GLOBAL X INSIGHTS

Why HealthTech? Why HEAL?

Arelis Agosto
aagosto@globalxetfs.com

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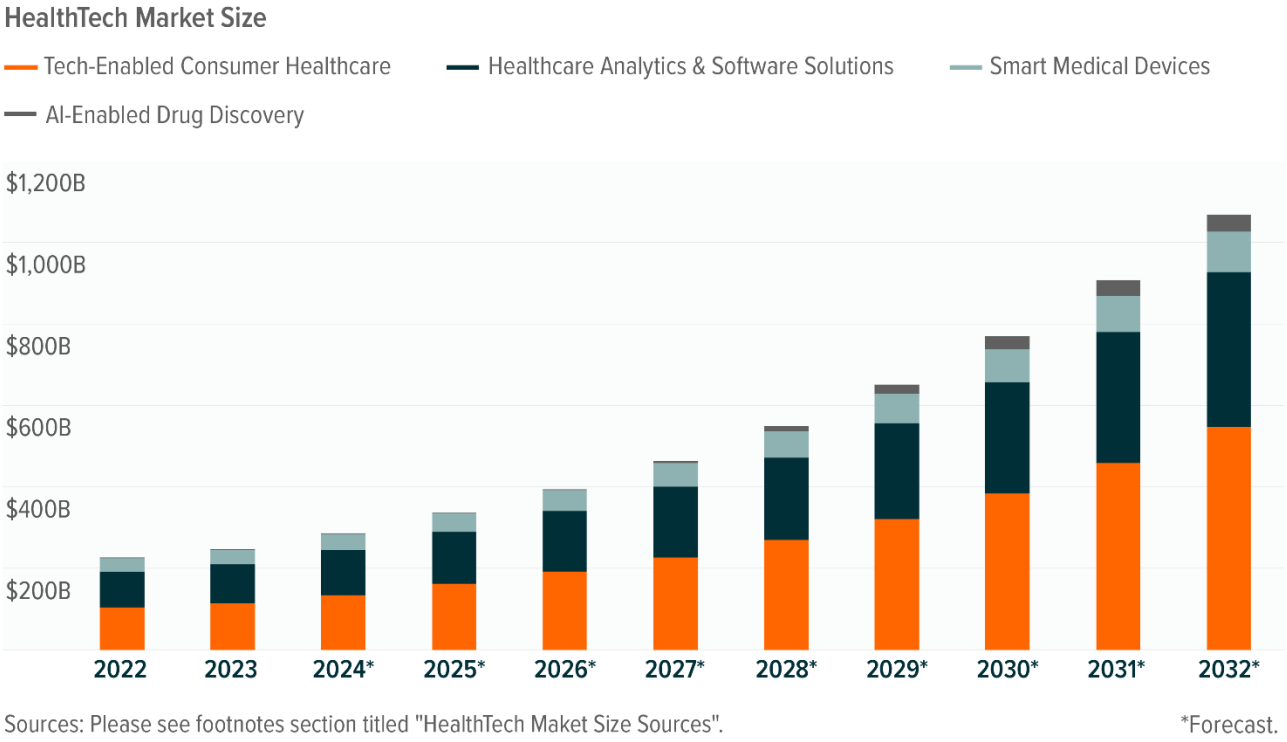
The healthcare industry faces a pivotal moment as traditional care models struggle to meet growing demand. While preventive approaches have improved chronic condition management and patient outcomes, the gap between healthcare supply and demand continues to expand. Technology is becoming the essential connection across this divide, with the healthtech market expected to grow dramatically from about $225 billion in 2022 to over $1 trillion by 2032.[1]

This expansion is expected to encompass four key areas: healthcare analytics and software solutions, technology-enabled consumer healthcare, smart medical devices, and AI-enabled drug discovery. Each area represents a unique approach to expanding provider capacity and improving care delivery efficiency. While healthcare has historically been cautious in adopting new technologies, mounting pressure to serve an aging population, manage chronic conditions, and improve access to care is accelerating digital transformation across the industry.

In response to these trends, we've updated the Global X Telemedicine & Digital Health ETF (EDOC) to the **Global X HealthTech ETF (HEAL)**, replacing the index the fund seeks to track effective April 1, 2025. This change reflects the rapidly expanding healthtech landscape and broadens our investment scope in an effort to capture more opportunities across the entire digital health ecosystem. HEAL seeks to provide investors with comprehensive exposure to companies driving healthcare's technological revolution, positioning them to potentially benefit from the industry's projected growth.

RAPID HEALTHTECH EXPANSION COULD NARROW THE CARE SUPPLY GAP



Sources: Please see footnotes section titled "HealthTech Maket Size Sources". *Forecast.

Key Takeaways

- HEAL seeks to provide investors exposure to the growing HealthTech industry, which is expected to grow fourfold from $225 billion in 2022 to over $1 trillion by 2032, fueled by urgent needs in healthcare capacity, aging demographics, and chronic condition management.[2]
- The fund offers exposure to applications of AI in healthcare, which are revolutionizing the industry across multiple use cases, from streamlining administrative workflows to expediting pharmaceutical research and development.
- HEAL allows inclusion of smart medical devices, which are being rapidly integrated into healthcare. The FDA has now approved 950 AI-powered medical devices, up from just 6 a decade ago.[3]

AI-Enabled Drug Discovery

Despite technological advancements, developing a new medicine still takes 10-15 years and costs $1.3 billion on average.[4,5] Only one in ten investigational drugs, however, makes it to market.[6] By running millions of scenarios, AI software could reduce the cost of preclinical drug development by 20-40% as well as accelerate design and validation of drug candidates up to 15-fold.[7,8]

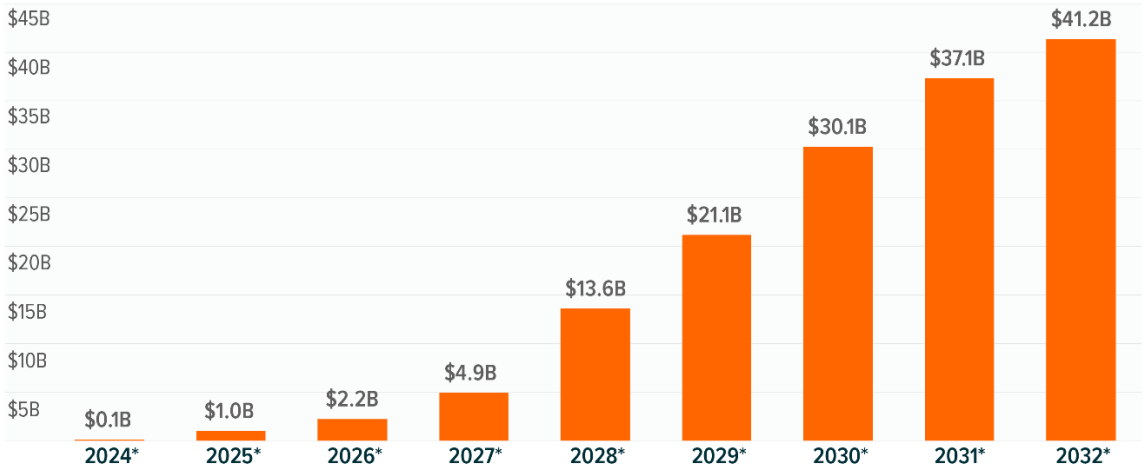
The drug development process is complex, requiring careful validation at each stage to ensure that only the most promising candidates advance to clinical trials and U.S. Food and Drug Administration (FDA) review. A flawed assumption or connection made in the early stages can result in years of wasted development time and resources on a drug that ultimately proves ineffective for patients. AI technology offers a potential solution by enabling researchers to leverage vast amounts of health data to make more informed decisions from the very beginning of the drug development process. This data-driven approach helps identify potential issues earlier and increases the likelihood of selecting successful drug candidates.

AI drug discovery software companies like Schrodinger, Simulation Plus, and Absci are pioneering a rapidly expanding industry. These providers can rapidly evaluate billions of potential compounds and predict how molecules will behave in the body. Further, they can harness machine learning to analyze massive biomedical datasets, revealing previously hidden patterns in disease mechanisms and optimizing drug designs digitally before any physical testing occurs.

The AI-enabled drug discovery software sector is projected to be the fastest-growing generative AI segment through 2032, with a compound annual growth rate of 121%.[9] HEAL offers exposure to such software providers.

AI DRUG DISCOVERY: EXPECTED TO BE FASTEST GROWING GENERATIVE AI SEGMENT

Generative AI Drug Discovery Software Market



Source: Bloomberg Intelligence. (2024, August 14). Generative-AI Revenue Potential. *Forecast.

This industry is, in turn, also expected to benefit:

- **Pharmaceutical Companies**: The integration of AI could fundamentally improve the economics of drug development. Currently, pharmaceutical companies must invest in hundreds of drug candidates knowing that only a small fraction will reach the market. This means approved drug prices must account for both successful and failed development costs. With AI-enhanced success rates, companies could develop more drugs more efficiently, potentially leading to better returns on investment and more affordable medicines.
- **Technology Infrastructure Providers**: The tech industry is making significant investments in healthcare AI capabilities. Chip manufacturers, in particular, are prioritizing healthcare development to meet growing drug discovery demands. For example,

Nvidia has established partnerships with hundreds of pharmaceutical and genomic firms, with their healthcare division now generating an estimated $1 billion in annual revenue.[10]

Smart Medical Devices

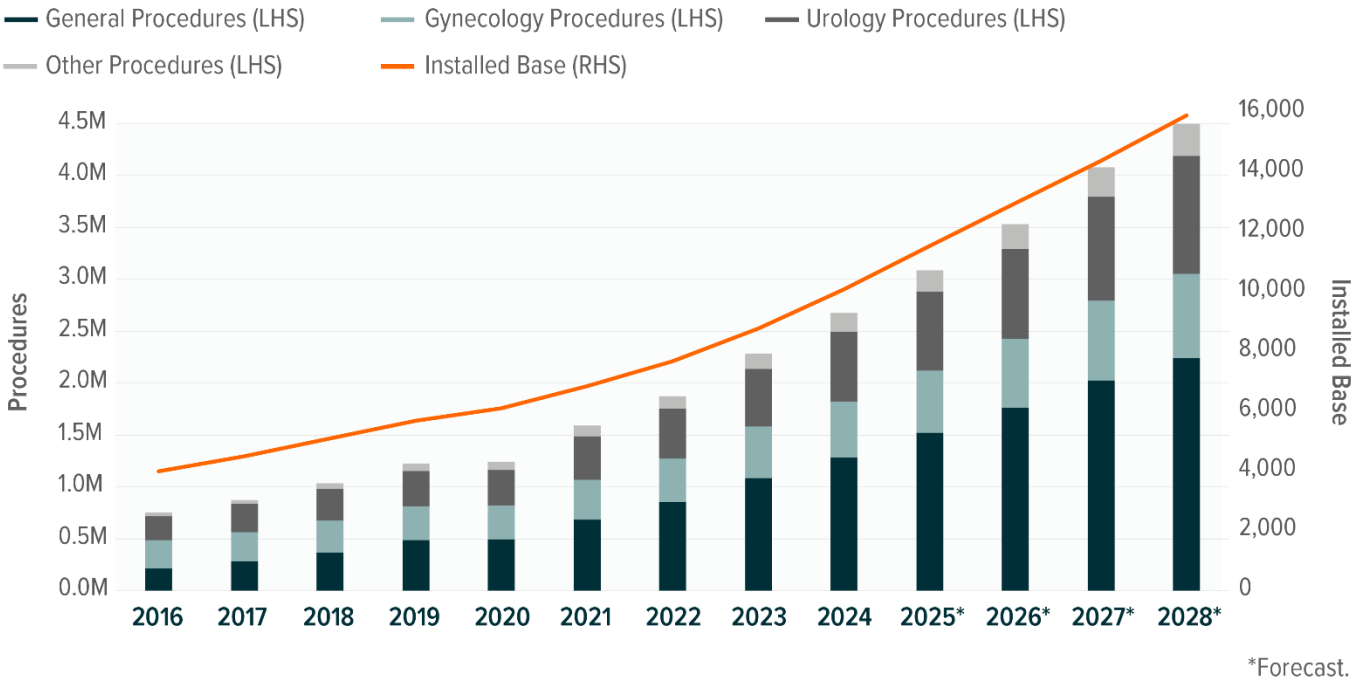
Smart medical devices are being deployed across the healthcare system to help scale up supply. These often apply novel software and AI applications to innovative hardware to help fill gaps in care. The FDA has approved approximately 950 AI-enabled medical devices in the United States, a dramatic increase from just 6 approved devices a decade ago.[11]

Smart medical wearables can bring healthcare technology directly to patients for continuous monitoring without sacrificing comfort. Diabetes devices from companies like Tandem Diabetes and Dexcom have paved the way in this category. Their success — evidenced by a 67% reduction in hospitalizations — creates a foundation for expanded monitoring across cardiovascular and neurological conditions.[12] Multi-biomarker tracking devices now chart the course for wearable health technology across diverse therapeutic applications.

Surgical robots have also been increasingly expanding their use cases. Though surgical robots have been in use for over two decades, advances in technology and software integration now enable more complex procedures. Benefits include reduced hospital stays, minimal scarring, lower infection risks, and decreased post-operative pain.[13] Accessibility has improved through alternative financing options, with leasing arrangements accounting for approximately 60% of placements by industry leader Intuitive Surgical.[14] Since receiving the first surgical robot approval in 2000, Intuitive Surgical has expanded to nearly 10,000 installations and facilitates over 2.6 million annual procedures.[15]

SURGICAL ROBOT ADOPTION ACCELERATING

Intuitive Surgical Installed Base & Procedure Volume



Sources: Intuitive Surgical Annual Reports 2017-2024. Bloomberg, L.P. (n.d.). ISRG: Intuitive Surgical Inc. Data as of March 14, 2025.

Similar devices are also being deployed behind the scenes, perhaps where patients might not directly see them in action. Healthcare facilities are rapidly adopting behind-the-scenes automation technologies. In the expanding $90 billion pharmacy automation market, integrated dispensing systems are revolutionizing medication management. These systems – like Omnicell's – can address critical demand as 85% of U.S. hospitals face pharmacy technician shortages.[16] Modern solutions, such as Omnicell's automated dispensing systems, deliver significant improvements – increasing inventory capacity by 30% and reducing pharmacist workload by 75%.[17,18]

Healthcare Analytics & Software Solutions

While medical technology has advanced rapidly in areas like genomics and surgical robots, fundamental administrative processes remain surprisingly analog. An estimated 80% of U.S. healthcare documentation still travels via fax and traditional mail.[19] This disconnect between

advanced medical capabilities and outdated administrative processes creates significant challenges for healthcare providers and patients alike:

- Physicians spend nearly 40% of their time on documentation rather than patient care.[20]
- Three-quarters of medical staff report that documentation requirements actively interfere with patient care.[21]
- More than three-quarters of physicians complete their documentation outside of regular hours.[22]
- Nearly 80% of doctors experience burnout related to healthcare IT systems.[23]

AI-powered solutions are now bridging this divide through intelligent workflow automation. Advanced natural language processing – like the software capabilities offered by Doximity – can help generate clinical documentation, from progress notes to discharge summaries. Enterprise content management platforms – like Veeva's flagship Vault – can help manage regulatory documentation and clinical trial data. Patient recruitment and retention software for clinical trials – such as IQVIA's CORE technology solutions – seek to support clinical trial enrollment, a critical need given that an estimated 80% of trials miss their enrollment deadlines.[24] AI chatbots – like Tempus' innovative Tempus One platform – can instantly summarize relevant clinical research and genomic insights to help physicians make more informed treatment decisions for their patients.

These innovations extend beyond mere efficiency – they're reshaping how the healthcare industry interacts with information.

The impact reaches beyond individual practices or businesses. By aggregating de-identified clinical data across diverse populations, these platforms create a living knowledge network. Providers can access insights from millions of patient encounters, stay current with emerging research, and make evidence-based decisions aligned with the latest standards of care. This collective intelligence, delivered through privacy-preserving analytics, is establishing a new foundation for medical decision-making.

HEALTHCARE'S CONNECTED KNOWLEDGE ECOSYSTEM: COLLECTIVE INTELLIGENCE IN ACTION

Transforming historical, isolated clinical datasets into a continuous learning system for improved patient outcomes.

Healthcare Analytics & Software Solutions

The rise of digital health solutions is fundamentally reshaping how patients access and experience healthcare. The global telemedicine market is projected to reach $280 billion by 2032, reflecting growing demand for convenient, accessible care options.[25] While virtual care adoption accelerated during the COVID-19 pandemic, the sector has evolved far beyond basic video consultations.

Digital pharmacies are revolutionizing medication management, with platforms like Hims & Hers now serving over 2 million subscribers.[26] These services combine home delivery with AI-powered medication management systems, reducing errors and improving adherence. Meanwhile, online healthcare marketplaces are streamlining how patients find and book care, significantly reducing wait times for specialist appointments.

Emerging hybrid care models blend virtual and in-person services, with a majority of healthcare organizations now offering some form of hybrid care delivery. These solutions particularly benefit chronic condition management, where continuous monitoring and regular provider check-ins can significantly improve outcomes. Remote patient monitoring programs have shown 50% reduction in hospital readmissions for conditions like heart failure and diabetes.[27]

Conclusion

The healthcare industry is experiencing unprecedented transformation through innovative technologies like artificial intelligence, robotics, and smart devices. These technological advancements are creating entirely new solutions across healthcare analytics, consumer healthcare, medical devices, and drug discovery — all while maintaining robust data protection standards essential for patient privacy and security.

HEAL offers investors a vehicle to target this opportunity by providing exposure to companies that operate at the intersection of healthcare and technology sectors. As the healthtech landscape evolves, HEAL offers access to innovations that may deliver growth potential while addressing important healthcare challenges.

Related ETFs

HEAL – Global X HealthTech ETF (HEAL)

Click the fund name above to view current performance and holdings. Holdings are subject to change. Current and future holdings are subject to risk.

Footnotes

1. Global X ETFs forecast as of March 14, 2025 based on information derived from: Bloomberg Intelligence. (2024, August 14). Generative-AI Revenue Potential. Evaluate Pharma. (n.d.). Cardiovascular Monitoring & Diagnostic Devices WW Consensus Sales Forecasts. Accessed on March 11, 2025. Evaluate Pharma. (n.d.). Diabetic Care WW Consensus Sales Forecasts. Accessed on March 11, 2025. Evaluate Pharma. (n.d.). Non-Invasive Monitoring Devices WW Consensus Sales Forecasts. Accessed on March 11, 2025. Grand View Research. (2023). Clinical Trial Management Systems Market Size. Grand View Research. (2023). Insuretech Market Size. Grand View Research. (2024). Telemedicine Market Size. Insight Partners. (2023). Medical Scheduling Software Market Size. Markets and Markets. (2024). Surgical Robots Market Size. Markets and Markets. (2025, March). Pharmacy Automation Market Size. Precedence Research. (2023). Revenue Cycle Management Market Size. Precedence Research. (2024). Electronic Health Records Market Size. Statista. (2024). Online Pharmacy.
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HealthTech Market Size Sources

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