and other industry players.

Keep reading for a closer look at the 2025 healthcare trends that could shape your next business opportunity.

Written by:

Alex Card
Senior Content Writer
Definitive Healthcare

Nicole Witowski
Senior Content Writer
Definitive Healthcare

Ethan Popowitz
Senior Content Writer
Definitive Healthcare



AI will continue to be a transformative force in healthcare

1

There's no doubt about it: Artificial intelligence (AI) is changing everything. From finance to retail, transportation to entertainment, AI is transforming industries by automating complex tasks, uncovering new insights from data, enabling faster decision-making, and so much more.

The healthcare industry is no different—it's nearly impossible to discuss the future of healthcare without mentioning the benefits, use cases, and consequences of AI. For good reason too: AI is enabling physicians to make more accurate diagnoses, create personalized treatment plans, and streamline operations. And that's just in the provider space; the innovative potential for AI has spread across the healthcare landscape, from life sciences organizations to manufacturers, suppliers, software companies, and more.

Kicking off this trends series, let's look at AI's growing role in healthcare and the groundbreaking ways it's set to transform the industry.

Notable AI use cases in healthcare

The healthcare industry is arguably one of the earliest adopters of AI and machine learning (ML) technologies. Years before innovations like ChatGPT, DALL-E, and Midjourney captured widespread public attention, healthcare organizations and life sciences companies were already harnessing AI models to drive advancements.

While true, AI's footprint and impact in the late 2010s was relatively small, and technology was primarily used and pioneered by only the biggest pharmaceutical and medtech companies. This changed, practically overnight, when AI hit the mainstream in 2023. Since then, the flurry of acquisitions, collaborations, and investments has been staggering. Estimates value [the global AI healthcare market](#) to be \$16 billion today and expect it to grow at a remarkable 40% CAGR to reach \$173 billion by 2029. It's clear that opportunity is out there, and healthcare providers and companies are rising to the occasion.

As we move into 2025, we can expect greater and more widespread adoption of AI, ML, and [predictive analytics](#) technologies in the healthcare market, bringing even more impactful changes across the industry.

Below are some of the most notable AI use cases that are already transforming healthcare and will continue to shape its future.

SUPPORTING EARLIER DISEASE DIAGNOSIS BY MINING UNSTRUCTURED DATA

It's no secret that the healthcare industry generates a lot of data. In fact, RBC Capital Markets estimates that healthcare data accounts for approximately 30% of the world's data volume and is expected to increase year-over-year.

According to data infrastructure company NetApp, about 80% of the healthcare data generated is unstructured—which means that it is undefined and not easily formatted for use in a database or analytics platform. Examples include medical images, clinical notes, and lab reports.

Unstructured data can be immensely valuable to healthcare professionals, as it often captures the severity of a patient's health condition and even the nuances of their environment. Untangling this vast amount of data—and being able to recognize complex patterns—can be crucial for healthcare providers.

However, unstructured data is often complicated to deal with as healthcare organizations can amass it quickly and haphazardly, which can make analyzing the dataset for trends incredibly difficult and time-consuming.

AI tools can streamline the process and take the heavy lifting out of making sense of unstructured data, saving physicians and researchers valuable time.

AI tools can streamline the process and take the heavy lifting out of making sense of unstructured data, saving physicians and researchers valuable time.

For example, providers can use machine learning models to analyze historical data to identify high-risk patients, [predict medication outcomes](#), and recommend more personalized treatments. AI can also assist medical imaging specialists with analyzing MRIs and CT scans to detect anomalies and make diagnoses faster and with greater accuracy or even detect patterns humans might miss.

These systems support healthcare providers by offering faster diagnoses, reducing human error, and enabling earlier intervention for diseases like cancer, heart conditions, and neurological disorders.

ENHANCING REMOTE PATIENT MONITORING CAPABILITIES

[Remote patient monitoring \(RPM\) devices](#) are growing in popularity alongside AI, and it seems likely that

[medical device](#) manufacturers and providers will continue to pair the two technologies thanks to the value they provide.

AI and ML technology can elevate RPM devices in a variety of ways, from tracking vital signs to analyzing [trends in chronic conditions](#) like diabetes and heart disease. These systems can monitor patients' health data in real time, and then alert users and their doctors to potential health risks before they escalate, possibly leading to faster invention. This is especially valuable in managing large patient populations, enabling more proactive and personalized care plans. Early intervention can also lead to significant savings by preventing unnecessary emergency room visits and reducing [hospital readmissions](#).

RPM devices already offer health systems and providers a wealth of benefits (read our [RPM intelligence report](#) for more), so pairing them with AI seems like a natural fit.

OPTIMIZING THE MEDICAL SUPPLY CHAIN WITH PREDICTIVE ANALYTICS

The aftermath of COVID-19 spotlighted how [fragile the medical supply chain can be](#). In the years since, health systems, manufacturers, suppliers, and distributors have turned to technology like AI and the blockchain to enhance efficiency, streamline processes, and keep the supply chain moving smoothly.

AI's [predictive analytics capabilities](#) are helping healthcare organizations manage inventory more effectively by analyzing historical data, patient demand trends, and external factors like seasonal health patterns or global crises (such as pandemics). These insights allow providers and suppliers to anticipate demand, reduce waste, and avoid stockouts of critical medications and supplies.

Meanwhile, blockchain technology adds another layer of security and transparency to the supply chain by providing an immutable, decentralized ledger that tracks every transaction and movement of goods.

This is especially crucial in healthcare, where the integrity of products—such as pharmaceuticals and medical devices—can directly impact patient safety. By using blockchain, stakeholders can verify the origin, authenticity, and condition of each product at every step of the supply chain. Counterfeit drugs, which are a persistent issue in global markets, can be identified and removed from circulation before reaching patients, thus reducing fraud and protecting public health.

Together, AI and blockchain integration provide end-to-end visibility across the supply chain. With a comprehensive understanding of every touchpoint, organizations can better manage their stock and distribution networks, potentially leading to higher-quality patient care and better outcomes.

IDENTIFYING PATIENTS FOR CLINICAL TRIALS WITH NLP AND OPTICAL CHARACTER RECOGNITION

Clinical trials offer pharmaceutical and medtech companies valuable information and can significantly impact decision-making and strategic planning. However, conducting a successful clinical trial can be a challenge, as many trials fail to find suitable candidates fast enough.

Some studies report that about 80% of clinical trials fail to meet their original enrollment deadline, and 55% of trials are terminated for failing to achieve full enrollment. This can lead to substantial financial loss for the company, and development delays for treatments or devices, among other consequences.

AI can help clinical trial researchers find the most suitable patients faster and with greater accuracy. For example, natural language processing (NLP) and optical character recognition (the process of converting an image of text into a machine-readable format) enable AI models to quickly read large datasets and parse for specific information to identify candidates that meet the trial's specific criteria. This can significantly slash time spent screening candidates, like in one study that screened 90 breast

cancer patients in only 24 minutes, a 78% reduction in time compared to the 110 minutes it took for a human coordinator. With more accurate and reliable patient data, researchers can conduct more effective clinical trials, potentially leading to a better end product.

ACCELERATING DRUG DISCOVERY WITH AI-POWERED SIMULATIONS

In the pharmaceutical industry, AI will continue to prove instrumental in accelerating the traditionally slow, costly, and risky process of drug discovery and development.

With AI's ability to mine vast amounts of data for insights, trends, and patterns, we can expect biopharma companies to use the technology, particularly in the [early stages of drug development](#).

For example, scientists can use algorithms to analyze biological data to identify viable molecules and compounds with desirable properties to treat a specific disease. Then, the team can use AI-powered simulations to better understand disease mechanisms and identify potential opportunities for drug intervention. This helps pharmaceutical companies bring potentially safer, more effective therapies to market faster, possibly leading to better patient outcomes and driving more revenue.

IMPROVING MARKETING AND SALES ACTIVITIES

The healthcare landscape is fiercely competitive, and it's only going to become more difficult to stand out and make your voice heard moving into 2025. Having a robust marketing and sales strategy will be all the more important if you're looking to find your ideal customers, bring new products or services to market, and identify opportunities to expand and generate revenue.

Moving forward, we expect more companies and providers across the healthcare industry to embrace AI—not only for the use cases described above but also because the technology can optimize their

marketing and sales operations. Here are three ways that AI can help:

- 1. Gain a deeper understanding of the market.** AI can analyze sources like [medical and prescription claims](#), affiliations and referral patterns, geographic and demographic data, and more to offer you a comprehensive look into the patients, providers, and competitors that matter to you.
- 2. Improve omnichannel strategy.** Organizations can use predictive analytics and machine learning to better understand how, why, and when customers, influencers, and decision-makers engage with their brand—and then meet them on the channels they use most.
- 3. Find relevant KOLs.** Medical affairs teams can use AI to identify the most valuable experts in their treatment area by analyzing social media metrics, speaking engagements, publications, and more.

What else can AI do?

AI technology is positioned to be a driving force behind some of the most transformative changes in healthcare. From revolutionizing disease diagnosis and drug discovery to optimizing the medical supply chain and marketing and sales performance, AI is not only enhancing how healthcare providers operate but also improving outcomes for patients across the globe.

You can learn more about AI in our report on [how life science companies use AI](#) or our study on [AI use cases for healthcare providers](#). You can even see its utility firsthand in our healthcare commercial intelligence platform.

One change that could be informed by AI in some surprising ways is the life sciences industry's shift toward direct-to-consumer care. Are major developers taking a risky gamble or making a tactical move to engage customers earlier? Keep reading to find out. ■

Biopharma dives deeper into the direct-to-consumer market



2

When you look into the future of healthcare, it's easy to fixate on advancements in technology and care delivery: These material developments symbolize medical progress in a concrete way that can easily be traced to patient outcomes and experiences.

But real-world medical breakthroughs are also shaped by its commercial component. Provider reimbursement structures, regulations, and business models all impact the kind of care physicians deliver and patients receive.

In the second part of our series analyzing the [top 2025 healthcare trends](#), we'll look at how the life sciences industry could expand its footprint in the direct-to-consumer (DTC) market following moves by early adopters in 2024.

Keep reading to see how biopharmaceutical developers and medical device makers are tapping into consumers' growing demands for control over their healthcare journeys—and ultimately driving more patients toward their products.

Why are Big Pharma companies going direct-to-consumer in 2025?

Pharmaceutical companies and other life science organizations have a variety of reasons for exploring DTC strategies in 2025 and beyond:

INCREASED CONSUMER EMPOWERMENT AND PERSONALIZATION

U.S. patients have more choice than ever before when it comes to how, where, and from whom they receive care. With access to provider performance scores, consumer reviews, and doctors' digital personas, patients are increasingly empowered with the information they need to make care decisions that best suit their preferences.

A 2023 study published in the Journal of American Marketing found that nearly three in four patients use online reviews to find providers. An earlier study showed that even consumer-sourced drug reviews can be useful for helping patients find medications that work for them.

Some biopharma companies are recognizing this shift toward self-driven, personalized care as an opportunity to engage with consumers, providing tools and resources that support self-management of chronic conditions like diabetes, obesity, migraines, and anxiety through direct sales platforms.

TECHNOLOGICAL INTEGRATION AND ACCESSIBILITY

The rise of health-focused apps, wearable devices, and telehealth platforms is accelerating this self-managed care model as well as the DTC approach within the life sciences.

The same smart devices and digital platforms that consumers use to monitor and manage their care also provide a convenient pathway for biopharma and medical device developers to sell their products.

A patient who's already accustomed to checking glucose levels with their smartphone is only a few taps away from ordering insulin or other medications—a considerably more streamlined process than scheduling an in-person visit with a provider.

By integrating their products with everyday consumer tech like smartwatches and smartphones, life science organizations can both add value to patients' at-home health experiences and seamlessly engage consumers through targeted messaging or access to digital storefronts.

DTC sales... drives a positive feedback loop of increasing brand trust and generating real-time consumer insights, which can shape product improvements and boost brand trust even further.

BUILDING BRAND LOYALTY AND REVENUE STREAMS

Provider and payor loyalty, rather than patient loyalty, has traditionally been the focus of life science marketing efforts. Providers and payors, after all, have long been the gatekeepers of patient care.

But as opportunities for drug and device manufacturers to engage consumers directly grow, patients' brand loyalty is becoming a critical component of those companies' commercial strategies.

DTC sales, supported by consumer-facing education and other healthcare resources, help keep patients engaged with companies' products. This drives a

positive feedback loop of increasing brand trust and generating real-time consumer insights, which can shape product improvements and boost brand trust even further.

Of course, online ordering, drug subscription models, and at-home diagnostics are more than brand-building exercises—they're powerful opportunities to diversify and expand revenue streams in a market that's increasingly focused on shareholder value.

Who are the biopharma players to watch for DTC activity in 2025?

ABBOTT LABORATORIES

Abbott Laboratories became one of the first entrants in the biopharma DTC market with the release of its Freestyle Libre continuous glucose monitoring (CGM) system directly to patients in 2017. Designed for patients with types 1 or 2 diabetes, Freestyle Libre empowers users to monitor glucose levels in real time via a smartphone app.

In September 2024, Abbott increased its foothold in the DTC market with [the launch of Lingo](#), the first-ever CGM device targeted at people without diabetes but who may be at risk of developing the disease. This move greatly expands Abbott's potential consumer base among people with prediabetes or those who may be concerned by a family history of diabetes. According to the CDC, [approximately 88 million U.S. adults have prediabetes](#), and around 84% of people with prediabetes don't know they have it.

In 2025, keep an eye on Abbott as the company is poised to grow its DTC offerings beyond glucose monitoring. Abbott recently announced a partnership with Medtronic to integrate the latter's insulin delivery product into the former's CGM system. They're also developing a deep brain stimulation system to manage severe depression, the first USDA-certified organic liquid infant formula for retail sale, and an aspirin-free heart failure management regimen.

DEXCOM

Similarly, Dexcom has revolutionized diabetes care with its G7 CGM technology, which, like Abbott's Freestyle Libre, allows users to track glucose levels through a smartphone app. In August 2024, [Dexcom launched Stelo](#), the first over-the-counter glucose biosensor for patients who don't use insulin, through its own DTC store.

What makes Dexcom's DTC approach so impactful is its emphasis on user experience and integration with broader health and tech ecosystems. Dexcom has partnered with companies like Apple and Fitbit, enabling consumers to incorporate glucose data into their daily health and fitness routines.

As we look to 2025, Dexcom could take this integration further. With the rise of wearable health tech, there's a growing appetite for seamless, tech-forward health management solutions. Expect to see more direct engagement with consumers, as Dexcom looks to offer personalized, tech-enabled health insights that target a wide variety of people with diabetes and prediabetes.

ELI LILLY

Eli Lilly has made headlines with its development of Mounjaro, a GLP-1 medication aimed at diabetes management and weight loss. Early in 2024, [the company launched Zepbound](#), a new GLP-1 drug designed specifically for weight loss that uses the same active ingredient (tirzepatide) as Mounjaro.

Lilly first released Zepbound through its brand-new DTC platform, LillyDirect, effectively establishing its position in the burgeoning biopharma DTC space. Lilly's sales platform is unique in that it integrates three distinct telehealth solutions to enable patients to get a prescription from a doctor in the same digital environment where they can order the drug, blurring the lines between developer, distributor, and care provider.

With the growing demand for effective weight loss solutions and wellness products, Lilly is likely to lean into DTC channels more aggressively in 2025. Ongoing efforts to substantially increase their tirzepatide manufacturing capacity are set to conclude next year, and the company expects to have late-stage trial results for its planned obesity pill by April 2025.

PFIZER

COVID-19 was the driving force behind Pfizer's entrance into the DTC space, as partnerships with governments and retail pharmacies enabled the pharma developer to widely distribute its vaccine to the public through easily accessible channels. But like the other companies we've mentioned, chronic disease management solutions are helping Pfizer occupy even more space in the market.

Late in 2024, Pfizer launched its PfizerForAll web platform, giving consumers direct access to COVID-19 and flu tests and vaccines, as well as migraine medications. We expect to see their offerings on this platform grow in 2025, with the most likely addition being their in-development oral weight-loss drug, danuglipron.

Expect more shakeups

Abbott, Dexcom, Eli Lilly, and Pfizer aren't the only developers making moves in the biopharma DTC space, but they're certainly the biggest of the trailblazers. As 2025 draws near, be on the lookout for other companies to announce new DTC platforms, partnerships that make their pharma and medtech products more accessible to consumers, and care management solutions that empower patients to take control of their well-being.

In the next section, we'll examine the growth of behavioral health providers within the urgent care space. Could these clinics provide relief to overburdened EDs and help patients in crisis get immediate access to the care they need? Let's explore how the landscape of mental healthcare is shifting in the U.S. ■

Mental health finds a new home in urgent care centers



3

Urgent care clinics first popped up in the 1970s as a solution for non-life-threatening emergencies. While it took decades for these centers to mature and fully integrate with the broader U.S. healthcare system, they have now become a trusted option for many, so much so that today, urgent care is sometimes seen as a “traditional” provider setting.

Now, we’re witnessing the rise of specialty urgent care clinics across the country, which are stepping in to tackle the growing need for behavioral health support. With about 8% of emergency department visits related to mental health issues and many ERs struggling to keep up, these specialized clinics are filling a gap for people in crisis, offering prompt assistance and critical referrals for ongoing care.

As these behavioral health urgent care clinics continue to gain traction, they hold the promise of reshaping how we approach behavioral health care in this country.

The rise of behavioral health urgent care clinics

Behavioral health urgent care clinics are designed to fill critical gaps in mental health services, providing rapid access to assessment and short-term mental health treatment. Unlike emergency departments, which can be ill-equipped to effectively handle psychiatric emergencies, these clinics specialize in

psychological issues. Patients can either walk in or schedule a same-day appointment, making it easier to access help when it's needed most.

Why the shift?

Several factors are driving the growth of these clinics. For one, the COVID-19 pandemic magnified mental health challenges, leading to increased reports of anxiety and depression among adults. Additionally, the ongoing opioid crisis and rising rates of substance use disorders have created an urgent demand for accessible care options.

Claims data from Definitive Healthcare shows that anxiety disorders were the most prevalent mental health diagnosis in 2023, accounting for 18.3% of the ten most common mental health diagnoses tracked, with generalized anxiety disorder and unspecified

anxiety disorder leading the way. They were followed by depressive disorders and substance use disorders.

The Children's Hospital Association also reported a substantial rise in visits to emergency departments for mental health treatment among children during the pandemic compared to pre-pandemic levels, including cases concerning self-harm and suicide. Although the demand for emergency behavioral health services has eased since the peak of the pandemic, many continue to struggle with worsened mental health, and rates remain elevated.

Hospital systems are key players in the movement

Provider organizations are stepping up to meet this demand. SSM Health, based in St. Louis, Missouri, opened its first mental health urgent care center in 2020 to help alleviate the pressure on EDs, with a second clinic following in 2024. Collaborating with various community partners, these centers provide a place where people in crisis can receive same-day professional care. Similarly, Seattle Children's Hospital in Washington has opened a mental health urgent care clinic specifically designed to support kids and adolescents.

Other similar walk-in facilities linking both youth and adults to mental health services are springing up across the country, including in Florida, Massachusetts, Ohio, and Wisconsin. This emerging model of care could provide a crucial bridge between traditional outpatient services and ER visits for some people facing mental health crises, making care more accessible.

MOST COMMON BEHAVIORAL HEALTH DIAGNOSES IN 2023

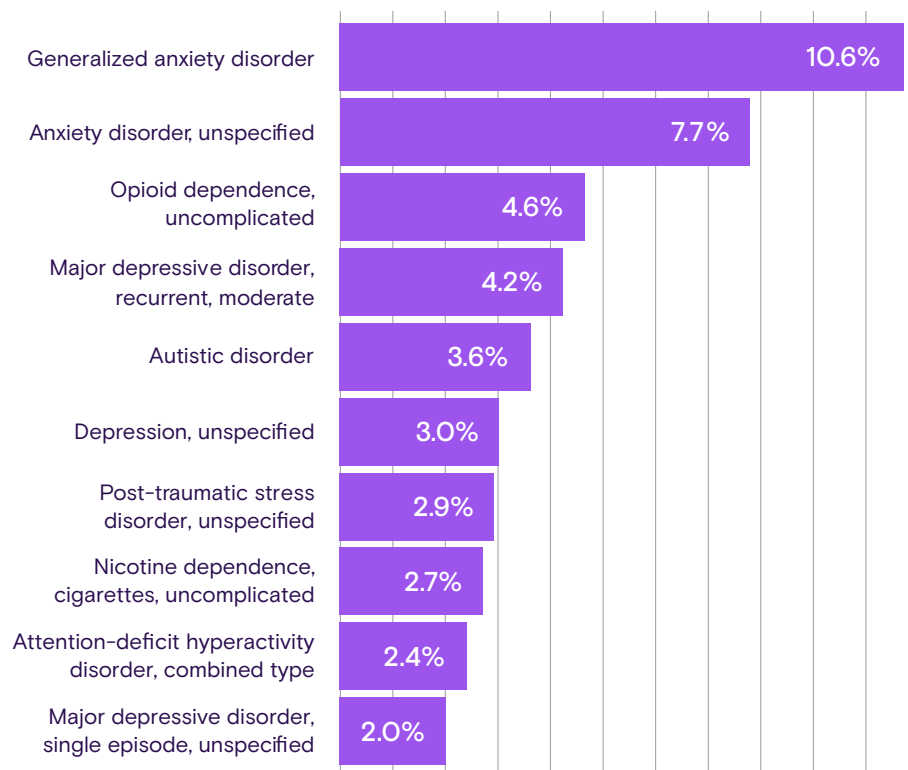


Fig 1 Data is from the Definitive Healthcare Atlas All-Payor Claims product for the 2023 calendar year.

The benefits of mental health urgent care clinics

IMMEDIATE ACCESS TO CARE

Many people seeking mental health care in traditional settings often encounter long wait times, sometimes stretching for months, which can delay the support they need and exacerbate psychiatric conditions. A recent [survey](#) by the American Psychological Association revealed that over half of psychologists reported having no openings for new patients. For those who do maintain waitlists, average wait times extend to three months or longer, with nearly 40% indicating that their waitlists have grown in the past year.

PROPORTION OF PSYCHOLOGISTS SEEING CHANGES IN THEIR WORKLOADS IN THE LAST 12 MONTHS, 2023

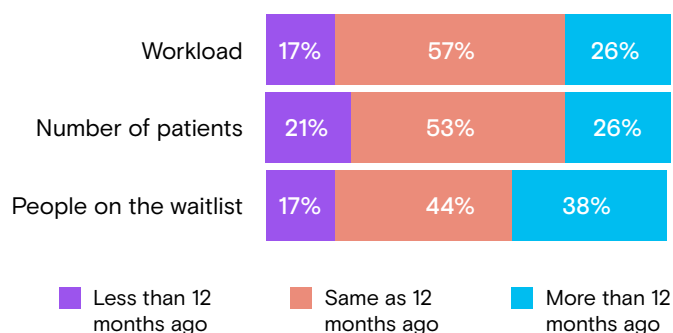


Fig 2 Source: American Psychological Association 2023 Practitioner Pulse Survey.

One of the primary advantages of behavioral health urgent care clinics is their ability to provide immediate access to care. For people facing a crisis—be it a panic attack, suicidal thoughts, or acute stress—prompt intervention can be lifesaving. These clinics often operate on a walk-in basis, reducing wait times and making it easier for those to seek help without an appointment.

CONNECTING PATIENTS TO ONGOING TREATMENT

Beyond crisis intervention, these clinics can play a role in connecting patients to ongoing treatment for mental health or substance use disorders. After an initial assessment and stabilization, clinicians can refer individuals to therapists, psychiatrists, and community resources, making sure they get the continued support they need. And like conventional urgent care clinics, these specialized urgent care clinics can serve as [referral sources](#) for health systems.

REDUCING THE BURDEN ON EMERGENCY DEPARTMENTS

With long wait times for outpatient care, many people find themselves turning to emergency rooms for behavioral health crises—often a level of care they neither want nor need. By redirecting those seeking mental health support away from overcrowded ERs—where about [8%](#) of visits are related to mental health issues—these clinics can not only improve access to care for patients but can also help hospitals operate more efficiently, especially as many ERs struggle to keep up with demand.

Mental health emergencies often require more time and resources, with psychiatric visits taking [42%](#) longer than non-psychiatric visits. They also lead to higher rates of inpatient admissions and transfers, along with a greater percentage of self-pay or charity care.

Moreover, many ERs are not equipped to handle behavioral health crises beyond initial stabilization. This can result in “boarding,” where patients wait long periods in ERs for appropriate care—sometimes for hours, days, or even weeks—after their evaluation is complete but before they can be admitted or transferred. During this time, most patients don’t receive psychiatric services, yet the [average daily cost is \\$2,264](#).

The challenge of boarding psychiatric patients in EDs not only hampers their capacity but also strains resources and increases wait times for all patients. This situation fosters frustration and puts additional pressure on healthcare staff. By shifting mental health crises to urgent care centers specifically designed for these needs, health systems can help both patients and [mental health providers](#).

Overcoming the challenges ahead

While the growth of behavioral health urgent care clinics is encouraging, there are still some significant challenges to tackle. One of the biggest hurdles is the pressing need for more trained professionals in the field. As more people seek mental health services, the shortage of providers makes it difficult to meet their needs effectively. Already, more than [150 million people](#) live in federally designated mental health professional shortage areas. Addressing this hurdle will be essential for ensuring that behavioral health urgent care clinics can fulfill their potential to provide timely and effective mental health support.

Find out what's next for behavioral health services

Over the next year, expect more health systems to explore urgent care models for mental health and to partner with community organizations to help patients connect to appropriate behavioral health resources. This emerging trend could bring numerous benefits: It could improve access to timely support for people in crisis, lower costs for patients and payors by diverting unnecessary ED visits, and provide health systems with a more efficient way to manage patient care and resources. It also opens doors for companies that support health systems and other provider organizations in developing and delivering effective behavioral health services. While the potential for improved outcomes is promising, it will be important to monitor the impact of these new services on the broader healthcare ecosystem.

Interestingly, some cutting-edge treatments in the behavioral health field like psilocybin, ketamine, and neuromodulation—as well as old standbys like SSRIs—are finding new applications in pain management.

Keep reading to learn about these and other non-opioid pain management solutions to keep an eye on in 2025. ■



Non-opioid pain management offers relief to patients and providers

4

Pain is both a universal human experience and also one of the most personal. It's our bodies' mechanism to indicate that something is wrong, and because no two bodies are identical, no two people will have the same experience of pain.

That's the ongoing challenge inherent to pain management: How do you titrate a dose or identify a specific neural pathway to modulate based on a patient's subjective experience?

Pain can be acute or chronic. It can originate from nerve damage or inflammation or psychological factors. Some people experience allodynia: Pain that results from stimuli not normally associated with harm, like the sensation of fabric on skin. In certain cases, pain felt in one part of the body may originate from another part entirely.

In other words, pain can be a complex challenge for physicians.

For thousands of years, healers have found a brutally simple solution to pain's complexity in opiates—and for the last couple hundred years or so, in their pharmacological lookalikes: opioids.

Opioids can be remarkably effective in treating pain in many forms. When used under medical supervision and for a short time, they can be relatively safe for most

people. But they're also highly addictive and carry a considerable risk of misuse and overdose. That's why biopharmaceutical companies, providers, and patients are increasingly exploring non-opioid options for pain management.

In the fourth part of our series on the top 2025 healthcare trends, we'll examine some of the emerging alternatives to opioids and [pain medications](#). Keep reading for a brief history of opioids, why these drugs are as medically alluring as they are potentially risky, and what new approaches to pain relief we may see evolve in the year ahead.

From opium flower to opioid crisis in 5,000 years

Far more potent than the unprocessed opium poppies first cultivated by Sumerians in 3400 BCE, opioids like morphine, heroin, methadone, and fentanyl have proven to be effective against a wide range of pain types. And because they work at the level of the brain and spinal cord, they are fast-acting and don't need to be administered at the source of the pain. Brilliant, right?

... it's important to remember the problem that makes opioids so alluring in the first place: Pain is complex, subjective, and potentially debilitating.

Unfortunately, there are no miracle cures. Greek physicians as far back as the 5th century BCE weighed opium's medicinal potential against its risks for dependence and overdose. Opium's addictive

properties were more broadly documented in the 17th century as it spread through Europe and Asia. After the American Civil War, so many veterans had become dependent on morphine that opioid addiction became known as "soldier's disease."

By the end of the 19th century, Bayer and other pharmaceutical companies were marketing heroin as a non-addictive morphine alternative. While the product has been refined and modified over the years, the reckless approach to pharmaceutical marketing carried on through the 20th century, bolstered by misleading claims about risk and illicit kickback deals. This led to massive overprescription, the flooding of the black market with opioids, and, ultimately, the national addiction and overdose epidemic that the U.S. has endured since the 1990s.

While it's easy to solely attribute the crisis to bad actors or perverse capitalistic incentives, it's important to remember the problem that makes opioids so alluring in the first place: Pain is complex, subjective, and potentially debilitating. Opioids give doctors and their patients a fast-working, reliable means of relieving that pain.

Despite what your high school football coach may have told you, enduring pain isn't a matter of physical fortitude or moral character. Generally, pain is a message from the body that it's being harmed; ignore at your own risk.

When pain is especially intense or long-lasting, it can be traumatic both physiologically and emotionally. Even relatively mild pain can affect mental health and quality of life. Extreme acute pain can send a person into circulatory shock, potentially leading to death.

In terms of long-term effects, up to [50% of people with chronic pain experience depression](#) related to their condition, according to a review of multiple pain studies published in *Cureus*. Some research suggests that [chronic pain could have a negative \(albeit modest\) effect on mortality](#).

According to the [CDC](#), around 1 in 5 Americans live with chronic pain. While opioids are among the fastest-acting interventional measures for people with chronic pain, they're far from the only option: Physical therapy, psychological therapy, and non-opioid pharmacological treatments have long been available and can be effective for certain patients.

In 2025, those options are set to expand even further. Let's take a look at some of the most exciting non-opioid pain management options poised to emerge or grow next year.

Exploring alternatives to opioids in 2025

NEUROMODULATION

Neuromodulation therapies like spinal cord stimulation (SCS) and peripheral nerve stimulation (PNS) are growing in popularity as a drug-free approach to chronic pain management. These technologies use non-invasive or minimally invasive medical devices to deliver electrical impulses that modify nerve activity and inhibit pain.

While neuromodulation has been around for a few decades, it's only getting more effective as interest in the technology grows and leads to further development. One of the most anticipated developments is the refinement and increased availability of closed-loop neuromodulation systems.

Unlike traditional systems, which provide constant stimulation, closed-loop systems use feedback from the body to adjust the stimulation in real time based on the patient's physiological responses. Some new and in-development systems are using artificial intelligence and [brain-computer interfaces](#) to more rapidly and effectively relieve pain according to patients' bio-feedback.

Early versions of these systems from companies like Medtronic and Nevro are already available, with more

advanced versions anticipated in 2025. Reflecting this interest, [Medtronic's neuromodulation segment outperformed the market](#) and grew by 10% in 2024.

We're also seeing a trend toward smaller, longer-lasting implantable neuromodulation devices. This year, medtech developer [ShiraTronics raised \\$66 million toward the development of an implant](#) that treats migraines through neuromodulation.

Additionally, a study published in Nature Neuroscience found that [noninvasive neuromodulation could help veterans](#) manage certain PTSD symptoms. We expect more research in this space in the year ahead.

CANNABIS, KETAMINE, AND PSILOCYBIN

Thanks to a growing body of scientific research, shifting social perspectives, and a push toward decriminalization and legalization, drugs that were once stashed in college dorm rooms are finding a new home in pain management professionals' formularies.

Cannabis has been studied extensively for its potential to manage both chronic and neuropathic pain, with studies suggesting that tetrahydrocannabinol (THC) and cannabidiol (CBD) could be particularly effective for conditions like neuropathic pain, [arthritis](#), and fibromyalgia, where traditional analgesics often fail. By 2025, we could see more refined cannabis-based formulations, such as specific cannabinoid ratios tailored to individual patient needs.

A recent study found that specific terpenes in [cannabis could help relieve pain related to chemotherapy](#) in particular. However, doctors still aren't entirely sold: While 71% of chronic pain patients support [the federal legalization of medical cannabis](#), only 59% of physicians do.

Ketamine has recently emerged as a powerful treatment for anxiety and depression. Once generally used as an anesthetic, [it's also being studied for its analgesic properties](#), particularly in cases of treatment-resistant pain.

Ketamine works by blocking NMDA receptors in the brain, which are involved in pain signaling and central sensitization—a key feature of chronic pain conditions like complex regional pain syndrome (CRPS) and neuropathic pain. Clinical studies have demonstrated ketamine’s ability to provide rapid and significant pain relief, especially in patients who have not responded to conventional therapies.

Earlier in 2024, mental health provider [Cambridge Biotherapies](#) announced the launch of a [ketamine infusion program](#) for pain and headache management. By 2025, ketamine could become a more prominent option for long-term pain management, particularly through low-dose ketamine infusions or oral formulations.

The growing use of esketamine, a more refined form of ketamine, could expand as its therapeutic window is further explored. Research published this year in *Frontiers in Medicine* shows that nasally administered [esketamine could be as effective for pain relief as morphine](#).

As more clinical trials are conducted on psilocybin and other psychedelics, their role in pain management could expand ...

Another compound moving from mental healthcare to pain management is psilocybin, the active ingredient in “magic” mushrooms. Psilocybin’s effects on serotonin receptors in the brain [may help “reset” the way the brain processes pain signals, potentially offering relief for patients with chronic pain conditions](#) like cluster headaches, migraine, and even phantom limb pain.

Looking toward 2025, psilocybin could become a complementary therapy for pain management, particularly for individuals with chronic conditions who have developed central sensitization—a heightened sensitivity to pain. While much of the current research focuses on psilocybin’s mental health benefits, its potential for reducing pain-related distress and altering the perception of pain could offer significant advantages over conventional pain treatments.

As more [clinical trials are conducted on psilocybin and other psychedelics](#), their role in pain management could expand, particularly for patients with treatment-resistant pain or co-occurring mental health disorders like depression or anxiety.

SELECTIVE SEROTONIN REUPTAKE INHIBITORS (SSRIS)

Around 13% of American adults take an antidepressant to treat depression and/or anxiety, with SSRIs being the most popular of these treatments. The effectiveness of SSRIs for depression has recently come into question, with some clinicians and researchers saying they’re [overprescribed and potentially risky](#) (sound familiar?). However, like psilocybin and other psychedelics, SSRIs ability to modulate serotonin receptors could also be leveraged to treat pain with less risk of harm than opioids.

So far, SSRIs are believed to have milder analgesic effects than other antidepressants like tricyclic antidepressants (TCAs) or serotonin-norepinephrine reuptake inhibitors (SNRIs), both of which are more commonly used for pain relief. In fact, they may even inhibit the efficacy of opioids.

But they do show some effectiveness in managing chronic pain conditions—particularly those associated with mental health conditions—like fibromyalgia, chronic migraines, and irritable bowel syndrome. [Using personalized medicine](#) to match patients to specific SSRIs based on genetic, biochemical, or psychological profiles could improve the efficacy of these drugs.

Doctors have found that [SSRIs reduce inflammation in patients with COVID-19](#), and some SSRIs are being modified to enhance those anti-inflammatory properties, which could make them more effective for pain relief.

In the near future, we could also see combination therapies pairing SSRIs with analgesics like NSAIDs, anticonvulsants, and muscle relaxants to enhance overall pain relief without increasing the dosage of either medication. This approach may be particularly useful for patients with multifactorial pain, such as those suffering from chronic low back pain or osteoarthritis.

We expect to see more clinical trials in 2025 that explore potential synergies between SSRIs, analgesics, and even non-pharmacological pain management methods like neuromodulation and digital therapeutics.

What's next?

The field of non-opioid pain management is huge and only getting bigger. While we covered some of the most compelling developments facing the field in 2025 and beyond, there's even more to consider, including advancements in virtual reality therapy, peripherally acting analgesics, and integrative medicine approaches like acupuncture, yoga, and mindfulness meditation.

In the final section of our [2025 healthcare trends](#) series, we'll discuss the factors contributing to a projected rise in medical cost growth, including inflationary pressures, prescription drug spending, and behavioral health usage. ■



Healthcare prices continue to rise

5

As we come to a close on our series of the top healthcare trends of 2025, it's easy to say that the healthcare industry is in a state of unprecedented transformation.

On the one hand, we are witnessing remarkable advancements in care delivery, technology, and operational efficiencies. However, an escalating financial crisis within the U.S. healthcare landscape is casting a long shadow over these innovations, undermining the system's ability to provide accessible, affordable, and high-quality care.

In case you missed it, the Centers for Medicare & Medicaid Services (CMS) recently published their report on [U.S. national healthcare expenditure \(NHE\) data](#)—and the outlook is concerning. [Individual medical costs](#) are expected to hit their highest level in 13 years by 2025 and, by 2032, NHE are projected to surge by a staggering 70%, reaching an astounding \$7.7 trillion.

This alarming trend underscores the urgent need to address the rising cost of healthcare in the United States. In this section, we'll explore the underlying factors driving this financial crisis and discuss potential solutions for mitigating its negative consequences.

Reasons why healthcare costs are rising:

- Inflation
- Prescription drug prices
- Decline in employer-sponsored insurance
- Aging population and longer life expectancy
- Chronic disease prevalence

Growing inflation applies pressure on the healthcare industry

Inflation affects healthcare just like any other sector. It increases the price of everything from wages and operational costs to medical equipment and supplies.

The cost growth of medical services usually leads the pack, rising at a faster rate year-over-year than other economic sectors. According to the [Peterson Center on Healthcare](#), medical care prices rose by 3.3% in June 2024. In contrast, the overall prices of all other goods and services in the U.S. grew by 2.9%. This growth is just one part of a greater trend: since 2000, the price of medical care increased by 121% compared to other consumer goods and services, which only rose by 86% over the same period.

Several elements contribute to healthcare inflation, including the U.S.' aging population and the [prevalence of chronic diseases](#), both of which we'll discuss in the following sections. Beyond those factors, inefficiencies in healthcare delivery and the supply chain, the trend of mergers, acquisitions, and consolidation in the industry, and high administrative costs also contribute to inflation.

Altogether, the various contributors to healthcare inflation can have a profound and significant impact. It not only affects the affordability and accessibility of healthcare services but also places a significant burden on the budgets of governments, businesses, and individuals alike.

As medical costs surge and inflation grows, we can expect healthcare organizations and leaders will be challenged in 2025 with finding new and innovative ways to manage expenses and find savings.

Three strategies that providers can consider to mitigate the impact of healthcare inflation are:

- 1 Optimizing workforce management:** The ongoing healthcare labor shortage is pressuring providers to maximize the time and value of their employees. To manage this, providers can look to automating routine tasks and streamlining administrative responsibilities with AI and other technologies.
- 2 Improving revenue cycle management (RCM) processes:** Poor RCM can lead to delays and denials in claims processing, leading to financial losses, penalties, compliance issues, and dissatisfied patients.
- 3 Promote cost transparency:** According to a survey by AccessOne, 69% of Gen X patients say transparency is essential. Ensuring that the costs of services are clearly outlined and communicated can help mitigate the risk of patients delaying payment and [reduce patient leakage](#) and frustration.

Prescription drug costs must be dealt with

In recent years, the [rising cost of prescription drugs](#) has become one of the most pressing issues in the U.S. healthcare system. It's one of the [big-ticket items of the Inflation Reduction Act](#) (which was extended into 2025). It grants Medicare the power to cap out-of-pocket costs, negotiate with drug companies to get lower prices for certain drugs, and penalizes pharmaceutical manufacturers if they raise prices faster than inflation.

The IRA was, in part, a response to the astonishingly high cost of prescription drugs in the U.S. and the financial strain it places on individuals and families.

According to one report, overall pharmaceutical expenditures grew by 13.6% in 2023 compared to 2022, for a total of \$722.5 billion—more than triple what the U.S. spent in the early 2000s. Without further reform, multiple foundations and the CMS estimate that drug costs will continue to rise throughout the late 2020s and into 2030.

WHAT'S DRIVING THIS HIGH-COST GROWTH? MULTIPLE FACTORS, INCLUDING:

Consolidation: Mergers and acquisitions result in fewer companies making and marketing drugs, which may reduce competition and lead to higher prices.

- **Patent protection:** By pharmaceutical patent law, other entities are unable to sell generic versions of the drug for the duration of the patent, which lasts for decades, and keeps competition at bay.
- **Increased utilization:** Demand for prescription drugs have increased as the U.S. population ages, and chronic conditions become more prevalent. Marketing and physician incentives can also contribute to overprescribing.
- **High drug prices:** Manufacturing drugs is expensive and risky, and often companies set high prices for new medication to recoup R&D costs and maximize profits.

As we look to 2025 and beyond, we may see health insurers, government agencies, and others that pay for prescription drugs employ strategies to slow the growth of medication costs. This could range from expanding the powers granted to Medicare under the Inflation Reduction Act to eliminating marketing tactics that discourage the use of generic drugs or even allowing the purchase of prescription drugs from outside the U.S.

There could also be measures in place to streamline the FDA approval process, which is notorious for being lengthy, expensive, and risky. Expediting the approval process could reduce research and administrative costs

and introduce new drugs into the market sooner, which could prevent the use of more expensive treatments. However, the real-world impact of these prospective changes remains to be seen, and for the time being, costs will likely continue to rise without slowing.

Decline in employer-sponsored insurance (ESI)

Employer-sponsored insurance (ESI) is the most common form of health coverage for working Americans, but its share of covered lives is expected to decline in the years to come. By 2032, the CMS expects about 1 in 10 people to be uninsured. This is problematic for several reasons, as people without insurance coverage often have less access to care, receive lower-quality care, and are more likely to delay or forgo care due to costs.

Beyond the rising costs of individual medical services across the healthcare landscape, employer behavior also influences the share of insured people. Should employers strip away benefits or reduce their contribution to ESI plans, it's the employees who shoulder the burden, often facing higher premiums, deductibles, and copays, which further feeds into the likelihood of postponing or neglecting care.

To compound the problem further, there are few positive choices for people who don't want ESI or don't have access to it. Individual insurance plans often have higher premiums and costs (which only increases overall healthcare spending). Alternatively, an influx of people transitioning to Medicaid or ACA marketplaces could place financial pressure on the government. To manage higher expenses, the government could raise taxes or reallocate funding, indirectly driving up costs.

Shifts in the labor market may also explain why fewer people will be insured in the future. With the rise of the gig economy, more Americans are moving into freelance and part-time work, which often does not provide health insurance.

The aging population brings new challenges and changes to healthcare

One of the most significant drivers of rising healthcare expenditures in the U.S. is the growing population of adults aged 65 and older. According to the Population Reference Bureau, older adults account for 17% of the nation's population. This is expected to grow to 23% by 2050 to a total of 82 million older adults.

This trend presents new challenges in the healthcare ecosystem. As people age, they tend to require more medical and specialized support. For example, older adults are more prone to chronic illnesses such as diabetes, arthritis, heart disease, and dementia. All of these conditions require ongoing medical attention, medication, and hospital visits, significantly driving up national healthcare expenditures.

With more people living longer, there is a greater demand for long-term care services and the professionals and facilities equipped to provide them. Nursing homes, assisted living facilities, and home health aides are costly and labor-intensive, also contributing to rising Medicare costs.

Increased chronic disease prevalence

Healthcare professionals and government agencies have warned for decades that the U.S. has a crisis of chronic disease. It's so widespread, in fact, that the CDC estimates that 60% of Americans have at least one chronic condition and 40% have two or more.

While chronic conditions are more likely to affect older people, as described above, experts are finding that conditions that used to almost exclusively affect adults now impact younger people at much higher rates. For example, one study reported that stroke rates in patients ages 20–44 increased by 65% between 1993 and 2015.

The COVID-19 pandemic is one of the primary reasons why chronic disease is so prevalent today. Millions of patients skipped appointments, tests, and screenings that were essential for managing chronic illnesses. This led to worsening health in patients and more patients in need of costly care in the ER or hospital.

Chronic diseases are also just naturally more expensive than most other conditions. Patients in need of chronic care management often require frequent visits to their provider or a specialist and need expensive imaging tests and scans, specialty drugs, and ongoing monitoring. The CDC estimates that 90% of all healthcare costs in the U.S. go toward treating chronic disease, about \$4.1 trillion a year.

The silver lining is that many chronic diseases are also preventable and avoidable. Conditions like heart disease and diabetes can be linked to lifestyle choices that are within a patient's own hands to change. Eating healthy, sleeping well, knowing your family history, and exercising regularly can all help lower one's risk of developing a chronic condition and can help address the symptoms of them. New technologies, as well as promoting health literacy and spreading educational resources about preventing chronic diseases can go a long way in reducing this national crisis.

The main takeaway

The rising costs of healthcare poses a significant threat to the accessibility, affordability, and quality of care in the U.S. Unfortunately, it's a multifaceted problem that involves government agencies, businesses, healthcare providers, organizations, and individuals.

It's not a problem that can be solved overnight, but as we look to how the healthcare landscape might shift in 2025 and beyond, it's likely that more will need to be done to combat the country's problem with health expenditures and addressing it will require a collaborative effort. ■

CONCLUSION

Get a data-driven edge in 2025

As we've explored in this e-book, the healthcare landscape in 2025 will be defined both by the exciting advancements and unsettling challenges that arise over the year ahead, some of which could shape the industry for years to come. Whether you're most concerned about the integration of artificial intelligence in healthcare, the shifting mental health landscape, the rise of direct-to-consumer models in the life sciences, or another key trend, getting access to the right data can help you stay ahead in an increasingly complex, competitive market.

Definitive Healthcare provides the comprehensive healthcare commercial intelligence you need to discover opportunities, prioritize targets, grow your business, and improve your bottom line. Our data products, tools, and services can support your entire organization from planning through execution and beyond.



About Definitive Healthcare

At Definitive Healthcare, our mission is to transform data, analytics, and expertise into healthcare commercial intelligence. We help clients uncover the right markets, opportunities, and people, so they can shape tomorrow's healthcare industry. Our SaaS products and solutions create the path to commercial success in the healthcare market, so companies can identify where to go next.

For more information, visit definitivehc.com.

Interested in discovering how we can help grow your business? Start a [free trial](#) or contact your Definitive Healthcare sales executive to learn more.