

he nation's largest retail, payer and tech disruptors once again invested billions of dollars in health care in 2022, continuing to build out their visions to transform the field. In the short term, these moves helped the companies grab market share in primary care, concierge medicine, virtual care, in-home medical services and elsewhere.

In many cases, the investments helped companies broaden their footprints as they continue to integrate their expanding vertical health care operations in areas like pharmacy benefits management, behavioral health, care coordination, diagnostics and therapeutics, and health information technology.

Meanwhile, tech giants like Apple and Google chose different paths. Apple is concentrating on how to help patients live healthier lives by making greater use of data captured through their personal devices to fuel innovative health and fitness apps and collaborating with the research community. Similarly, Google is leveraging its health-tracking platform to help patients collect their data in one place.

As these companies execute their respective strategies, they all share some common aspirational goals in contributing to the delivery of care that is easier to access, coordinated and affordable. However, each disruptor faces some big questions in 2023.

This report examines what's ahead for Amazon, CVS Health, UnitedHealth Group (Optum and UnitedHealthcare), Walgreens Boots Alliance, Walmart, Apple and Google and issues they likely will face this year and beyond.

What's at stake?

The \$260 billion primary care market is dominated by traditional providers in a fee-for-service arrangement, but that is changing rapidly. By 2030, nontraditional players could own as much as 30% of the primary care market, according to a Bain & Company analysis.

What will drive future change?

- Innovative care models from nontraditional players that significantly alter the health care landscape.
- A shift to value-based payment models.
- New care models with a heightened focus on:
 - Specific populations.
 - Broader adoption of multidisciplinary care teams.
 - Growth of alternative care sites and channels of care.



AMAZON

Provider aspirations continue, pharmacy initiatives expand

With major moves in 2022 to transform its pharmacy operations, the medical supply chain and care delivery, Amazon is poised for another year of health care growth.

Primary care expansion continues

- Amazon Care, the virtual and in-person primary care offering through Care Medical has closed, but another window has opened.
- Amazon is in the process of buying concierge primary care provider One Medical for \$3.9 billion, including 188 offices in 28 markets and 767,000 members. The One Medical purchase has recently come under scrutiny from the Federal Trade Commission (FTC). Bloomberg and the Wall Street Journal report that the FTC is preparing a possible antitrust lawsuit to challenge some of Amazon's business practices as anti-competitive.
- In January, the company launched RxPass, a service that allows Amazon Prime users in 42 states to pay a monthly flat fee of \$5 to get as many as 50 generic medications that treat 80 common ailments. The online retailer has launched Amazon Clinic, a message-based virtual care service available in 32 states for the treatment of more than 20 common health conditions.

Increasing access to diagnostics and therapeutics

- Amazon Dx on-demand diagnostic lab offers COVID-19 tests for in-home use and plans to expand into other testing services, including sexually transmitted infections, fertility, hormone levels and more.
- The company is leveraging Amazon Web Services (AWS) data and cloud computing capabilities to drive innovation in diagnostic testing and research.
- Amazon also is exploring next-gen digital therapeutics software-driven therapeutic interventions that treat, manage and prevent disease.

Investing in disease management

- Investments in Kaizen Health (a nonemergency medical transportation platform) and Pieces Predict (predictive models to help clinicians forecast patient changes) will further Amazon's care coordination efforts.
- AWS Healthcare Accelerator will serve as an incubator for startups to expand the use of AWS services and accelerate growth in the cloud.

Building next-gen tools for providers, payers

- AWS Healthcare Accelerator is backing startups that provide digital tools to improve patient engagement and streamline clinical workflows (e.g., GYANT, b.well, Medical Informatics). Efforts are aimed at facilitating closer communications among the care team.
- GE Healthcare is partnering with AWS to deliver artificial intelligence (Al)- and cloud-based imaging solutions and clinical insights to providers.



- Will Amazon scale primary care offerings to compete with CVS Health, Walgreens and others?
- Will RxPass help Amazon rapidly expand its pharmacy base, particularly with seniors, as the company flexes its pricing and distribution muscle?
- How will it expand relationships with hospitals and health systems to crystalize its vision?
- Will Amazon's planned purchase of One Medical be completed given current FTC review of Amazon's business practices?



CVS HEALTH

Primary care push propels expansion

After another year of multibillion-dollar investments to expand its primary and home care businesses, CVS Health leaders plan to take calculated steps in 2023 to further round out their portfolio.

Integrated care strategy takes root

- The company is leveraging its ownership of Aetna to incentivize health plan clients to use CVS Health services.
- It is connecting consumers with CVS care teams through 650 HealthHUB locations (soon to be 1,500).
- In February, CVS agreed to buy primary care provider Oak Street Health for \$10.6 billion in cash. The deal is expected to close this year but is likely to face regulatory scrutiny, with one antitrust advocacy group already opposing the deal.
- The company recently expanded virtual mental health services offered through its CVS Health Virtual Primary Care offering. The services are available to Aetna members 18 and older.
- CVS' \$8 billion Signify Health purchase gives the company an instant cornerstone to fulfill its homehealth aspirations.

Primary and home care differentiation strategy

- Expand services beyond MinuteClinics to meet more consumer care needs.
- Within three years, create health subscription models for broader populations.
- Diversify its portfolio by expanding home health services.
- Commercialize data analytics and insights, and address social determinants of health.

Laying the foundation to dominate retail care

- Some analysts believe CVS could be the best-positioned retail primary care competitor today.
- CVS has more than 10,000 retail pharmacies in the U.S. and Puerto Rico.
- 50 million patient visits are spread among MinuteClinics' 1,100 retail locations.
- An estimated 34 million Americans are served by Aetna, CVS Health's subsidiary and part of its integrated care strategy.

CVS Health's growth highlights

- The company's CarePass program, a paid membership that gives consumers free medication delivery and other perks, has more than 5.6 million members, a 40% jump from last year, the company reports.
- Nearly 80% of CVS Health customers now use the company's self-serve digital tool to complete necessary forms before appointments at MinuteClinics and HealthHUBs.
- The company plans to spend \$3 billion to make further digital enhancements to improve the customer experience.
- Lastly, it is leveraging a \$100 million venture fund targeting early-stage health technology companies, which will focus on digital disruptors delivering accessibility, affordability and simplicity to consumers.



- How far will CVS Health go in expanding its primary care offerings?
- Can the company meet its goal of facilitating 65 billion health care interactions by 2030?
- How will CVS Health further engage with hospitals, health systems and other providers and payers as it pushes for more rapid transformation, improved care coordination and other improvements in care delivery?



UNITEDHEALTH GROUP

(Optum/UnitedHealthcare)

Broad-based expansion further diversifies health care portfolio

As one of the most diversified and well-funded disruptors in health care, Optum is poised for another year of growth after it completed its merger with Change Healthcare.

Expanding data and analytics to simplify back-end operations

• Optum's \$7.8 billion merger with data and analytics giant Change Healthcare last year will simplify clinical, administrative and payment processes for providers and payers. Change Healthcare has relationships with thousands of providers to transact client records for more than 85 million patients.

Making mental health services more accessible

- Optum Ventures has backed multiple funding rounds since 2020 for virtual behavioral health platform Brightline, which addresses anxiety and depression in children and teens.
- Optum has partnered with Alma and Talkspace to offer virtual behavioral health services to its patients.
- In 2022, Optum acquired Refresh Mental Health, a network of 200 outpatient mental health facilities.

Care coordination: giving an assist to patients and providers

- Optum has invested in Buoy Health and Lumeon to assist patients through the care journey. Buoy uses tools, including an Al chatbot, to help patients determine if care is needed.
- The company also is investing heavily in solutions to manage care from the patient side. It has backed Health[at] Scale, a company that harnesses machine intelligence to provide more precise and timely care.
- In 2022, Optum invested in Medallion, which streamlines the provider licensing, credentialing and payer-enrollment processes.

Investing in high-tech ways to facilitate remote-patient monitoring, home care

- Optum is expected to close this year on its \$5.4 billion purchase of the home health care business LHC Group.
- In 2022, Optum invested in DUOS, which uses virtual assistants to help elderly patients maintain their independence and health.
- It has partnered with CarePredict, a digital health platform that addresses senior needs using wearable tech and AI to analyze changes in daily activities and behavior patterns to spot potential health issues.
- Optum also has acquired Vivify Health, which provides remote-patient monitoring to assess and coordinate care based on a patient's condition.

VBC support

- UHG and Walmart are partnering on a 10-year Medicare Advantage VBC model and a co-branded health plan.
- Optum-backed Greater Good Health offers technology to help nurse practitioners provide comprehensive patient care.
- Its partnership with HealthEdge helps Optum with the technology to support its payer business transition to the VBC model.
- Optum acquired Imperium Health, an accountable care organization enablement company, to support organizations in their transition to VBC models.

Facilitating virtual care

Optum has invested in a diverse set of companies that provide mobile solutions to patients, including:

- Loop Health, which has an app-based platform for virtual care, medication ordering and general medical inquiries.
- Vira Health, which aims to address undermet needs in women's health by focusing on improvements to menopause care.

- Can Optum effectively integrate its many recent acquisitions and partnerships into its operations?
- Will the company be able to convince its huge physician groups and patients to embrace VBC?
- Optum has provided UHG with a sizable growth engine. Can it continue growing, even if not at the current pace?



WALGREENS BOOTS ALLIANCE

The company banks its future on health care delivery

This will be a pivotal year for Walgreens' all-in approach to its health care future. The company expects to turn a profit on its health care operations as it continues to build out its primary care locations with VillageMD.

Big primary care push

- With its \$5.2 billion investment in primary care provider VillageMD, Walgreens now has a nearly twothirds controlling interest in the company.
- It plans to open at least 600 co-located primary care practices with VillageMD in more than 25 U.S. markets by 2025 and 1,000 by 2027.
- The company plans to expand further into VBC.
- VillageMD is buying the medical practice Summit Health for \$8.9 billion, which includes the urgent care clinic chain CityMD.
- Walgreens last year also spent \$1.3 billion to complete its acquisition of specialty pharmacy Shields Health Solutions

Walgreens' home health play

- A \$330 million investment in post-acute and home care company CareCentrix gives Walgreens a controlling interest in the company. This move helps Walgreens increase its capabilities to serve patients with complex or chronic conditions.
- CareCentrix manages 19 million patients through 7,400 provider locations and helps patients age, heal and stay at home.
- CareCentrix states that it reduces total care costs for its members by 20%.

Building stronger relationships with customers

The larger message in Walgreens' health care investments includes:

- Building stronger relationships among the consumer, primary care physician and pharmacist.
- Increasing patient satisfaction by making care more convenient in their neighborhoods.
- Providing more care in underserved communities due to its large retail footprint.



- Will VillageMD care sites deliver the volume the partners hope?
- Can Walgreens compete effectively in this space with larger rivals like Amazon and Walmart?
- It will take time to see if Walgreens' strategy pays off. Will its future revenues and other results satisfy investors? The company states that it expects revenues of between \$14.5 billion and \$16 billion by 2025, after previously forecasting no more than \$12 billion for that same period, according to Motley Fool.



WALMART

Retail health clinic expansion, VBC initiatives drive growth

The nation's largest retailer continues to add virtual care and discount drug programs and recently added a unified electronic health record system for its clinics that will bring its low-cost prescription drugs to self-insured employers.

Leveraging pharmacy as a front door to primary care

In many ways, Walmart and Amazon are on similar paths toward reshaping health care. Both are focused on:

- Leveraging health technologies to streamline care and cut costs.
- Expanding consumer relationships through pharmacy and consultation services.
- Delivering care via telehealth and other means.
- Expanding VBC.

Walmart's footprint

- The company has about 5,000 stores across the country. This generates huge foot traffic to Walmart's pharmacies and walk-in retail health clinics.
- Walmart continues to add free-standing health centers in various regions around the country. It plans to open 16 new health centers in Florida this year in the Jacksonville, Orlando and Tampa areas.
- The company acquired telehealth provider MeMD last year, providing multichannel access to care.
- In October, the Walmart Healthcare Research Institute launched an effort to increase community access to health care research and lead to safer, higher-quality and more equitable care. As part of the initiative, Walmart's patient portal will give patients access to targeted research opportunities. Walmart's study partners include clinical research organizations, pharma companies and academic medical centers.

Building long-term partnerships

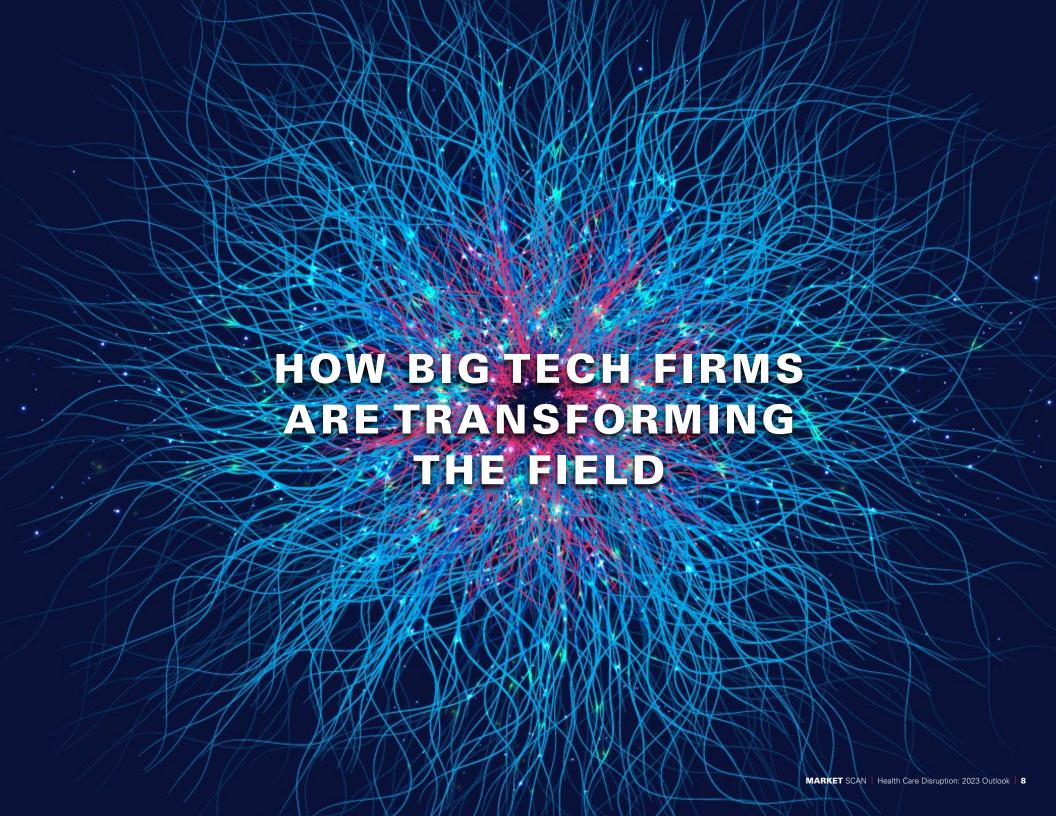
- The company recently inked a 10-year agreement with UHG to drive VBC adoption among Walmart's clinicians. The partnership signals a commitment to extend VBC models to seniors and Medicare beneficiaries across the country over time.
- Walmart has partnered with Epic to engage patients, providers, payers and other stakeholders to enhance communication and information sharing.
- Last year, Walmart partnered with Health[at]Scale Technologies to connect its employees with providers suited to meet their needs.

New leaders hone Walmart's focus

- Cheryl Pegus, M.D., executive vice president of health and wellness, has created a new management team to refine Walmart's vision.
- The company is focused on making it easier for employees and customers to access primary, dental and vision care.
- Convenience is key. Walmart is making care appointments available on weekends and offers telebehavioral health and teen-focused services as differentiators.



- Will Walmart's clinics be able to deliver the level of care patients expect?
- Will the company need to recruit more physicians to fulfill its health care vision?
- How quickly can Walmart scale its health centers to support its ambitious growth plans?







APPLE

Empowering people to live healthier lives

Apple won't be competing in the ever-more crowded primary care space. Instead, it is using the Apple Watch and iPhone to build partnerships with payers, health systems and clinical researchers. The company continues to add health-related features to its Apple Watch to establish the wearable as a clinical tool to be used in research.

Empowering users on their personal journey by:

- Putting health data in one place.
- Serving as an intelligent guardian for users' health.
- Providing features to improve everyday health and fitness.
- Fueling innovative third-party health and fitness apps.

Supporting the health ecosystem through community collaboration by:

- Equipping researchers to make new scientific discoveries.
- Strengthening the physician-patient relationship with meaningful data.
- Promoting healthy lifestyles with Apple Watch.
- Supporting public health and government initiatives.

- The company must make it easier for patients to transfer data from personal devices to providers in real time.
- Will patients be willing to consistently share personal health data they collect and own?
- Can Apple monetize its health care ventures beyond the sales of its devices?





GOOGLE/ALPHABET

Company continues to hone Al-influenced health care strategy

Like Apple, Google has an advantage in personalized health care through its data platform that connects to its devices.

Leveraging AI for personalized data and research and development (R&D)

- The Google Fit health-tracking platform connects to any Android-enabled devices such as the Garmin smartwatch to collect health information in one place.
- Pharma companies increasingly are leveraging AI to cut R&D costs, reduce drug delivery times and address previously untreatable diseases. Google has been active in this space for nearly a decade. In 2022, Google backed AI drug discovery startups BenchSci, Seismic Therapeutic and InstaDeep.

Making computer vision better, faster and cheaper

- Al use in radiology continues to be a key focus area.
- Google Ventures has invested more than \$140 million in startups Viz.ai and Hyperfine.
- Google also is partnering with providers like Mayo to co-develop computer vision solutions for radiology support.

Google Cloud collaborates with providers, others to improve performance

• In November, the company launched three new Health Data Engine "accelerators" to help health care organizations improve health equity, patient flow and VBC. The accelerators were developed in collaboration with Hackensack Meridian Health, Lifepoint Health and others.

- Hardware will be key to Google's future. Devices ranging from Chromebooks to Pixel phones to home devices provide the means for Google users to manage their data. How successful will Google be in monetizing these capabilities?
- Can Google own the patient journey process?
- Will Google become involved with direct medical care and prescription drug services?

What does retail disruption mean for hospitals? Providers should consider these questions:

- **1.** Do we have an omnichannel presence that provides the convenience, access, transparency, pricing and other information and services that patients want?
- 2. Are there partnership opportunities with any of the Big 5 companies transforming primary care?
- **3.** How can we leverage our strength in established trust and rapport with existing patients to use our outpatient, clinic and virtual services for routine and nonemergent care?
- **4.** How can we partner with big tech firms around research, data sharing, etc., to improve care?

