Innovation: Pushing the deal market to adapt and evolve

2024 Healthcare and Life Sciences Investment Outlook

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Contents

Executive summary

Welcome to the KPMG 2024 Healthcare and Life Sciences Investment Outlook. This in-depth examination of the healthcare and life sciences (HCLS) deal market explores how the major developments of 2023 have prepared the way for the year ahead. In this paper, we analyze how eight subsectors fared during another year of industry challenges and global instability, and how deal activity and market drivers could shape the 2024 investment landscape.

The insights of this report are based on extensive global research into the deal and market environments, as well as our annual survey of corporate and private equity (PE) deal makers across the subsectors. Crucial to creating this report is the extensive knowledge and experience of our HCLS leaders, who work with our clients on their most pressing deals, strategy, and transformations worldwide.

The HCLS marketplace began last year facing widespread uncertainty. The US Federal Reserve was hiking interest rates at a historic pace even as inflation proved difficult to tame. Companies throughout the industry had to cope with a sharply higher cost of capital as they considered strategic changes to reposition themselves in an unpredictable post-COVID-19 environment. And although many economists insisted recession was imminent, employment reports and consumer spending numbers kept surprising on the upside. There were many more questions than answers as industry and PE leaders considered their next moves.

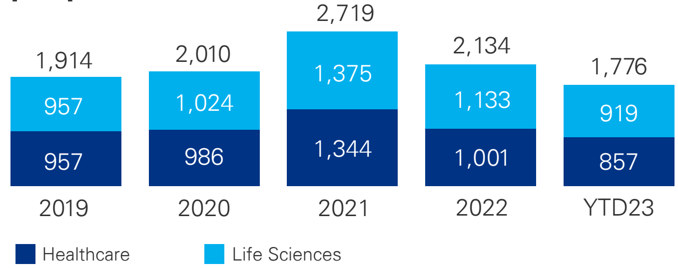
Against that backdrop, deal volumes for life sciences and healthcare dropped from 2022 levels, with life sciences transactions declining from 1,133 to 919, and healthcare deals falling from 1,001 to 857 (Exhibit 1). Much of the retreat came in the fourth quarter (Exhibit 2). In terms of strategic investments, deals for life sciences companies dipped from 778 in 2022 to 662 a year later (Exhibits 3 and 4). But healthcare transactions by strategic investors went up, rising from 475 in 2022 to 566 in 2023 (Exhibits 5 and 6).

Yet many deals were completed throughout the year. Large healthcare companies made moves to increase their scale, while smaller hospitals and health systems, in particular, looked for partners that could rescue them from an increasingly dire financial landscape. Biopharma deal activity has been more mixed. The number of acquisitions in 2023 remained stable compared to 2021 and 2022; however, other strategies for acquiring assets to build portfolios have declined sharply. This is an interesting development, as pharma leaders, forced by the specter of approaching price negotiation to reconsider their strategies for filling their pipelines and remaining competitive, made a few major acquisitions and many smaller ones, along with numerous partnerships and licensing agreements. Companies in other life sciences subsectors considered their options for reshaping themselves as their industries continued to be transformed by a remarkable pace of innovation.

Even during the fourth quarter, when deal volume fell across the HCLS landscape, there were still motivations for dealmaking, including among largely sidelined financial investors looking to deploy a mountain of capital. But valuations for potential acquisition targets remained above long-term multiples, and interest rates were higher than they had been in many years, a combination that has discouraged some investors.

Still, as the end of the year approached, there was good news on the macroeconomic front, with inflation continuing to ease and further rate hikes by the Fed appearing less likely. With possible rate cuts next year and an economy that could achieve a soft landing, the environment for dealmaking could markedly improve.

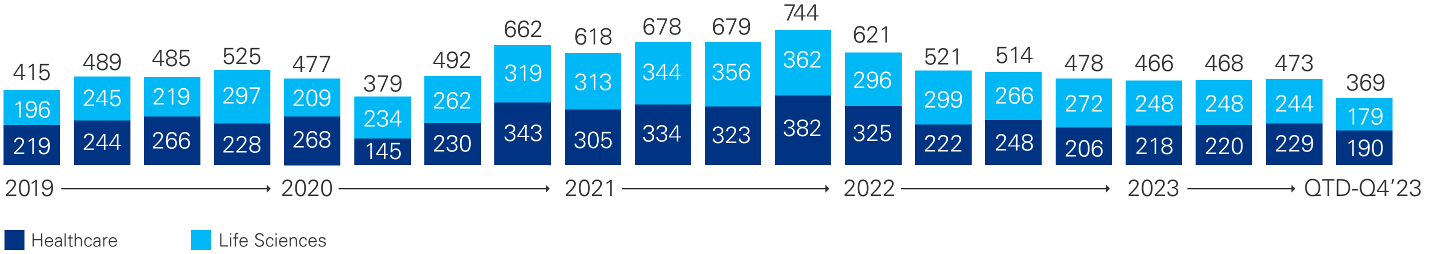
Exhibit 1. HCLS deals fell back to below pre-pandemic levels



Notes: Biopharma data sourced from Informa and Pitchbook while all other LS subsectors' data has been sourced from Capital IQ, Refinitiv, Informa, and Pitchbook; HC data has been sourced from Capital IQ, Refinitiv, and Pitchbook; Data is updated until December 10, 2023.

Sources: Capital IQ, a division of Standard & Poor's; Refinitiv; Pitchbook; Informa; all accessed in December 2023

Exhibit 2. Deal volume consistently down last 6 quarters



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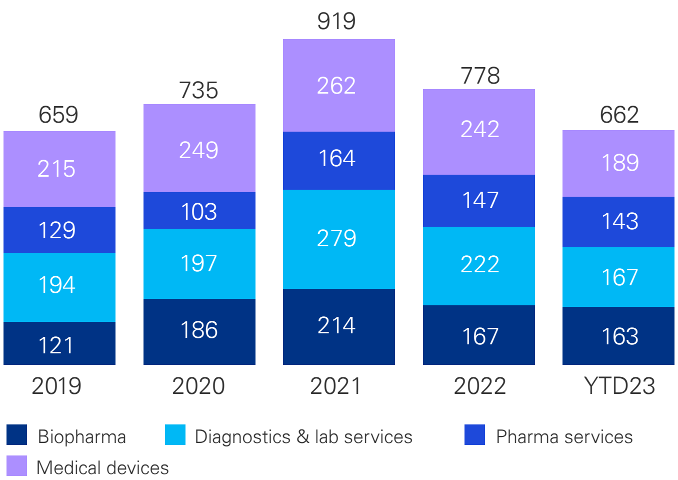
Sources: Capital IQ, a division of Standard & Poor's; Refinitiv; Pitchbook; Informa; all accessed in December 2023

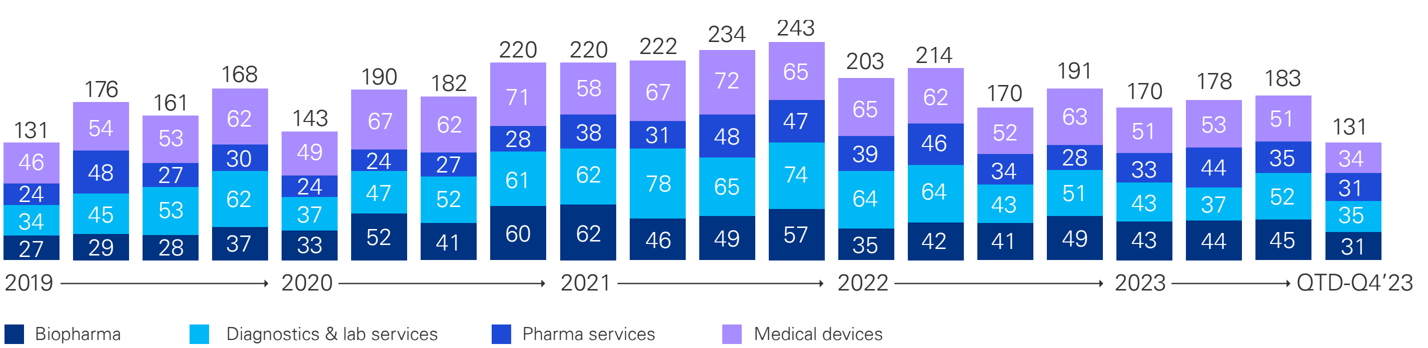
Exhibit 3: Life Sciences strategic investments, 2019-2023



Notes: Data for Biopharma sub-sector sourced from Informa and Pitchbook while all other LS subsectors' data has been sourced from Capital IQ and Pitchbook; Biopharma subsector excludes deals pertaining to cannabis and hemp as well as distributors/suppliers of drugs; Diagnostics subsector include companies that are manufacturers of diagnostics equipment, LS tools as well as lab services providers; Companies that are CRO, CMO or CDMO (support services) for medical devices companies have been excluded from our analysis; Pharma services include CROs, CMOs, CDMOs as well as companies that provide commercialization, consulting, advertising services and other services on contractual basis; YTD as of December 10, 2023

Sources: Capital IQ, a division of Standard & Poor's; Informa; Refinitiv; Pitchbook; all accessed in December 2023

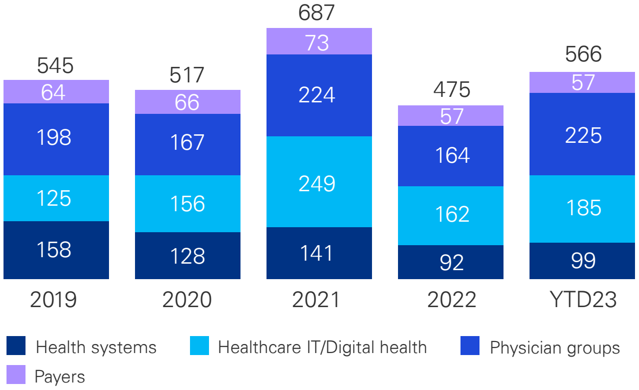
Exhibit 4: Life Sciences strategic investments by quarter, 2019-2023



Notes: Data for Biopharma subsector sourced from Informa and Pitchbook while all other LS subsectors' data has been sourced from Capital IQ and Pitchbook; Biopharma subsector excludes deals pertaining to cannabis and hemp as well as distributors/suppliers of drugs; Diagnostics subsector include companies that are manufacturers of diagnostics equipment, LS tools as well as lab services providers; Companies that are CRO, CMO or CDMO (support services) for medical devices companies have been excluded from our analysis; Pharma services include CROs, CMOs, CDMOs as well as companies that provide commercialization, consulting, advertising services and other services on contractual basis; YTD as of December 10, 2023

Sources: Capital IQ, a division of Standard & Poor's; Informa; Refinitiv; Pitchbook; all accessed in December 2023

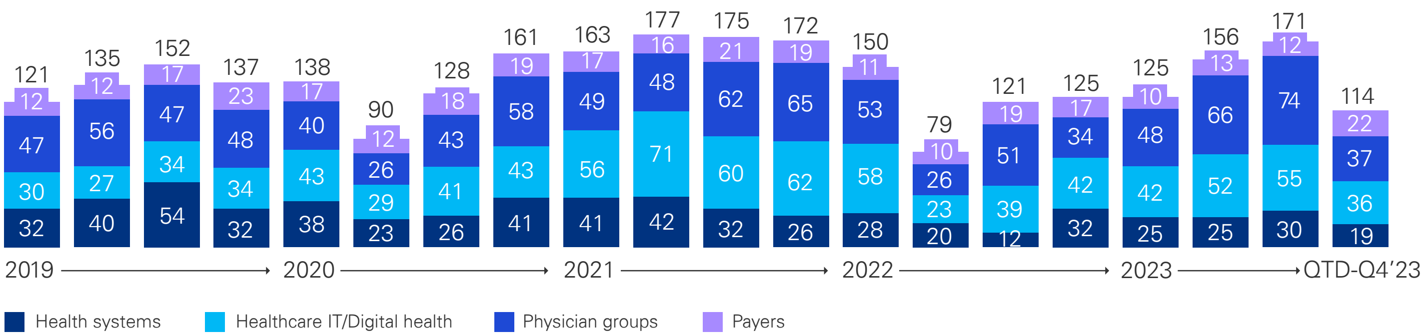
Exhibit 5: Healthcare strategic investments, 2019-2023



Notes: Data has been sourced from Capital IQ and Refinitiv; Strategic investments include deals undertaken by a public/private company with no major private equity backing (PE); Includes deals with only US-based Targets; Data is updated until December 10, 2023.

Sources: Capital IQ, a division of Standard & Poor's; Refinitiv; all accessed in December 2023

Exhibit 6: Healthcare strategic investments by quarter, 2019-2023



Notes: Data has been sourced from Capital IQ and Refinitiv; Strategic investments include deals undertaken by a public/private company with no major private equity backing (PE); Includes deals with only US-based Targets; Data is updated until December 10, 2023.

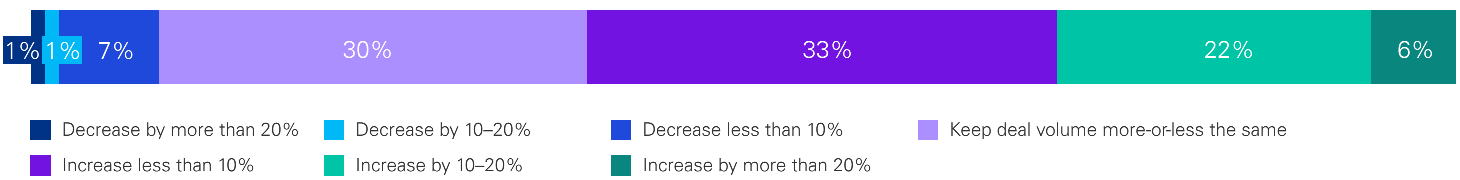
Sources: Capital IQ, a division of Standard & Poor's; Refinitiv; all accessed in December 2023

The year ahead

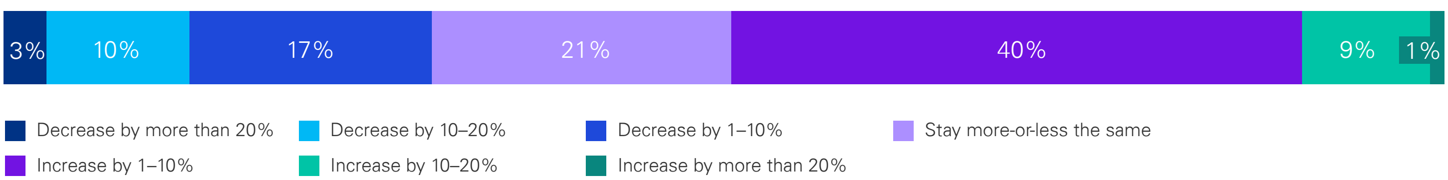
With the anticipation that some economic and industry headwinds may ease in 2024, respondents to our survey are feeling more positive about M&A activity in the coming year. Sixty-one percent expect more deals in 2024 than in 2023, and only 9 percent predict that deal volume will fall. But unlike a year ago, when 48 percent of respondents said they believed industry valuations would fall, 50 percent of this year's respondents project an increase in valuations, compared with 30 percent who expect valuations to decline (Exhibit 7). We think this disparity in valuation points of view makes sense as there definitely appears to be a bimodal deal market where highly competitive targets are meriting higher valuations than targets where bidding wars have not materialized.

Exhibit 7: Deal volumes are expected to grow while valuations also rise

Q: What magnitude does your firm plan to increase or decrease M&A deal activity for 2024 compared to 2023, as measured by number of transactions?



Q: To what extent do you believe valuations in your industry will change from 2023 to 2024?



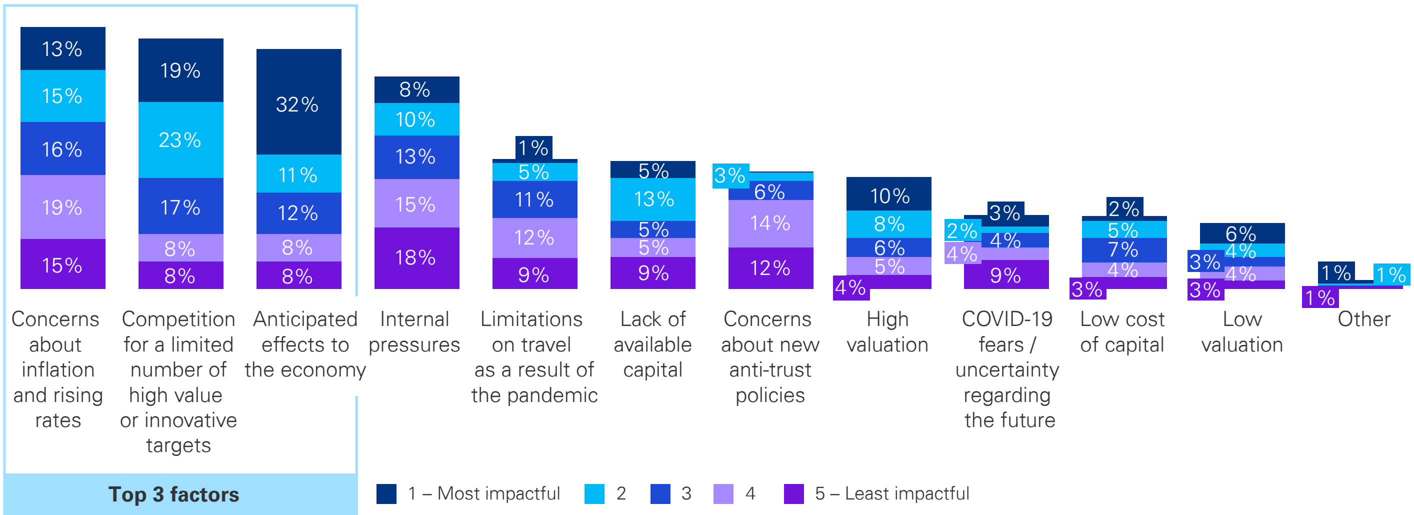
Source: 2023 KPMG HCLS Investment Survey

Asked what might cloud their outlook for 2024, survey respondents cited concerns about inflation and rising rates, competition for a limited number of desirable acquisition targets, and anticipated effects to the economy (Exhibit 8).

In the months ahead, we will continue to uncover the trends driving M&A across healthcare and life sciences and bring you quarterly updates on these evolving industries. Stay tuned.

Exhibit 8: Headwinds that could impact deal activity in 2024

Q: What factors will impact your firm's M&A deal activity plans for 2024, as measured by number of transactions?



Notes: Other: Economic downturn, US FDA no longer recognizing China-only clinical trials, legislation changes slow integration of recent transactions, reimbursement, etc.
Source: KPMG HCLS Investment Survey 2023

Subsector analyses

Subsector overview highlights

Life sciences

Biopharma

The pharmaceutical industry was confronted with a range of headwinds in 2023 and many will continue into the foreseeable future. In addition to macroeconomic headwinds, three federal government policy issues are negatively impacting the industry: the FTC's new and more extreme anti-competition policies (see Sanofi-Maze); the implementation of the Inflation Reduction Act (IRA); and the Biden administration's new NIH framework for march-in rights. The amount of policy disruption facing the pharmaceutical industry is unprecedented. That said, for companies with a sound legal preparation to combat FTC objections, there were several large acquisitions near the end of the year that demonstrated a continuing appetite for innovative cell-and-gene therapies and treatments for cancer and rare diseases. Precision medicine helped fuel much of activity in the subsector, which also featured product acquisitions, licensing deals, and strategic R&D partnerships. But, as we head into 2024, a more assertive FTC, the impact of the IRA, and the potential threat of march-in rights could have a profound effect on the industry, and if policymakers are not extremely thoughtful on the degree they implement these policies, the current ecosystem that fuels innovation could be dramatically disrupted, which would domino into the deal market. (11)

Diagnostics

Amid a sharp drop in M&A, the largest diagnostics industry transactions moved offshore in 2023, with an ex-US buyer, seller, or both. Innovations in testing, including companion diagnostics for precision medicine and advanced at-home testing for a growing number of conditions, is helping to reshape company priorities. (18)

Medical devices

After three years of challenging elective surgery volume, it now appears to be climbing past pre-pandemic levels. That means optimism among medical device companies may begin to rise, and M&A could recover from low levels in 2023. Innovations in cardiology, robotic surgery, internet-connected wearable devices, and other areas may also spur dealmaking in 2024. Innovation across robotics, AI, machine learning, and IOT are driving advancement in this field, and 2024 should include a range of deals focused in these areas. (23)

Biopharma services

Still adjusting to a post-COVID-19 world, many CDMOs and other pharma services companies face uneven demand and heightened competition; overall, however, this area has significant potential. Major pharma firms and emerging biotechs continue to outsource functions at all stages of drug development and manufacturing, and private equity investors, in particular, appear poised to reengage in what has historically been their most active life sciences subsector. (27)

Subsector analyses

Subsector overview highlights

Healthcare

Hospitals and health systems

While hospital and health system operating margins began moving into positive territory overall in 2023, institutions continue to look for ways to raise efficiencies and revenues, from automating processes to training nurses. Many are pursuing M&A and partnerships to gain scale and share resources. More than 60 percent of our survey respondents expect deal volume to rise in 2024. Health systems will pursue partnerships, especially with digital health companies and physicians, to grow share, build new revenue streams, and gain economies of scale. (34)

Physician practices

Investors' interest in physician practices peaked in 2021 and returned to pre-pandemic levels in 2022 and 2023. Challenges in the subsector include reimbursement pressures, the increasing shift toward value-based payments, and potential regulatory changes. In 2023, strategic buyers took up the slack from financial investors, making more deals in the third and fourth quarters of 2023 than even in the peak year of 2021. These acquirers tell us they are now looking for higher-quality assets with stronger management teams. (39)

Payers

While financial investors stayed on the sidelines and shied away from this subsector in 2023, major players within the payer space are making strategic acquisitions while also divesting select assets to focus their portfolios and improve margins. The value of scale, including the promise of better operating efficiencies, will continue to drive many deals in this space. The most successful payers will have expertise in patient engagement, care coordination, risk adjustment, compliance, and other areas to turn a profit in Medicare Advantage (MA), where more than half of Medicare recipients are now enrolled. (44)

Healthcare IT

This industry is fragmented, with many small and mid-sized businesses aiming to maintain their independence while they grow. Many are subject to strict regulations, and some have so much customer churn that they are less desirable as acquisition targets. More healthcare players are moving to the cloud and pursuing other digital advances, however, which will likely spark more HCIT dealmaking. (50)

Life Sciences

Life Sciences: Scaling a wall of uncertainty

In 2023, most of the life sciences industry continued to adapt to a post-pandemic world of reduced government support, difficult macroeconomic conditions, and a culture of rapid innovation that has produced losers as well as winners. The phase-in of the Inflation Reduction Act (IRA), which in 2023 selected its first 10 drugs for price negotiation with Medicare, loomed large.

In biopharma, as companies debated how the IRA would impact their pipelines, businesses continued to emphasize the development or acquisition of precision medicine treatments, cell-and-gene therapies, and innovative approaches to treating cancer and rare diseases. One promising therapeutic modality that became a focus of deal activity in 2023 involved targets focused on antibody-drug conjugates (ADCs). ADCs have several proven qualities the pharmaceutical industry has found compelling and thus led to an increase in deal activity. First, ADCs have continued to have good efficacy and safety results across a wide range of cancer types. Second, ADCs do not involve the complex patient administration and supply-chain challenges seen with other modalities like CAR-T therapy. Third, many of the ADC assets are able to be developed across a wide range of indications, increasing the overall commercial opportunity beyond the lead indication. These qualities really helped foster an active market around this area.

Questions about the near- and long-term future also affected M&A in diagnostics, with companies rushing to develop or acquire companion testing technologies such as liquid biopsy and next-generation sequencing. The rise of increasingly accurate at-home tests for a range of conditions is also forcing a shift in priorities as companies look for ways to partner with retailers and others that can put tests in the hands of consumers.

Dealmaking in medical devices may rebound in the coming year as elective surgery volumes surge and innovation in cardiology, robotic surgery, AI-supported surgery, and other areas motivates industry leaders to bolster and reshape their portfolios, and, in some cases, to divest non-core assets. The large medical device competitors vary in their overall financial health coming out of COVID-19. Some are still recovering from the challenges COVID-19 created for their business. We anticipate that in 2024 some of these companies will become more focused, considering carve-out opportunities to improve their capital positions and enable them to focus on M&A in new, higher-growth areas. Overall, between divestitures and acquisition activity, we expect this industry segment to rebound in 2024.

Although deal volume in the biopharma services subsector also declined in 2023, and some companies struggled in the post-COVID-19 era, demand for the work these businesses do is likely to continue to rise as large pharma companies and emerging biotechs look to outsource functions at all stages of drug development, from clinical testing to securing regulatory approvals and commercializing new therapies. There is a bit of a rest on the interest in cell-and-gene therapy manufacturing. The market capacity for CDMO capacity became a bit overbuilt in the near-term, especially as several key pipeline therapies in this space failed in Phase III clinical trials. This has led to some notable divestitures of manufacturing sites and site closures. However, we think this lull in growth in this segment is likely only a two- to four-year pause. The pipeline for cell-and-gene therapies remains extremely robust, and eventually new late-stage therapies will succeed and require access to more manufacturing capacity.

Biopharma: Looking for opportunity amid turbulence

In 2023, biopharma firms faced macroeconomic headwinds and policy challenges that continued to hinder dealmaking. With Medicare price negotiation mandated by 2022's IRA looming and the FTC demonstrating that it will continue to scrutinize significant acquisitions, deals were difficult to complete. Yet companies still need to build their pipelines.

The largest biopharma deal of 2022, Amgen's acquisition of Horizon, finally passed muster with the FTC in September 2023 and closed early in the fourth quarter.[1] That underscored one major theme in this subsector—that although the FTC will continue to look closely at most M&A activity, the negligible concessions from Amgen[2] suggest that taking the FTC to court may become simply a cost of doing business for deal makers, which could begin to disregard this threat.

Conversely, the FTC closed out 2023 by authorizing a lawsuit against Sanofi, which led to Sanofi giving up on its licensing deal for Phase II-ready asset MZE-001 from Maze Therapeutics. The FTC will take its persuasion impact as a victory, and the implications for the pharmaceutical industry are potentially significant. The premise of the FTC's complaint was that this licensing deal would eliminate a nascent competitor poised to challenge Sanofi's monopoly in the Pompe disease therapy market. This is notable on several fronts. First, while today Sanofi is the largest commercial player (one of two commercial competitors) in Pompe disease, the target population is a rare disease with an estimated 10,000 patients worldwide. It raises the question of how many competitors can really address this population and have a viable business. Second, MZE-001 just completed Phase I. There are numerous competitor programs in Phase II led by other big pharmaceutical companies such as Roche, Bayer, and Astellas. The lawsuit here seems to be based on a projection of what the future competitive landscape in Pompe disease could be. It raises the question of why the presence of big pharma competitors with later-stage pipeline assets (that notably have a higher probability of success) should not be considered evidence of Sanofi trying to keep pace with future competition rather than continuing its market leadership. Heading into 2024, FTC actions will lead to longer timeframes for closing deals, and may have an impact on the type of deal strategies the pharmaceutical industry deploys, especially if highly structured deals for high-risk, early-stage pipeline assets are going to garner more attention by the FTC.

The intersection of macroeconomic conditions and big pharma competition for assets has created almost a bimodal market in valuations. Although a late-year rally lifted the biotech sector overall, many firms, lacking support from private and public markets, are running short of cash. Yet biotechs in high-demand therapeutic areas have seen valuations continue to grow. Precision medicine, cell-and-gene therapies, and treatments for cancer and rare diseases remain industry priorities. Strategic partnerships, licensing deals, joint ventures, and other forms of risk-lowering collaboration have partially replaced traditional acquisitions, most of which have been in the $1 billion to $10 billion range. However, we have also seen once well-funded biotechs such as Goldfinch Bio close their doors in 2023 due to funding challenges.

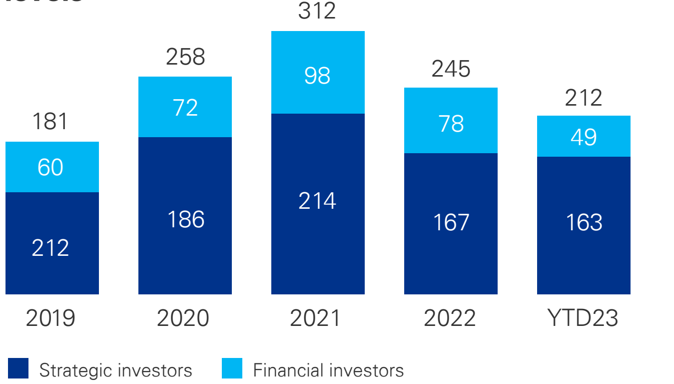
[1] Source: "Amgen completes $27.8 billion Horizon Therapeutics deal," Reuters, October 6, 2023

[2] Source: "Amgen settles with FTC on $27.8 billion Horizon takeover," Los Angeles Times, September 1, 2023

How biopharma fared in 2023

The volume of biopharma deals declined further in 2023 after peaking during the pandemic years of 2020 and 2021. Yet the past year's 212 overall deals still surpassed the total of 181 in pre-pandemic 2019. In today's environment, financial deals have become less common as well, making up just 23 percent of deals in 2023, compared with 32 percent a year earlier (Exhibit 9).

Exhibit 9: Biopharma deals remain above 2019 levels



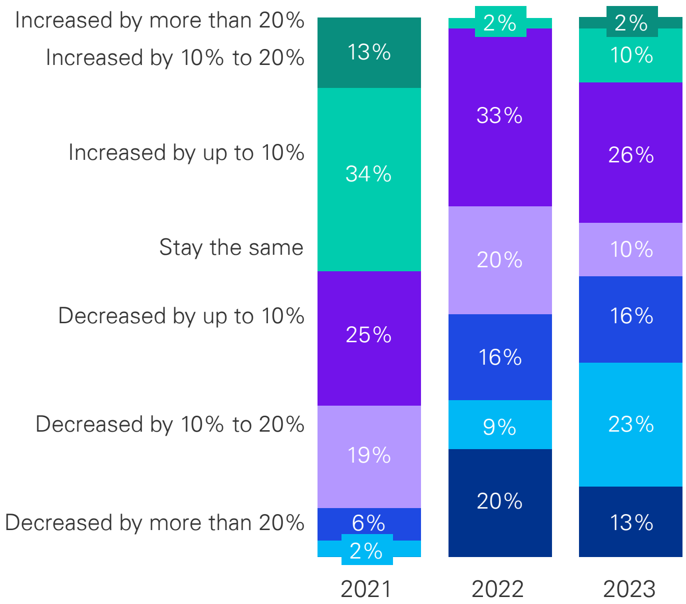
Notes: Strategic deals data for Biopharma sourced from Informa while all other LS subsectors' data has been sourced from Capital IQ, Refinitiv, Informa, and Pitchbook; HC data has been sourced from Capital IQ, Refinitiv, and Pitchbook; Annual Biopharma deal outlook publication does not include M&A deal activity with financial investors and includes other non-M&A deals such as Strategic R&D collaborations, outputs will thus differ to this publication; Data is updated until December 10, 2023.

Sources: Capital IQ, a division of Standard & Poor's; Pitchbook; Informa; Refinitiv; all accessed in December 2023

A December rally lifted the previously slumping Nasdaq Biotechnology Index, which tracks the prices of public biotech companies traded on the exchange. But most respondents to our survey, asked to assess the changes in biotech valuations, saw a decline, a sentiment that has become more widespread during the past three years. About 52 percent of respondents judged that valuations had declined in 2023, compared with 45 percent and 8 percent, respectively, who felt valuations had fallen in 2022 and 2021 (Exhibit 10).

Exhibit 10: A growing number of respondents believe biotech valuations are falling

Q: To what extent do you believe the valuations of innovative pharmaceutical or biotech companies have changed in 2023, 2022, and 2021?



Note: Based on respondents who work/have investment in biopharma industry

Sources: KPMG HCLS Investment Survey 2023, KPMG HCLS Investment Survey 2022, KPMG HCLS Investment Survey 2021

Biopharma

We saw several noteworthy trends in the space in 2023:

The looming impact of the IRA. As IRA phase-in dates draw closer, with negotiated prices for an initial 10 drugs set to take effect in 2026, biopharma companies are feeling pressure to reconsider their strategies for developing, acquiring, and bringing pipeline drugs to market. Those first 10 drugs were selected last summer, and in September the drugs' manufacturers officially agreed to participate, even as many of them pursued legal action against the IRA. Looking ahead, the effect of price negotiation—particularly for small molecule drugs, which get just nine years of protection from price negotiation, compared with 13 years for biologics—is likely to impact commercial strategies and may alter the deal landscape as companies choose not to pursue some products. We expect there to be a tangible impact on the biopharma deal market, discouraging some pharma companies from partnering with biotechs to help develop and commercialize their assets, particularly for small molecule drugs.

The ultimate impact of the law will continue to be debated as the IRA's phase-in approaches, and many studies are attempting to analyze current moves by pharma companies through the lens of looming price negotiation. For example, a relatively large proportion of the 50 pipeline discontinuations announced during the first half of 2023 involved late-stage products, perhaps indicating decisions to cease investing in some programs where profitability could be hurt by the IRA. But development of small molecule drugs was abandoned in only slightly larger numbers than discontinuations for biologics (26 small molecule drugs versus 24 biologics).[3] Other studies suggest that the original Congressional Budget Office estimate—that lower R&D spending because of the IRA could result in just 15 of 1,300 new drugs not coming to market over the next 30 years—may underestimate what is likely to occur. One study projected a loss of 79 small-molecule drugs during the next 20 years, as well as an 8 percent drop in industry revenue and a 12 percent reduction in R&D spending.[4]

Precision medicine's evolving role. A paradigm shift, precision medicine continues to drive innovation and M&A across the life sciences sector. Now moving beyond oncology and rare diseases to cardiology, immunology, and neurodegenerative diseases, precision medicine not only holds immense promise, but also requires a fundamental change in the pharma business model. AI is also playing a crucial role across the precision medicine continuum (see Our thinking: A new era of precision medicine) in everything from screening and risk assessment to determining optimal treatments and monitoring treatment progress.

Given this promise, precision medicine continues to be a focus for dealmaking. The largest deal in 2023, Pfizer's $43 billion acquisition of Seagen, a biotech firm with a strong pipeline of oncology treatments, fills a major need for Pfizer. Seagen, whose marketed products generated about $2 billion of revenue in 2022, has been a leader in developing antibody-drug conjugates (ADCs), a kind of novel, complex, targeted cancer therapy that was also at the center of Abbvie's planned $10.1 billion acquisition of ImmunoGen, announced in late November.[5] A third ADC-focused transaction, a partnership announced in October in which Merck agreed to pay Daiichi Sankyo an initial $5.5 billion to develop and commercialize three ADCs in a deal that could ultimately be worth $22 billion,[6] underscores the importance of these cancer drugs to pharma companies, an emphasis likely to continue in 2024. In a fourth ADC deal, also in October, GSK entered an agreement with Chinese firm Hansoh Pharmaceuticals for exclusive rights to an ADC in early-phase testing.[7] And in December, Bristol Myers Squibb acquired the rights to another ADC from SystImmune in an agreement that could be worth as much as $8.4 billion.[8]

In other precision medicine-focused deals, Astellas made its largest acquisition in history when it paid $5.9 billion for Iveric Bio and its assets for various ophthalmic conditions and rare diseases.[9] Another area that is starting to heat up in the pharma deal market

[3] Source: "Pharmaceutical innovation and the Inflation Reduction Act: What can we learn from the first half of 2023," ATI Advisory, November 2023
[4] Source: "Gilead-backed study warns US price negotiations could hit R&D harder than expected," Fierce Biotech, September 6, 2023
[5] Source: "Abbvie to acquire ImmunoGen for $10 billion in banner year for ADCs," Endpoint News, November 30, 2023
[6] Source: "Merck and Daiichi Sankyo Strike Cancer Drug Deal Worth Up to $22 Billion," Investopedia, October 20, 2023
[7] Source: "GSK enters exclusive license agreement with Hansoh for HS-20089," press release, October 20, 2023
[8] Source: "Bristol Myers, SystImmune to develop cancer drug in up to $8.4 billion license deal," Seeking Alpha, December 12, 2023
[9] Source: "Astellas Pharma buys Iveric Bio for $5.9 billion," Reuters, May 1, 2023

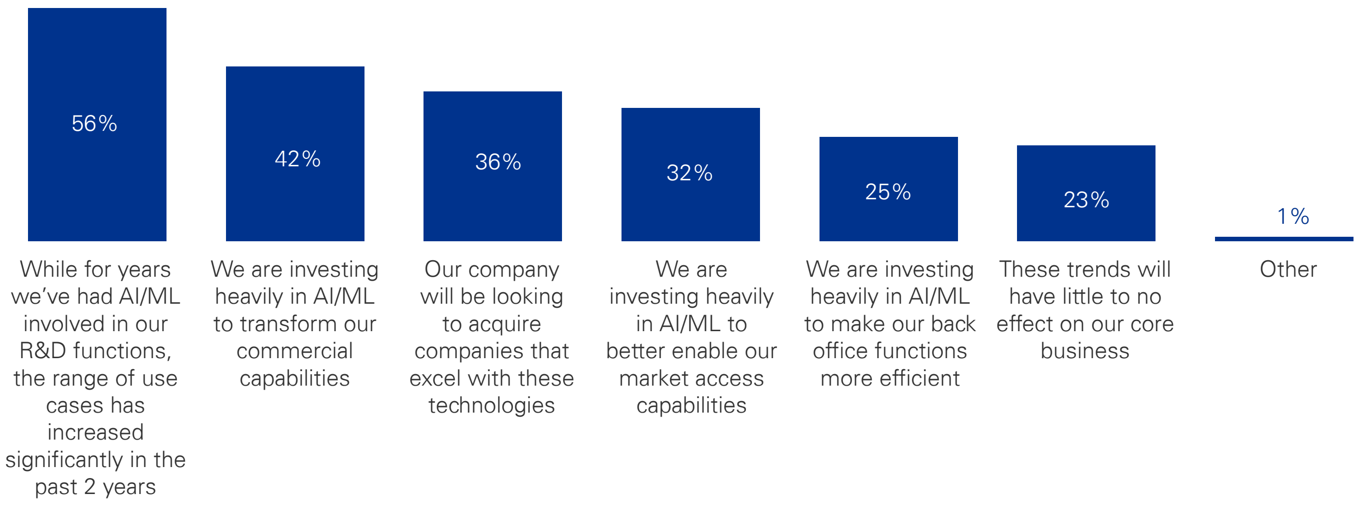
is radio-pharmaceuticals. Eli Lilly paid $1.4 billion for POINT Biopharma[10] as it looks to enter the radioligand therapy market, another increasingly competitive field within precision medicine. We expect more deals in radiopharma to happen in 2024. Finally, in a deal announced in late December, Bristol Myers Squibb said it would acquire Karuna Therapeutics for $14 billion, in a transaction that will increase the company's presence in central nervous system therapies, one of the industry's fastest-growing categories. Karuna's Phase III KarXT is a novel treatment for schizophrenia and for psychosis in Alzheimer's disease.[11]

AI's transformative impact. In precision medicine and across the biopharma landscape, artificial intelligence (AI) is transforming drug development and other parts of pharma operations, and it is a growing focus for investment. Although 56 percent of respondents to our survey said that AI and machine learning (ML) have been priorities for years, 42 percent reported investing heavily in AI/ML to transform their commercial capabilities, and 36 percent said they were looking to acquire companies that excel in these technologies (Exhibit 11).

In drug development, AI can speed the process of identifying novel disease targets as candidates for preclinical testing. It also has the potential to help reanalyze clinical trials data of compounds that have failed in Phase II or III, comparing responders with non-responders to determine whether a particular drug might succeed in alternative populations. AI is also being used to create efficiencies in R&D quality reviews, which can shorten timelines for earning FDA approvals. Pharma companies in 2023 were active in AI-focused acquisitions, research partnerships, and other collaborations. Several of these focused on improving the understanding of disease biology to increase likelihood of drug efficacy. Moderna and Caris Life Sciences announced a research partnership to support development of mRNA oncology treatments using Caris's library of patient data and analytics capabilities.[12] Similarly, AI and precision medicine specialist Tempus has formed a strategic collaboration with Recursion Pharmaceuticals,[13] and Owkin and Genmab agreed to join forces in AI-enabled research on cancer patients.[14] Genentech and Nvidia will collaborate on building a next-generation generative AI platform for drug discovery.[15]

Exhibit 11: Investment in AI is increasing

Q: What effect do you envision artificial Intelligence or machine learning will have on the biopharma industry?



Notes: Based on respondents who work/have investment in biopharma industry; Respondents were allowed to select all that apply; There is no year-on-year overview for this question as this question wasn't part of last year's survey.
Source: KPMG HCLS Investment Survey 2023

[10] Source: "Lilly to Acquire POINT Biopharma to Expand Oncology Capabilities into Next-Generation Radioligand Therapies," press release, October 3, 2023
[11] Source: "Bristol Myers to buy Karuna Therapeutics for $14 billion," The Wall Street Journal, December 22, 2023
[12] Source: "Caris Life Sciences and Moderna Announce Multi-Year Strategic Partnership to Advance mRNA-Based Oncology Therapeutics," press release, October 24, 2023
[13] Source: "Tempus Announces New Strategic Collaboration with Recursion to Advance Therapeutic Development," press release, November 9, 2023
[14] Source: "Owkin signs research agreement with Genmab A/S to explore the biological profiles of cancer patients to improve treatments," press release, September 19, 2023
[15] Source: "Genentech and Nvidia enter into strategic AI research collaboration to accelerate drug discovery and development," press release, November 21, 2023

Heightened antitrust scrutiny in Life Sciences deals

By Arman Oruc, *Co-Chair, Antitrust Competition, Goodwin Procter*

Although the first two and a half years under the new leadership at the FTC could have been characterized as "business as usual," the FTC's decisions in three transactions in the last quarter of 2023 reflect the sobering reality that the agency has been exploring new areas of focus to identify potential reductions of competition as a result of collaboration and M&A deals in life sciences. Whereas parties interacting with the FTC have reported the agency has been focused on "killer acquisition" theories in pipeline transaction and "bundled rebates" in transactions involving commercial assets, the challenges against the Sanofi/Maze and Amgen/Horizon transactions have demonstrated that the FTC is ready to act on these theories of harm.

Killer acquisition theory and early-stage deals: Arguably, the most surprising development was the FTC's action to block Sanofi's proposed exclusive license agreement with Maze Therapeutics—a transaction that involved a very early-stage asset. Sanofi announced in May 2023 the $750 million ($150 upfront) exclusive license of Maze's glycogen synthase 1 (GYS1) program, with a completed Phase 1 study in Pompe disease. After a six-month investigation, the FTC concluded that the licensing agreement would allow Sanofi to eliminate future competition to its products approved for Pompe disease (in particular its Nexviazyme intravenous treatment) by controlling the development and commercialization of Maze's promising Phase 1 asset (MZE001). The complaint filed by the FTC is based on the "killer acquisition" theory: Sanofi has a monopoly position and it is acquiring the future competition such that it can kill it (or otherwise avoid competitive pressure). Such a theory is viable only if one can assume that other assets in the pipeline cannot impose the desired competitive pressure, and that the asset being acquired would have been successful in the absence of the transaction. Given the long timelines associated with drug development and the high risks, the killer acquisition theory does not appear to be a good fit for life sciences because it requires the FTC, and ultimately a judge, to speculate many years into the future and make judgment calls about the technical and regulatory probabilities of success for assets at various stages of development. Given Sanofi already announced it plans to terminate the transaction, we will not get to see how the agency's theories would play in front of a court.

Although the FTC has publicly espoused this theory before, it is still surprising to see the agency actually challenge a narrow deal involving such early-stage assets. While prior enforcement actions in life sciences have focused on mega-mergers (i.e., BMS/Celgene) or those involving commercial assets (i.e., Amgen/Horizon), the challenge here is closer to some of the recent enforcement in the tech space, such as the FTC's failed challenge to the Meta/Within transaction.

Market access key in FTC review of deals involving commercial assets: The FTC's lawsuit challenging Amgen's $28.3 billion acquisition of Horizon Therapeutics earlier in 2023 was the most significant enforcement action in the life sciences space since AbbVie/Allergan and BMS/Celgene in 2019. The FTC alleged Amgen would be able to more effectively maintain the monopoly position of Horizon's two approved drugs, Krystexxa and Tepezza, by utilizing contracting practices (i.e., bundling and rebating) with Amgen's other drugs. According to this theory, Amgen could exercise the latent market power these Horizon products already had by, for example, keeping future competitors off the formularies of some payers through contracting practices. The case highlighted publicly that the FTC has been exploring the nuances of market access tactics in many pharma transactions in the last three years. Of particular interest is whether big pharma can increase its ability to maintain its products in better formulary positions as a result of the transaction.

Once again, this novel theory of harm will not be tested before a court. Soon after the lawsuit was filed, the parties settled. Under the settlement, Amgen is prohibited from conditioning any rebates or contract terms related to legacy Amgen products on the sale or positioning of Horizon's Krystexxa or Tepezza (or the exclusion or disadvantage of current or future competing products to Krystexxa or Tepezza). Overall, the settlement is relatively minor in scope but demonstrates that the FTC is keenly focused on the market access practices and their impact on not only prices, but also the formulary positioning of other competitors.

Extensive investigations with a focus on innovation: In many respects, the clearance of Pfizer's $43 billion acquisition of Seagen is a sign that the agency is not randomly searching for theories to block deals. To be sure, the agency investigated the Pfizer/Seagen transaction extensively, but ultimately cleared it. Nevertheless, the review suggests that the Sanofi/Mase challenge was not an aberration.

Reportedly, the FTC requested documents and information related to Pfizer's $68 billion acquisition of Wyeth in 2009, and Pfizer's $60 billion acquisition of Pharmacia in 2003, to examine evidence of R&D spending cuts in the wake of the Wyeth and Pharmacia deals. Indeed, in transactions in other industries, the agencies routinely review how the parties have competed in the marketplace in the past. It should come as no surprise that the agency is now including past innovation efforts as part of considering competitive behavior. Of course, in life sciences transactions, such an inquiry significantly broadens the scope of the investigation and takes it into areas of major uncertainty, especially as one goes deeper into the early-stage and preclinical pipeline.

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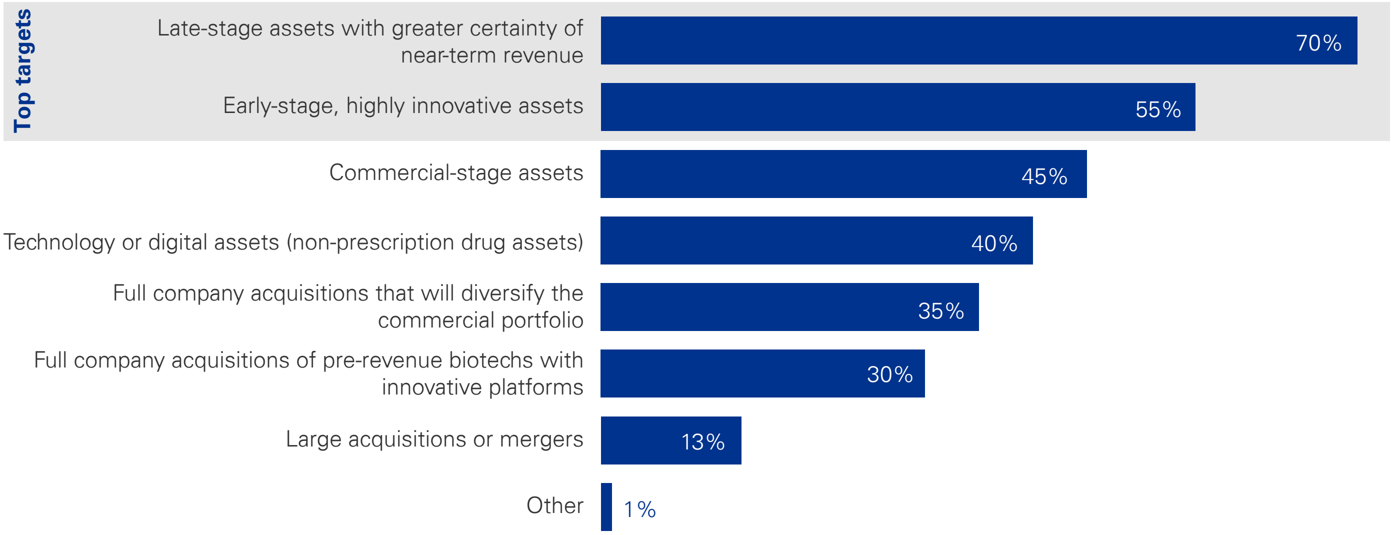
Outlook and investment considerations for 2024

The quest for innovative therapies continues to drive M&A in this subsector, with 70 percent of respondents to our survey indicating they would focus on late-stage assets that provide a greater certainty of near-term revenue and 55 percent targeting early-stage, highly innovative assets (Exhibit 12).

Exhibit 12: Early- and late-stage assets are top biopharma targets

Q: In 2024, what types of targets will your company look to acquire?

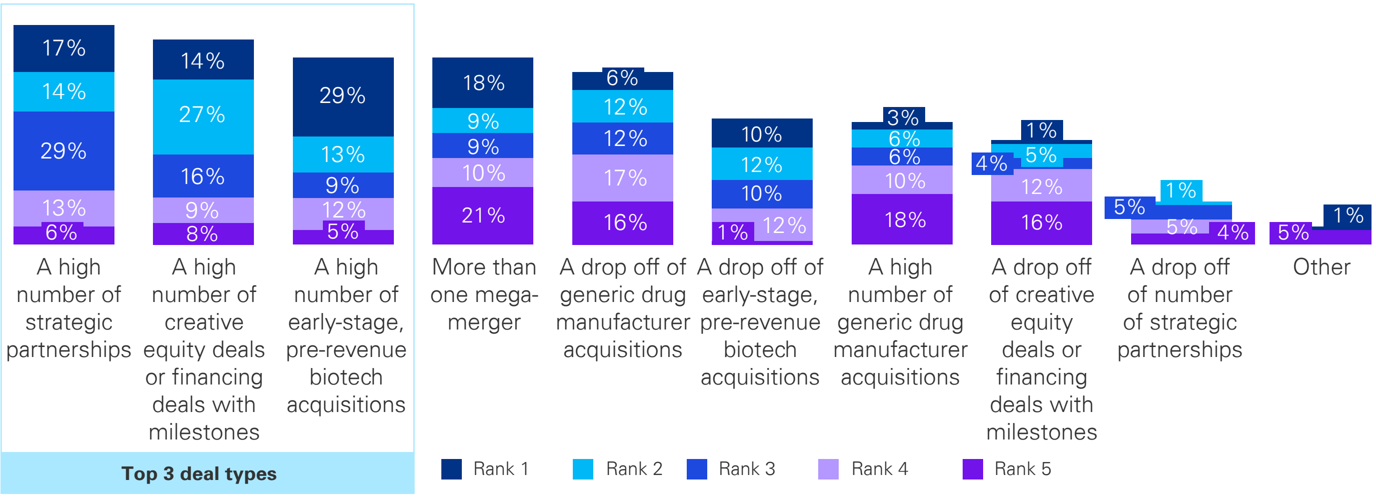


Notes: Based on respondents who work/have investment in biopharma industry; Respondents were allowed to select all that apply.
Source: KPMG HCLS Investment Survey 2023

Asked what deal types they would focus on in 2024, survey respondents gave the highest rankings to strategic partnerships, equity deals with milestones, and biotech acquisitions (Exhibit 13).

Exhibit 13: Strategic partnerships and creative equity deals will be a chief focus

Q: What types of pharmaceutical deals do you expect in 2024? (Rank top 5 in order)



Notes: Based on respondents who work/have investment in biopharma industry; Bar total based on respondents who gave some rank to the given deal.
Source: KPMG HCLS Investment Survey 2023

Tailwinds and headwinds

Tailwinds

FTC approval of Amgen's acquisition of Horizon. This closely followed decision, which required only that Amgen not bundle any of its products with two Horizon medications,[16] suggested that despite government promises to step up scrutiny of industry dealmaking, the actual impact on large acquisitions may be negligible.

The convergence of AI and precision medicine. After a year in which generative AI became a household term, that emerging technology and other AI applications appear set to accelerate the industry's move toward a precision medicine future. The potential for AI-driven treatment decisions, in particular, should spur progress in harnessing patient data, determining optimal treatment, anticipating treatment responses, and delivering personalized healthcare experiences.

Continuing global innovation. Breakthrough research and treatments for everything from diabetes and Alzheimer's disease to many kinds of cancer and rare diseases are providing new hope for patients and an array of M&A possibilities for pharma companies.

Headwinds

Uncertain impact of the IRA. Beyond the 10 companies and drugs selected for initial Medicare price negotiation, the broader industry is focused on how to adjust R&D, business models, and pricing while potentially restructuring pipelines.

FTC lawsuit on Sanofi-Maze. This should be a red flag to the industry. The FTC's rationale concerns why a licensing deal for a Phase II-ready pipeline asset potentially enables Sanofi to build a monopoly in Pompe disease. Given several big pharma companies have Phase II assets in development, the basis of this lawsuit seemed spurious, but with Sanofi not fighting the lawsuit, the industry should expect an emboldened FTC for these types of deals.

Economic uncertainty and the high cost of financing. Although inflation fears are easing and interest rates may be peaking, the cost of capital remains higher than it has been for many years, squeezing projections for possible acquisitions.

Valuation gaps. As the prices of many biotechs continue to fall, valuations for others remain high, potentially discouraging financial and strategic buyers.

The take-away

Onrushing innovation across a wide range of different treatment modalities has continued to spur dealmaking, while investors focus on both early-stage and late-stage therapies and use strategic partnerships and milestone-based deal structures that can help mitigate risks. Further clarity and consensus about the impact of the IRA in 2024 could help shape pharma companies' approaches to developing their pipelines. Additionally, if FTC anti-competition policies continue to have success, the industry may have to rethink the current innovation model where large companies fund smaller companies to develop innovative early-stage assets. If the FTC continues to find more Sanofi-Maze type deals to restrict, the industry will need to rethink what deal strategies can enable innovation and still enable investing companies to benefit.

[16] Source: "Amgen's $27.8 billion purchase of Horizon Therapeutics on after FTC settlement," Forbes, September 1, 2023

Diagnostics manufacturing: Seeking direction and better conditions for M&A

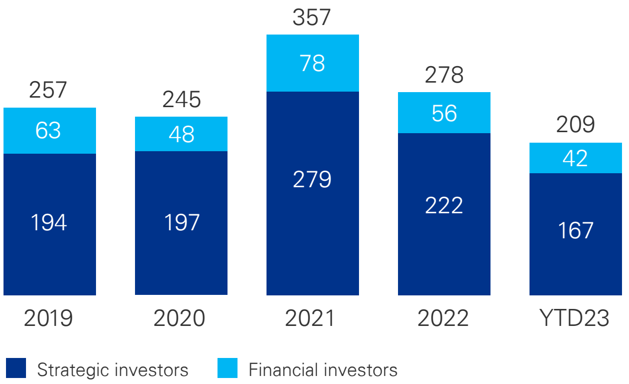
The diagnostics manufacturing subsector, so crucial to the COVID-19 response, continues to feel the aftereffects of the pandemic's fade. Some COVID-19 testing companies, once flush with cash, have gone out of business, while others continue to search for sustainable new business models. The migration of diagnostic testing to non-traditional locations has resulted in a broad range of at-home tests and innovative partnerships between manufacturers and retailers. Yet, questions remain about how far the decentralized testing trend has progressed, and what the future will look like for lab companies and their partners.

In part because of interest rate volatility and the unfavorable financing environment, M&A in the space has been subdued, and buyers and sellers remain at odds over valuations. But companies are positioning themselves for a time when rates stabilize and a more normal level of dealmaking returns.

How diagnostics fared in 2023

As in most other life sciences subsectors, M&A involving diagnostic companies dipped in 2023 to its lowest level in several years. With just 42 financial investments and 167 strategic investments, overall transactions were down 25 percent from the previous year's numbers (Exhibit 14).

Exhibit 14: Diagnostic manufacturers' strategic and financial investments, 2019-2023



Notes: Strategic deals data for Biopharma sourced from Informa while all other LS subsectors' data has been sourced from Capital IQ, Refinitiv, Informa, and Pitchbook; HC data has been sourced from Capital IQ, Refinitiv, and Pitchbook; Annual Biopharma deal outlook publication does not include M&A deal activity with financial investors and includes other non-M&A deals such as Strategic R&D collaborations, outputs will thus differ to this publication; Data is updated until December 10, 2023.

Sources: Capital IQ, a division of Standard & Poor's; Pitchbook; Informa; Refinitiv; all accessed in December 2023

Several trends impacted this subsector in 2023:

Ex-US deals dominated the market. All of the biggest diagnostics transactions during the past year had an ex-US buyer, seller, or both. That marks a change from the recent past, when US companies were at the forefront of diagnostics M&A. Now, much of the innovation in the industry comes from beyond US shores, and many of those companies have the funding to make the deals they want. For US companies, this trend means more competition for desirable assets in an already difficult deal market. It also means that some of the best targets may be outside the US. Illustrating this trend, in March, Australian Clinical Labs, one of that country's largest pathology providers, offered $1 billion to buy medical center operator Healius, whose pathology division operates 100 medical laboratories and 2,000 sample collection centers across Australia.[17] In June, European private equity group Cinven acquired a majority stake in the German-based Synlab Group, which Cinven will combine with the French Labco, acquired in May, to form one of Europe's largest diagnostics companies.[18]

Advances in at-home and point-of-service testing. Consumers, who became comfortable with testing themselves for COVID-19, can now avail themselves of a growing range of other at-home tests, for everything from colon cancer to sexually transmitted diseases (STDs). LetsGetChecked, which offers self-administered tests for vitamin and hormone deficiencies, hepatitis, cholesterol, and STDs, offers testing kits through Walmart, Amazon, and other retailers. The kit for STDs, which costs less than $70, allows consumers to send a urine sample to a lab and returns results within a few days. For those who test positive, a telehealth visit and treatment are included. Another company in this space, Healthy.io, offers smartphone apps and home test kits for urinary tract infections, prenatal health, and kidney disease. Exact Sciences' Cologuard, which lets patients collect a stool sample at home, has entered the mainstream and is increasingly prescribed as a more convenient alternative to colonoscopy; at the American College of Gastroenterology annual meeting in October, the company launched a next-generation version of the test. These are among the companies working toward the goal of making at-home testing accurate, inexpensive, non-invasive, and convenient.

Precision medicine. Precision medicine uses diagnostic tests and technologies that diagnose disease earlier, match the appropriate therapy to a patient based on the precise genetic or molecular features of the patient's disease, or monitor disease recurrence post-treatment. Buoyed by the expansion of testing technologies that include next-generation sequencing, liquid biopsy, and the emergence of new early cancer detection assays, precision medicine continues to be a growth area for the diagnostics subsector. Among multiple cases of M&A and other deals to enhance diagnostic companies' portfolios, Quest Diagnostics in April bought Haystack Oncology, a liquid biopsy company focused on minimal residual disease (MRD) testing,[19] and in September, in another move into the liquid biopsy testing market, Exact Sciences acquired Resolution Bioscience from Agilent.[20] In another strategic move, Freenome bought Oncimmune Ltd., a UK-based immunodiagnostics developer, to strengthen its early-detection cancer testing portfolio.[21]

Moving into 2024 and beyond, as precision medicine-enabling technologies advance, key data is published, and the healthcare industry sees the benefits of both early intervention and post-treatment monitoring, we expect to see continued dealmaking in the early cancer detection and MRD spaces.

Reference lab companies continue to reposition themselves. Several trends within lab testing led to significant transactions during 2023. Large reference labs have continued to expand their footprints by acquiring regional testing locations. In August, Labcorp announced that it was purchasing the outreach laboratory business of Tufts Medicine in Massachusetts,[22] and in October the company announced it was also acquiring Baystate Health's

[17] Source: "Australian Clinical Labs offers to buy Healius for $1 billion," Reuters, March 19, 2023

[18] Source: "Cinven to acquire the Synlab Group," press release, June 25, 2023

[19] Source: "Quest Diagnostics to Acquire Haystack Oncology, Adding Sensitive Liquid Biopsy Technology for Improving Personalized Cancer Care to Oncology Portfolio," press release, April 27, 2023

[20] Source: "Agilent Technologies and Exact Sciences agree to terms of sale for Resolution Bioscience," press release, September 12, 2023

[21] Source: "Freenome acquires global immunodiagnostics developer Oncimmune Ltd," Biospace, May 22, 2023

[22] Source: "Labcorp forges strategic partnership with Tufts Medicine, will acquire outreach laboratory business," Prnewswire, August 3. 2023

outreach laboratory business.[23] In a similar transaction, Quest Diagnostics announced the acquisition in March of the Northern Light Laboratory in Maine.[24]

The large reference labs also focused on building and acquiring capabilities for liquid biopsy and other advanced testing technologies. Quest's acquisition of Haystack Oncology, discussed above for its role in the push for precision medicine, expanded its oncology portfolio to include blood tests for MRD. Labcorp has extended its own oncology testing capabilities with the launch of a blood test, Plasma Focus, that can find cell-free DNA (cfDNA), a cancer biomarker released by tumors that can help physicians determine precise treatments for their patients.[25] Plasma Focus is the first new test to come out of Labcorp's 2022 acquisition of Personal Genome Diagnostics.

Another trend in lab services is the shift toward pairing at-home sample collection with traditional lab testing. This innovative model, which combines the convenience of at-home testing with the accuracy of traditional lab testing, has been tried before by major reference labs, but now companies such as Simple HealthKit are making it less expensive and quicker. The lower cost and convenience of these latest efforts enable access by a much broader population, encouraging health equity. Such models require partnerships among diagnostics companies and labs, payers,[26] and retailers such as Walmart.[27]

AI begins to move beyond radiology. To date, almost all FDA-approved diagnostic applications for AI have involved AI-enabled reading of radiology images to help physicians detect disease. Those applications may handle some of the more time-consuming work of diagnostic imaging, tracing tumors and structures, measuring fat and muscle in full-body CT scans, and detecting intracranial aneurysms, intracranial stroke, and pulmonary embolisms.[28] In May, Philips acquired AI firm DiA Imaging Analysis, which has received FDA approval for nine applications for AI-based ultrasound image examination.[29] In another imaging-related transaction, GE HealthCare acquired Caption Health, which makes software that can help guide ultrasound technicians during examinations.[30] That said, a next wave of AI-leveraged testing—for pathology and genomics testing, in particular—is coming. In one study, for example, an AI blood testing application for pathology detected more than 80 percent of liver cancers in a population of 724 people.[31]

Antitrust concerns have not gone away. Sequencing company Illumina's acquisition of Grail, a cancer test kit maker, was held up by US and European Union regulators after it was announced in 2020. And although the deal closed in 2021, in April 2023 the FTC ruled that Illumina would have to divest the testing company. In December, Illumina announced it would proceed with the divestiture, a move that underscores how regulators are determined to prevent excessive market concentration.

Outlook and investment considerations for 2024

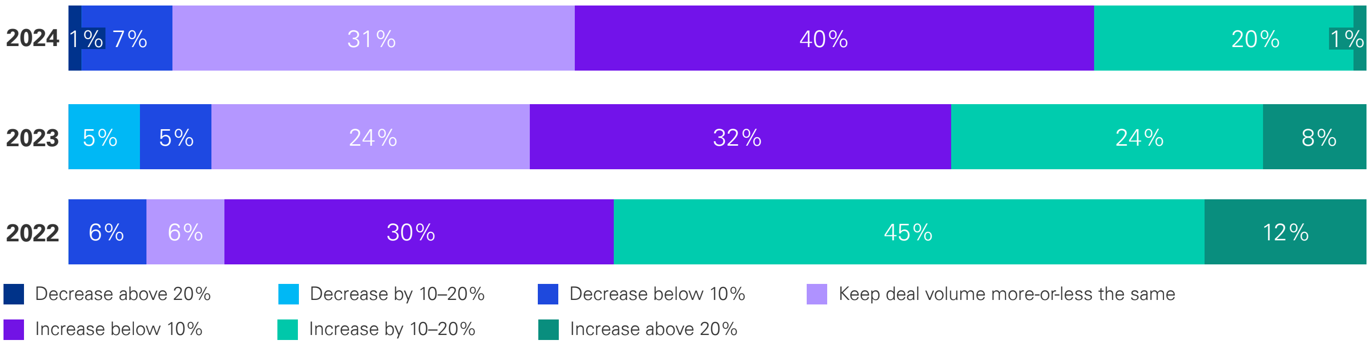
Sixty-one percent of our survey respondents expect the number of deals involving diagnostics companies to increase in 2024, and 21 percent believe deal volume will rise by at least 10 percent (Exhibit 15). Those expectations represent a slight retreat from the numbers of transactions anticipated a year earlier but may underestimate the level of activity in the year ahead. Asked to compare actual deal volume with their expectations at the beginning of 2023, 65 percent of respondents in this subsector said the number of deals in 2023 was higher than expected.

[23] Source: "Labcorp and Baystate Health announce strategic relationship for diagnostic laboratory services," press release, October 4, 2023
[24] Source: "Quest Diagnostics completes acquisition of Northern Light Laboratory in Maine," press release, March 20, 2023
[25] Source: "Labcorp launches liquid biopsy to detect cancer-related biomarkers," Fierce Biotech, June 1, 2023
[26] Source: "Simple HealthKit and Imperial Health Plan offering at-home diagnostic tests," Fierce Biotech, October 11, 2023
[27] Source: "Simple HealthKit inks deal with Walmart to expand access to at-home tests," Fierce Biotech, June 12, 2023
[28] Source: "Using AI in radiology clinical practice," Mayo Clinic News Network, September 14, 2022
[29] Source: "Philips acquiring artificial intelligence firm DiA Imaging Analysis for nearly $100 million," Radiology Business, May 17, 2023
[30] Source: "GE HealthCare agrees to buy AI imaging firm Caption Health in second acquisition," Medtech Dive, February 10, 2023
[31] Source: "New AI blood testing pathology detects more than 80 percent of liver cancers," News Medical, November 20, 2022

Survey respondents expect the coming year's deal activity to be dominated by small strategic tuck-ins, cited by 42 percent of respondents, and strategic partnerships, noted by 39 percent. That marks a change from a year earlier, when 65 percent of respondents expected partnerships to predominate, compared with just 11 percent who anticipated small tuck-ins. Expectations of large consolidations, mentioned by 24 percent of this year's respondents, were unchanged from 2022.

Exhibit 15: Deal makers expect volume to rise in 2024

Q: How do you believe overall deal volume for diagnostic manufacturers in 2024 will compare to 2023?

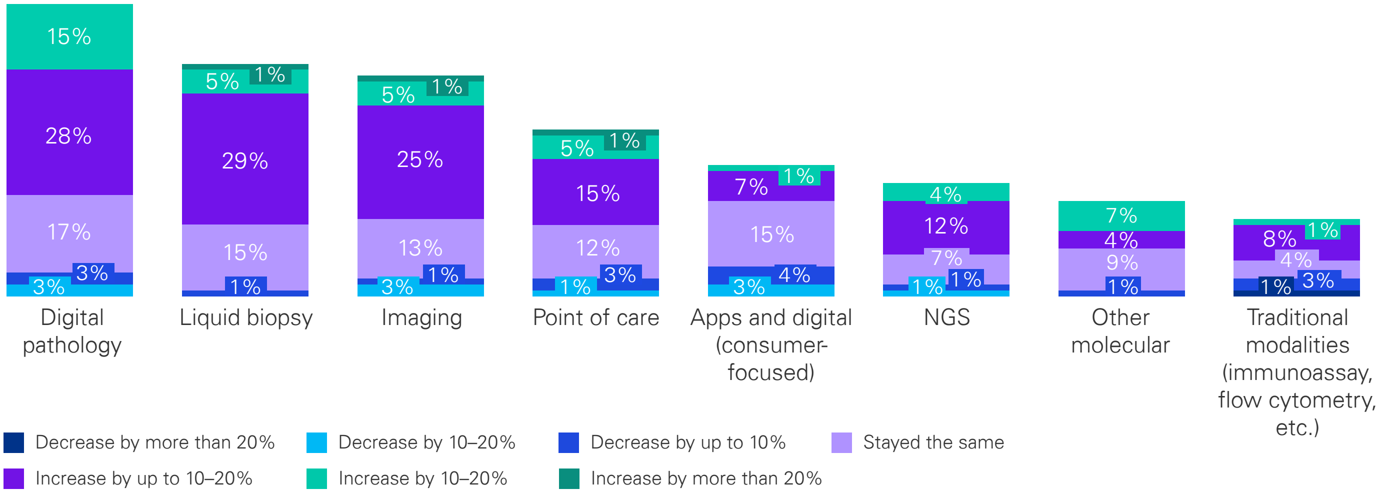


Notes: Based on respondents who work/have investment in diagnostic manufacturer's industry; Bars in the charts add up to 100 percent.
Sources: KPMG HCLS Investment Survey 2023, KPMG HCLS Investment Survey 2022, KPMG HCLS Investment Survey 2021

This year's survey respondents expect the top three areas for diagnostics M&A activity in 2024 to be digital pathology, liquid biopsy, and imaging. The first two of those also led expectations for 2023, but respondents a year ago anticipated more deals involving apps and digital than imaging. Valuations in those focus areas are expected to be higher in 2024, with 43 percent, 35 percent, and 31 percent of respondents, respectively, anticipating increased valuations for assets in digital pathology, liquid biopsy, and imaging (Exhibit 16).

Exhibit 16: 2024 valuations of target assets are expected to be higher

Q: For the given technology, how do you expect valuations in 2024 to compare to 2023?



Notes: Based on respondents who work/have investment in diagnostic manufacturer's industry; The n count for each technology is based on selection in Q35; Percentages reflect the percentage of all respondents; Bar height reflects the number of respondents who gave an answer about each technology..
Source: KPMG HCLS Investment Survey 2023

Tailwinds and headwinds

Tailwinds

The rush to AI and precision medicine. The transformation of diagnostic technologies to emphasize AI-enabled testing and analysis and to provide companion testing for precision medicine is expected to lead this subsector in coming years, encouraging a high level of M&A and partnerships.

Continued portfolio shaping. After several years of diversifying their businesses, many larger diagnostics companies are now streamlining their operations, divesting non-core assets to focus on growth priorities. This creates opportunities for strategic and financial buyers and sellers.

Partnerships for at-home testing. The rising popularity of a range of at-home diagnostic tests is leading manufacturers to seek arrangements for marketing and distributing tests directly to consumers.

Headwinds

Valuation disparities. The disconnect between the expectations of buyers and sellers continues to hold back some potential dealmaking. Diagnostics continues to be an area where innovation and reimbursement do not align, requiring more diligence around ambitious forecasts and aggressive global launch plans.

Macroeconomic conditions. Although recession fears have eased and interest rates may have peaked, the cost of capital remains high and the path to future growth is uncertain, clouding the outlook for potential dealmaking. In diagnostics, companies had a buying spree during COVID-19, and the pandemic's end paired with the market environment is spurring more caution.

The take-away

This subsector continues to expand, providing a range of diagnostic platforms and tests from low-margin, core lab diagnostic testing to technologically advanced molecular-based companion and complementary testing for precision medicine, to AI-enabled radiology, pathology, and other applications. As companies continue to position themselves for the future in 2024, dealmaking is likely to pick up around the most innovative categories, especially if macroeconomic headwinds begin to ease.

Medical devices: Rebounding after a sluggish year

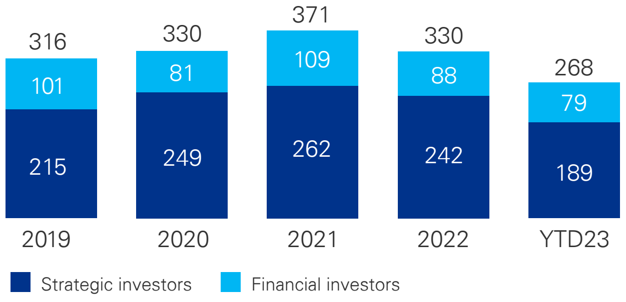
The slow pace of 2023 dealmaking in the medical device subsector, with the number of transactions almost 20 percent below 2022's numbers, is likely to give way to a more active 2024. Industry revenues are expected to rebound as the post-COVID-19 return of elective surgeries continues to accelerate, and companies that already have strong margin performance emphasize both technological advantages and building scale in selected areas. At the same time, companies in lower-margin sectors will likely look to expand into new procedure and device categories.

Advances in devices that allow for remote patient monitoring, further improvements in diabetic care and cardiology, and an expansion of robotic surgery all could lead to increased M&A activity in 2024. AI-supported devices and services will continue to be an investment theme across the medical device landscape, and we expect increased numbers of deals as companies look to compete for both capabilities and talent.

How medical devices fared in 2023

Dealmaking in this subsector fell to its lowest level in the past several years, with total transactions down 19 percent from 2022. With just 268 deals in 2023, M&A was below even pre-pandemic numbers (Exhibit 17). Yet 65 percent of respondents to our survey said the number of deals during 2023 exceeded their expectations at the beginning of the year, and 35 percent said transactions were at least 10 percent above projected levels (Exhibit 18).

Exhibit 17: Medical device companies' strategic and financial investments, 2019-2023

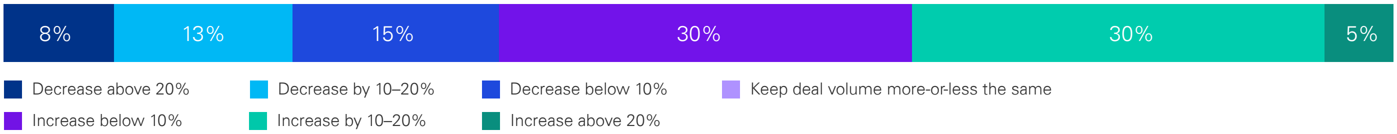


Notes: Strategic deals data for Biopharma sourced from Informa while all other LS subsectors' data has been sourced from Capital IQ, Refinitiv, Informa, and Pitchbook; HC data has been sourced from Capital IQ, Refinitiv, and Pitchbook; Annual Biopharma deal outlook publication does not include M&A deal activity with financial investors and includes other non-M&A deals such as Strategic R&D collaborations, outputs will thus differ to this publication; Data is updated until December 10, 2023.

Sources: Capital IQ, a division of Standard & Poor's; Pitchbook; Informa; Refinitiv; all accessed in December 2023

Exhibit 18: Medical device deals during 2023 exceeded expectations on January 1

Q: By what magnitude has the number of your firm's planned transactions varied from your initial plans on January 1, 2023?



Source: KPMG HCLS Investment Survey 2023

Several trends impacted this subsector in 2023:

Wide-ranging applications for AI. Several transactions and partnerships illustrate how AI and ML are transforming aspects of the medical device subsector. For example, in a global pilot program, Medtronic is collaborating with Cydar Medical to enhance support for surgeons doing minimally invasive surgery by creating and updating three-dimensional maps of patient tissue.[32] The introduction of generative AI could lead to further applications such as improved remote monitoring of patient health conditions and better accuracy and efficiency of cancer detection through digital pathology. Generative AI may soon support real-time patient monitoring and produce personalized insights and interventions, which would make imaging solutions more accurate.

Diabetic care pushes forward. The development of an artificial pancreas that could automatically adjust insulin levels for people with type 1 diabetes reached another milestone. In January 2023, the FDA approved the iLet Insulin-Only Bionic Pancreas System, which brings together a weight-based algorithm, an integrated infusion pump, and an integrated continuous glucose monitor (CGM).[33] In a related development, research at the University of Cambridge showed that an artificial pancreas could also help those with type 2 diabetes, doubling the amount of time they were in the target range for glucose.[34] And in a September transaction, Abbott acquired Bigfoot Biomedical and its Bigfoot Unity smart insulin management system, which uses connected insulin pen caps to display dosing recommendations based on data from an integrated CGM.[35]

Competition in robotic surgery. Although Intuitive Surgical continues to broaden its applications for robot-assisted surgery in a market it has dominated for decades, at least a dozen competitors are maneuvering to find their own niches. In September, Paris-based Moon Surgical announced the first US use of its Maestro surgical robot, which received FDA approval in December 2022. Two surgeons in Florida used the robotic surgical assistant, designed to be integrated into existing surgical workflows, to perform a common bariatric surgical procedure.[36] Rather than take aim directly at Intuitive Surgical's well-established da Vinci robot, which is often used in intricate surgery for prostate cancer and other malignancies, Moon Surgical's goal is to deploy Maestro for a wide range of relatively routine soft-tissue surgery—including gallbladder removals, hernia repairs, appendectomies, bariatric surgery, and reflux surgery.[37] Further adoption of this and other robotic technology could help relieve hospital staffing shortages.[38]

Innovations in cardiac care. Following Johnson & Johnson's late 2022 acquisition of Abiomed, a leading maker of cardiac care technology, for $16.6 billion,[39] several 2023 deals helped bolster medical device companies' capabilities in cardiology. In April, Abbott announced it had completed its acquisition of Cardiovascular Systems Inc., a medical device company

[32] Source: "Medtronic, Cydar Treat First Patient in AI Pilot Program," MD+DI, August 3, 2023
[33] Source: "FDA Clears a New Artificial Pancreas System," JRDF, May 22, 2023
[34] Source: "Artificial pancreas successfully trialed for use by type 2 diabetes patients," ScienceDaily, January 11, 2023
[35] Source: "Abbott to acquire Bigfoot BioMedical, furthering efforts to develop personalized, connected solutions for people with diabetes," press release, September 5, 2023
[36] Source: "First U.S. clinical cases performed with Moon Surgical's Maestro surgical robot," MassDevice, September 26, 2023
[37] Source: "Moon Surgical CEO Anne Osdoit on readying a soft tissue robot for launch," Medtech Dive, December 1, 2023
[38] Source: "Surgical robotic trends and how to accelerate adoption," Medical Design and Outsourcing, May 16, 2023
[39] Source: "Johnson & Johnson to acquire Abiomed," press release, November 1, 2022

with an atherectomy system used to treat peripheral and coronary artery disease.[40] In October, Cordis completed its acquisition of Swiss company MedAlliance, which makes drug-eluting balloons for angioplasties.[41] And in November, Johnson & Johnson acquired privately held Laminar, which makes an investigational device that may reduce stroke risk in patients with atrial fibrillation.[42]

Questions about the impact of weight-loss and diabetes drugs. The thesis seemed simple, and it spooked investors in a broad group of medical device companies. If effective new GLP-1 drugs help people lose weight and avoid diabetes, cardiovascular problems, and other health conditions, patients will be less likely to need everything from glucose monitors and insulin pumps to products for bariatric surgery, stents, and knee-replacement devices. In the wake of the August release by Novo Nordisk of preliminary study data showing that its GLP-1 drug helped reduce the risk of heart attack, stroke, and death from cardiovascular events, shares in many device companies dropped sharply. But the full results of the study, presented in November, were less clear-cut, showing that many patients stopped taking the drug and others lost less weight than anticipated. Although the new drugs still show great promise, the immediate threat to device makers may have been overblown, and medical device company stocks have regained some of their losses.[43]

Rising interest in elective surgery. A persistent question about when and whether demand for elective surgical procedures would rebound to pre-pandemic levels has clouded the outlook for many medical device companies. But research by investment firm Needham comparing numbers of Google searches for 20 elective procedures in June 2023 with searches in early 2020 found that recent numbers, on average, had risen to 115 percent of pre-pandemic levels. Needham analysts say Google search numbers are highly correlated with growth in the medical device market.[44] Other reports from health insurers and investment analysts also noted a rise in pent-up demand for elective procedures that was considered likely to continue into 2024.[45]

Outlook and investment considerations for 2024

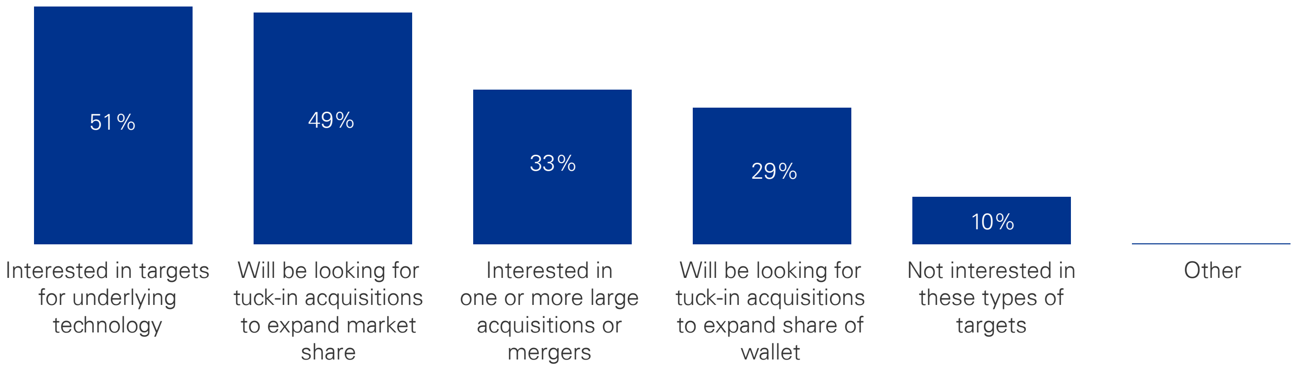
If elective surgeries continue to rebound, it could help shape the dealmaking outlook for the medical device subsector, and in our survey, respondents looking ahead to the coming year had slightly different expectations than they had a year ago. Now, 19 percent say they expect 2024 to be characterized by large consolidations, compared with 17 percent a year earlier. Thirty-two percent expect small strategic tuck-ins, and another 32 percent anticipate strategic partnerships, compared with 57 percent and 26 percent, respectively, who had those expectations moving into 2023.

In terms of what kinds of acquisitions companies may consider in 2024, 51 percent of survey respondents say they are looking at potential targets based on their underlying technology, compared with 49 percent who will be focusing on tuck-in acquisitions to expand market share, and 33 percent who are interested in one or more large acquisitions or mergers (Exhibit 19).

[40] Source: "Abbott completes acquisition of Cardiovascular Systems, Inc." press release, April 27, 2023
[41] Source: "Cordis announces the completed acquisition of MedAlliance," press release, October 2, 2023
[42] Source: "Johnson & Johnson MedTech acquires Laminar, Inc." Morningstar, November 30, 2023
[43] Source: "Obesity drugs put these stocks on a crash diet—now they're rebounding," The Wall Street Journal, November 17, 2023
[44] Source: "Interest in elective surgeries up 115% over pre-COVID levels, Google searches show: Needham," Medtech Dive, June 15, 2023
[45] Source: "Elective surgeries are on the rise: What does it mean for healthcare?" Advisory Board, June 23, 2023

Exhibit 19: How deal makers are looking at elective surgery

Q: To what extent will you be targeting elective procedure medical device manufacturers for investment in 2024?



Notes: Based on respondents who work/have investment in medical device industry; Respondents were allowed to select all that apply.
Source: KPMG HCLS Investment Survey 2023

Tailwinds and headwinds

Tailwinds

Automation and AI in manufacturing. Companies are incorporating robotics and other technologies to reduce costs and relieve workforce shortages.

Continued technological innovation in diabetes, cardiovascular care, and other areas. Industry leaders have been on the lookout for acquisitions that can expand their offerings in the most innovative areas.

Resurgence of procedural demand. If older patients, in particular, continue to schedule knee and hip replacements, cosmetic surgeries, and other elective procedures in high numbers, it could encourage dealmaking for device manufacturers.

Headwinds

Pressure on margins. Increases in reimbursement for medical procedures have failed to keep pace with inflation in the cost of producing medical devices, and companies have a limited ability to pass along those costs.

A disconnect between buyers and sellers. Questions about the valuations of development-stage opportunities, in particular, continue to discourage medical device M&A.

A lack of interest by venture capital. Uncertain returns on investment in this subsector have led many early-stage investors to look elsewhere.

The take-away

Some of the challenges of 2023 in this subsector may persist in 2024, as economic and industry pressures continue to negatively impact profitability and the appetite for dealmaking. Yet, we expect many medical device companies to look for opportunities to improve product lines, increase market share in innovative areas, and position themselves for an uncertain future.

Biopharma services: Resilient demand could overcome challenges

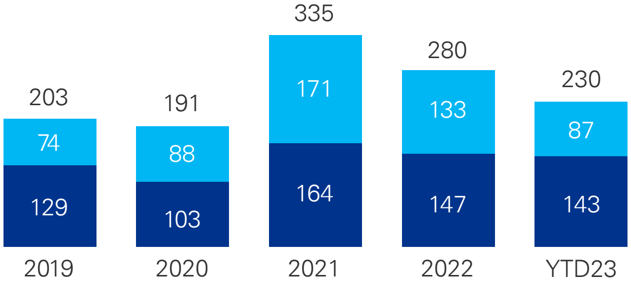
In 2023, many biopharma services firms continued to contend with the aftermath of the COVID-19 pandemic. After mobilizing to produce vast quantities of sterile injectables for COVID-19 vaccines, for example, some CDMOs have found themselves with excess manufacturing capacity amid much lower demand for vaccines. The demand for virtual or decentralized clinical trials has also fallen, leading to significant layoffs and repositioning for companies such as Curebase and Reify Health.

Yet the demand for many services provided by companies in this subsector continues to be strong as major pharma firms and emerging biotechs look to outsource functions at all stages of drug development, from clinical testing to securing regulatory approvals and commercializing new therapies. Cell-and-gene therapy manufacturing is a strong area of interest, as is the need for CROs to take a more data-driven approach to clinical trial development.

How biopharma services fared in 2023

Overall dealmaking in this subsector declined 18 percent from 2022 levels but remained higher than in 2019 and 2020. Although PE accounted for a smaller percentage of overall deals in 2023 than it did a year earlier, financial investors were involved in several significant acquisitions as they looked to take advantage of an uncertain environment in several areas (Exhibit 20).

Exhibit 20: Biopharma services companies' strategic and financial investments, 2019-2023



Notes: Strategic deals data for Biopharma sourced from Informa while all other LS subsectors' data has been sourced from Capital IQ, Refinitiv, Informa, and Pitchbook; HC data has been sourced from Capital IQ, Refinitiv, and Pitchbook; Annual Biopharma deal outlook publication does not include M&A deal activity with financial investors and includes other non-M&A deals such as Strategic R&D collaborations, outputs will thus differ to this publication; Data is updated until December 10, 2023

Sources: Capital IQ, a division of Standard & Poor's; Pitchbook; Informa; Refinitiv; all accessed in December 2023

Several trends helped shape growth and acquisition strategies in 2023:

A patient-centric approach. For CROs that perform clinical trials, finding, enrolling, and keeping qualified trial subjects continues to be a major challenge, especially as targeted therapies and other highly specific treatments reduce the pool of potential participants. The promise of fully decentralized trials, popular during the pandemic, has faded somewhat with the realization that in most cases, some traditional site visits will still be needed. The new goal is "patient-centric" trials that increase contacts with patients and use remote monitoring, telehealth visits, and other virtual services that can help keep patients engaged. In August, Clario sold its suite of e-clinical tools to Sitero, a CRO that will incorporate the tools into its own e-clinical solution.[46] And in September, CRO Florence Healthcare acquired VersaTrial for its clinical trial site solutions.[47]

Focusing on data. Incorporating big data, including real-world data (RWD), into clinical trials is emerging as a priority for maximizing commercial opportunities and improving the probability of trial success. In one example of this trend, Thermo Fisher in July acquired data intelligence firm CorEvitas, which provides regulatory-grade RWD for medical treatments and therapies.[48]

Private equity poised to re-engage. Pharma services has always been the most active life sciences subsector for private equity, and despite economic headwinds and a lack of compelling, reasonably priced targets, 2023 saw a few significant transactions as PE firms looked for deals that could create value. In May, in a $7.1 billion transaction, Elliott Investment Management, Patient Square Capital, and Veritas Capital acquired Syneos, a leading CRO.[49] That purchase price represented just a 12 percent premium to the latest Syneos share price and is typical of transactions that took advantage of the relatively depressed valuations of many publicly traded life sciences companies in 2023. Just days earlier, Baxter International agreed to sell its biopharma services unit, an injectables CDMO now called Simtra, to Warburg Pincus and Advent International for $4.25 billion,[50] a transaction that closed in October.

Advanced therapeutics. As cell-and-gene therapies and other biologic treatments continue to dominate pharma R&D, companies are bolstering their capabilities. In an approach to improve CGT production, Thermo Fisher and Charles River Laboratories joined the Multiply Labs robotic manufacturing consortium, and will work with other consortium members to develop and validate a robotic manufacturing system that can produce gene-modified cell therapies at industrial scale.[51] And in November, Japan-based Ajinimoto acquired Forge Biologics, a CDMO that produces viral vectors and plasmids for CGTs.[52]

AI at hyper speed. The integration of generative AI, ML, and other AI technologies accelerated in 2023 and will become even more central to this subsector in 2024. These advances will help speed data review, support data-driven trial recruitment, and change how therapeutic targets are screened and tested. From a drug formulation standpoint, AI-based businesses such as Ginkgo Bioworks will become prominent names. In August, Ginkgo announced a new partnership with Google Cloud to build a novel generative AI platform for engineering biology and biosecurity.[53] In another AI-related transaction, BioNTech agreed in January to acquire InstaDeep to aid AI-powered drug discovery, design, and development.[54]

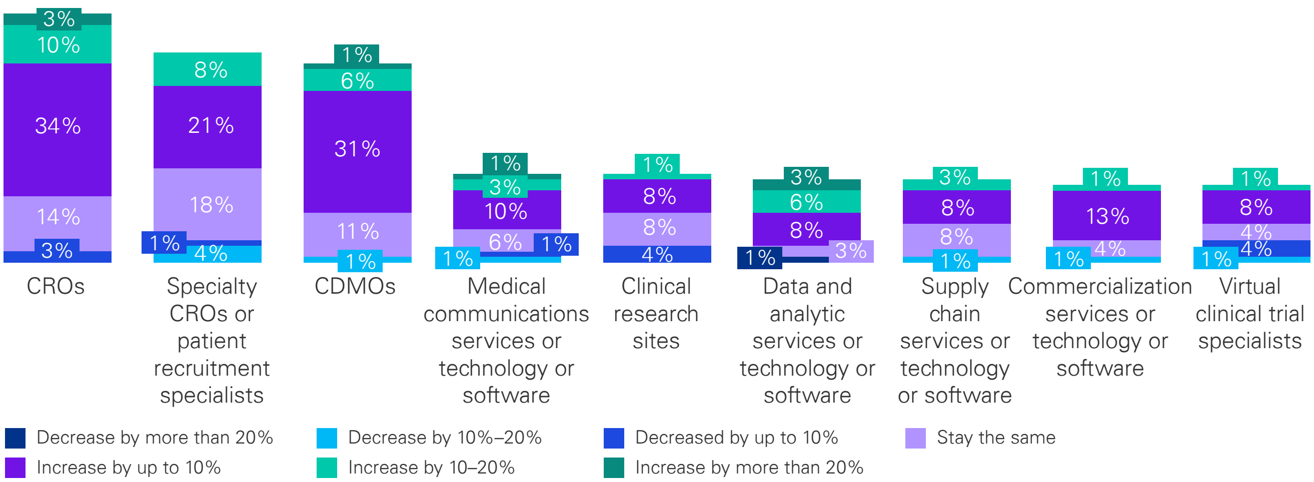
[46] Source: "Clario announces sale of software solutions business to Sitero," press release, August 1, 2023
[47] Source: "Florence Healthcare acquires VersaTrial to accelerate clinical research site enablement," press release, September 25, 2023
[48] Source: "Thermo Fisher Scientific to acquire CorEvitas," press release, July 6, 2023
[49] Source: "Syneos taken private for $4.46 billion by investment consortium," Reuters, May 10, 2023
[50] Source: "Baxter to divest biopharma business for $4.25 billion," Reuters, May 9, 2023
[51] Source: "Multiply Labs adds Thermo Fisher Scientific and Charles River Laboratories to its robotic manufacturing consortium," Business Wire, May 5, 2022
[52] Source: "Ajinomoto Co., Inc. to acquire Forge Biologics for $620 million," press release, November 13, 2023
[53] Source: "Ginkgo Bioworks and Google Cloud Partner to Build Next Generation AI Platform for Biological Engineering and Biosecurity," Yahoo Finance, August 29, 2023
[54] Source: "BioNTech to acquire InstaDeep to strengthen pioneering position in AI-powered drug discovery, design, and development," press release, January 10, 2023

Outlook and investment considerations for 2024

In our survey, respondents expected valuations to rise in most areas of the subsector in 2024. Forty-seven percent of all respondents predicted increases in valuations for CROs, 38 percent expected higher valuations for CDMOs, and 29 percent looked for increased valuations for specialty CROs or patient recruitment specialists (Exhibit 21). According to the survey respondents, the top three areas for M&A activity in the subsector in 2024 are likely to be CROs, specialty CROs, and CDMOs. That marks a change of emphasis from a year ago, when data and analytics services or software, specialty CROs, and medical communications companies were cited as the mostly likely areas (Exhibit 22).

Exhibit 21: Investors expect rising valuations in several areas

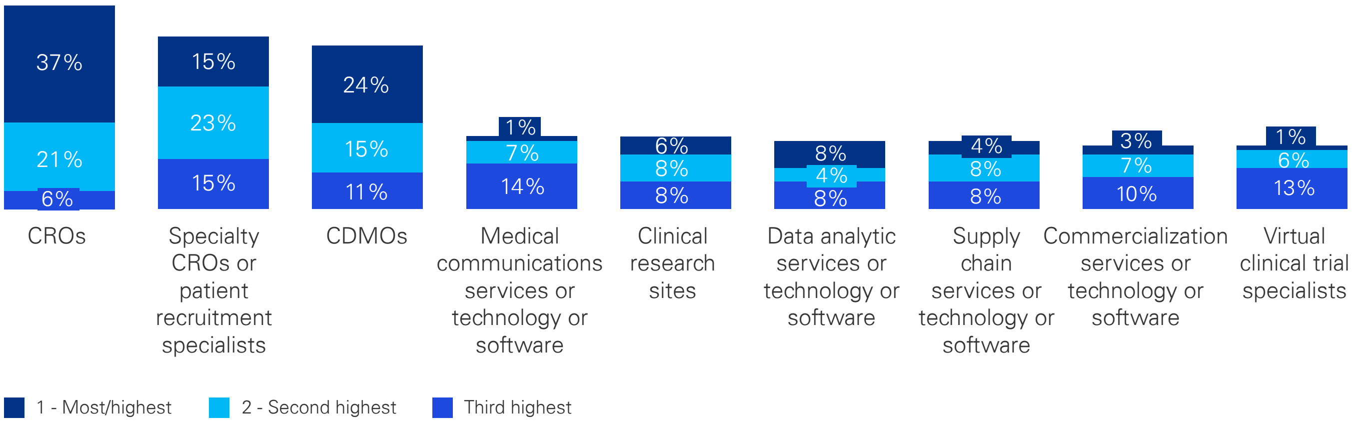
Q: For the said pharma services, how do you expect 2024 valuations to compare to those in 2023?



Notes: Based on respondents who work/have investment in pharma/diagnostic lab services' industry. Percentages reflect the percentage of all respondents; Bar height reflects the number of respondents who gave an answer about each focus area.
Source: 2023 KPMG HCLS Investment Survey

Exhibit 22: Where investors expect to focus in 2024

Q: What areas within pharma services do you expect to have the most deal activity in 2024?



Notes: Based on respondents who work/have investment in pharma/diagnostic lab services' industry; Bar total based on respondents who gave some rank to the given service
Source: KPMG HCLS Investment Survey 2023

Tailwinds and headwinds

Tailwinds

Demand for CGT clinical trials and manufacturing. Large pharma companies and smaller biotechs alike are increasingly focused on discovering and developing biologic drugs, with twice as many biologics in clinical trials now as there were in 2019. Much of that work will continue to be outsourced to companies in this subsector.

An increasing reliance on AI. The potential for AI-powered applications to streamline and speed up operations across this subsector is likely to lead to increased M&A as companies position themselves to provide innovative services to biopharma clients.

A boost from PE: As PE deal volume is expected to rebound in FY24, pharma services deal activity will increase given PE's strong focus on the sector.

Headwinds

Valuation uncertainty. Amid turbulence in the subsector, the disconnect between buyers and sellers remains significant.

Dealmaking impediments. Although the cost of capital may be stabilizing, it remains much higher than in recent years, changing the calculus for making significant acquisitions.

The take-away

Despite broader market headwinds, softer M&A markets overall, and uncertainty about unfolding trends in this subsector, biopharma services companies continue to show resilience as a vital part of drug discovery, manufacturing, and commercialization. The ongoing momentum around biologic drugs and precision medicine, in particular, seems certain to lead to a higher level of M&A activity in 2024 and beyond.

New tax rules will have significant impact on life sciences M&A

The M&A dynamic within the life sciences sector is being shaped by three new rules in the realm of global tax reform. First, the Organisation for Economic Co-operation and Development's (OECD) Pillar 2 rules, or the Global Anti-Base Erosion (GloBE) proposal, aims to ensure that multinational enterprises pay a minimum level of tax (e.g., 15 percent of GloBE income), regardless of where they are headquartered or operate. Some aspects of the rules are scheduled to take effect in 2024, while other aspects of the rules will take effect in 2025, but these rules are already reshaping the M&A landscape.

Second, the (re)introduction of the 15 percent US Corporate Alternative Minimum Tax (CAMT), which came into effect in 2021, may also reduce the tax benefits of certain transactions, alter the attractiveness of potential deals, and increase the administrative burden during M&A processes.

And third, the changes to the US tax rules regarding the deductibility of research and development (R&D) expenses, which are technically effective now, require US companies to amortize these expenses over five years (over 15 years for non-US expenses) rather than deducting them immediately. These changes could significantly impact the after-tax return on investment in R&D for life sciences companies that are US taxpayers, potentially affecting the valuation of targets with significant R&D operations.

These new rules present both challenges and opportunities. The challenges are clear: increased complexity, potential financial impacts, and the need for more thorough due diligence. But what about the opportunities? These new rules can also serve as a catalyst for strategic reevaluation and innovation. They can prompt companies to explore new markets, consider different deal structures, and even discover potential targets that may have been overlooked in a less complex tax environment.

In the end, these changes underscore the need for life sciences deal teams to reassess their M&A strategies and consider tax implications more carefully during the dealmaking process. While the changing regulatory and tax landscape presents challenges, it also offers opportunities for those willing to adapt and innovate. By staying informed, proactive, and strategic, companies can navigate these changes successfully and continue to thrive in the dynamic life sciences M&A market.

Healthcare

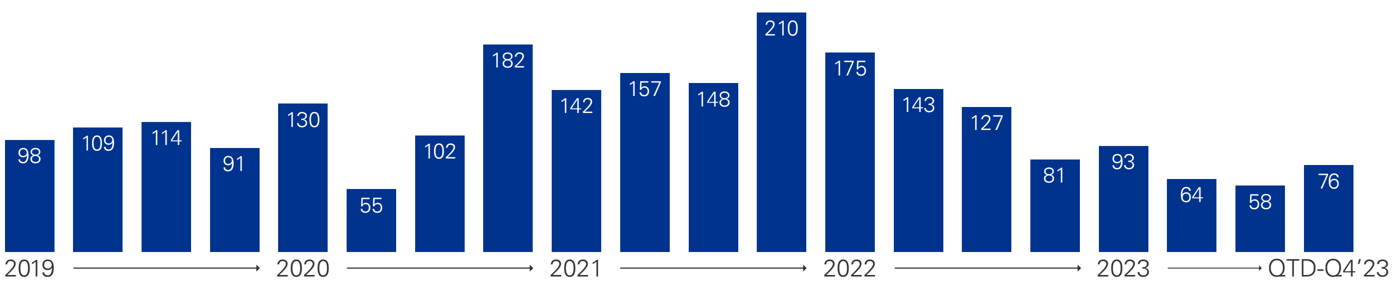
After years of volatility, healthcare dealmaking holds steady

The most lethal pandemic in more than a century. A global economic downturn. Mountains of government funding distributed. Painful increases in inflation and interest rates. Demands for better wages and benefits in industries of all kinds. Wars raging in Europe and the Middle East. In this environment, many forecasts missed their mark, and investors may feel even more pessimistic than they should.

About half of our survey respondents said they invested in more deals in 2023 than they were planning as the year began, with the exception of hospital and health systems, where only a third of respondents did more deals than they expected. Yet financial investors made significantly fewer deals in the healthcare space, despite their need to put dry powder to use (Exhibit 23). Some private equity firms found they could not integrate or improve new acquisitions as fast as they had hoped; many are still working hard to improve the efficiencies and integrate the operations of companies they paid top dollar for when dealmaking peaked in 2021.

Strategic acquirers in the healthcare industry faced their own challenges, especially the need for scale.

Exhibit 23: Financial investors averaged far fewer deals per quarter in 2023



Notes: Data has been sourced from Pitchbook; Financial investments include platform/add-on deals undertaken by private equity (PE) firms; Includes deals with only US-based targets; Data is updated until December 10, 2023.
Source: Pitchbook; all accessed in December 2023

Many big players in the four subsectors we discuss here—hospitals and health systems, physician practices, healthcare IT firms, and payers—scrambled to get even bigger by making acquisitions in 2023. Antitrust regulators have taken note, questioning the impact of some deals on consumers and communities. Meanwhile, many smaller players felt a rising need to find suitors with more expertise, funding, and more to negotiate with stakeholders.

In short, M&A offers many healthcare companies hope in an uncertain marketplace: they can share resources to become more efficient; gain access to new markets, offerings, or talent; or sell to a larger entity with the resources to invest in profitable growth.

This is why we believe healthcare M&A is likely to remain steady in 2024, with some megadeals and many smaller transactions: the deals may not yield the quick, big paydays of years gone by, but they make strategic sense to buyers and sellers.

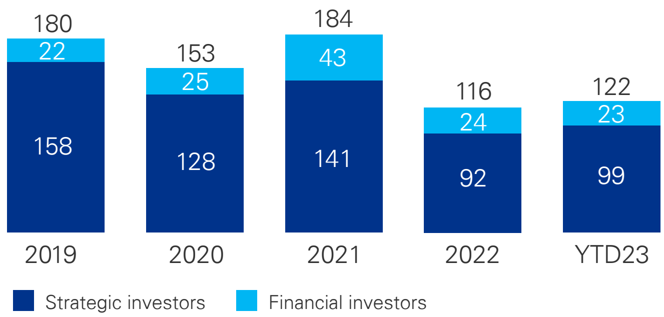
Hospitals and health systems: Dealmaking is still imperative

Hospital and health system operating margins remain below historic levels but began moving into positive territory overall in 2023, thanks in part to a slowdown in labor cost increases.[55] Nearly every institution continues to look for ways to raise efficiencies and revenues, from automating back-office processes to training nurses to help them work at the top of their licenses. And many are being forced to make difficult choices with unprofitable service lines: accept operating losses, forge service line joint ventures or other partnerships, or reduce presence with the offerings. Fortunately, leaders at numerous health systems tell us they have received larger than historical reimbursement rate increases year over year.

Not surprisingly, many hospitals and health systems are pursuing M&A and partnerships to gain scale and share resources. Several major deals were closed, but overall deal volume was low in 2022 and 2023 (Exhibit 24).

More than half of our survey respondents expect deal volume in the subsector to rise in 2024; only 7 percent expect another decline. Our respondents also expect health systems to pursue partnerships, especially with digital health companies, multi-specialty physician groups, and primary care physician groups to grow share, build new revenue streams, and gain economies of scale.

Exhibit 24: Hospital and health system deal volume, 2019-2023



Notes: Strategic investments include deals undertaken by a public or private company with no major private equity backing; financial investments include platform and add-on deals undertaken by private equity firms; Includes deals with only US-based targets; data is updated until December 10, 2023.

Sources: Capital IQ, a division of Standard & Poor's; Refinitiv; Pitchbook; all accessed in December 2023

How hospitals and health systems fared in 2023

Some of the subsector's toughest post-pandemic challenges have eased—inflation has slowed, for example. That said, most hospitals and health systems are still working hard to control costs and raise revenues while maintaining the quality of care for patients and improving outcomes. Innovative institutions are taking a range of steps to make progress, including:

Innovating to create value. Hospitals are increasingly moving procedures off premises into physicians' offices, patients' homes, and ambulatory surgery centers, for example, which appeals to payers and patients alike. More than 80 percent of cardiac stress tests are now conducted outside hospitals in Houston, for example.[56] Hospitals can benefit financially from these moves if they replace lost volume with higher-acuity services, own the offsite facilities, or earn value-based incentives to reduce the cost of care.

Several academic health systems are pursuing innovation and new revenue streams. Mass General Brigham Innovation, for example, connects industry

[55] Source: "National Hospital Flash Report," Kaufman Hall, October 2023

[56] Source: "Healthcare procedures on the move: How and where to capitalize on the ongoing shift of care outside of hospital settings," kpmg.com, 2023

leaders and investors with medical experts, inventors, and other thought leaders. The business unit reports average annual licensing revenue of $165 million for technologies in diagnostics, medical devices and software, therapeutics, and vaccines.[57]

Overcoming hurdles in specific markets. Challenges can vary by geography. In October, California imposed the nation's first minimum wages for healthcare workers, which will take effect in June 2024.[58] Kaiser Permanente's 85,000 striking workers in nine states won a 21 percent raise over four years and other benefits.

Even with pay hikes, staffing challenges will persist across the country: the healthcare workforce shrank in the last two years, with net losses of at least 200,000 experienced RNs and 60,000 LPNs and LVNs; more than a quarter of nurses say they plan to retire in the next five years.[59] Institutions in every market will need to find new ways to attract, train, and retain staff. Working conditions, such as shift length and development opportunities, will matter as much as compensation to many of the most sought-after candidates.

Changes in state and federal regulations and other trends will continue to affect dealmaking into 2024; activity may rise, particularly if the US avoids a recession and core inflation falls below 3 percent by mid-year, as we expect.[60]

The year in M&A

Big deals dominated industry headlines in 2023, and they are likely to continue. For example, Missouri-based St. Luke's Health System on November 29 announced a definitive agreement for a $10 billion merger with BJC Healthcare, which operates 15 hospitals, including the state's largest.[61] St. Luke's trains medical students at the University of Missouri-Kansas City. University of Michigan Health acquired Sparrow Health's six-hospital system with about 10,000 caregivers based in Lansing, creating a $7 billion institution with more than 200 sites of care.

In October, General Catalyst, a private equity firm, created Health Assurance Transformation Corporation, headed by Marc Harrison, MD, former CEO of Intermountain. In an interview, Harrison told Becker's Hospital Review that he is looking for "a system that wants to change" worth $1 billion to $3 billion.[62]

In contrast, Kaiser Permanente agreed in April to acquire Geisinger as part of a new value-based care nonprofit known as Risant Health. It plans to acquire four or five health systems in the next five years, helping to "ease the transition to value-based care for health systems unable to do it on their own," and intends to grow annual revenues to $30 billion or more.[63]

Significant consolidation in many regions, along with more intense antitrust scrutiny, will likely spur some dealmakers to look for opportunities across geographies. While the FTC has not yet challenged cross-market mergers, it has investigated deals with no geographic overlap, such as between Advocate Aurora and Atrium Health. The agency took no action in that case, and the deal closed in December 2022, creating a company with $27 billion in annual revenues, 67 hospitals, and more than a thousand other sites of care in six states.[64]

The agency in November did block John Muir Health's effort to acquire San Ramon Regional Medical Center from Tenet Healthcare, citing anti-competitive issues.[65] We expect the FTC to look closely at every hospital deal in the year ahead.

[57] Source: Innovation landing page, Mass General Brigham website
[58] Source: "California Passes SB 525 to Raise Health Care Minimum Wage," National Law Review, November 6, 2023
[59] Source: "The 2022 National Nursing Workforce Survey," Journal of Nursing Regulation, April 2023
[60] Source: "Retail therapy… The outlook for the U.S. consumer," KPMG, November 8, 2023
[61] Source: "BJC and Saint Luke's Health Systems Reach Definitive Agreement to Combine and Accelerate Shared Commitment to Deliver Extraordinary Patient Care," BJC HealthCare press release, Nov. 29, 2023
[62] Source: "General Catalyst is shopping for a health system: What Dr. Marc Harrison is looking for," Becker's Hospital Review, October 16, 2023
[63] Source: "Risant + General Catalyst: 2 approaches to buying health systems," Becker's Hospital Review, November 3, 2023
[64] Source: "Atrium Joins Advocate Aurora in Hospital Mega-Merger Deal," Revcycle Intelligence, December 5, 2022
[65] Source: "FTC Cracks Down by Blocking John Muir Health's Deal With Tenet," HealthLeaders Media, Nov. 27, 2023

Some policymakers and researchers have concerns that mergers, even those across state lines, can lead to higher prices without improvements in care. Some deals also lead to reductions in offerings, especially for low-margin but essential services such as maternity and psychiatric wards, potentially reducing communities' access to care.

At the other end of the financial spectrum, distressed institutions will continue to look for buyers and partners; some will succeed. The original winning bidder for the bankrupt Mercy Iowa City Hospital, for example, was a creditor, Preston Hollow Community Capital. The parties could not agree on how to fund operating losses, however. In a new round of bidding, University of Iowa Health came out on top, with its deal approved by the court in November.[66] Poor performers and those with small market shares are less likely to raise antitrust concerns.

At KPMG, we expect strategic deals to continue to outpace financial deals in the year ahead. Some hospitals and health systems will likely seek other approaches to boosting efficiencies and margins, such as joint ventures and partnerships that expand offerings to communities that need them.

Many other notable deals were announced or closed in 2023, including:

- In February, UnitedHealth Group closed its $5.4 billion acquisition of LHC Group, a home health provider.
- In March, CVS Health completed its $8 billion acquisition of Signify Health after a bidding war with UnitedHealth Group, Amazon, and Option Care Health. The deal adds more than 10,000 clinicians—who make house calls—to CVS's network.
- In May, CVS completed another major deal—a $10.6-billion acquisition of Oak Street Health, a primary care provider with more than 160 clinics in 21 states that mainly serve Medicare beneficiaries.
- In June, Optum announced it would merge with Amedisys, a home and hospice care provider, pending approvals.
- In September, Froedtert Health and ThedaCare announced they would merge to create an 18-hospital system in Wisconsin.
- In November, Medical City Healthcare in Dallas, a unit of HCA Healthcare, completed its acquisition of Wise Health System and its three inpatient hospitals in Texas, enlarging its portfolio to 19 hospitals. HCA now operates more than 180 hospitals. HCA is also buying Trinity Regional Hospital Sachse, a bankrupt institution in Texas, for $41 million in a deal expected to close in January.

Cross-market mergers announced in 2023 and pending review at press time included:

- Kaiser Permanente in California and Geisinger in Pennsylvania, with $95 billion and $6.9 billion in annual revenues, respectively
- In July, Essentia Health and Marshfield Clinic Health System announced an agreement to form a regional health system with 3,800 providers and 150 sites of care, including 25 hospitals, in Michigan, Wisconsin, Minnesota, and North Dakota.[67]

Continuing a trend that accelerated in 2022, some deals fell apart in 2023. Examples include Presbyterian Healthcare Services, a not-for-profit system with its own health plan and eight hospitals in New Mexico. Negotiations ended on a deal with UnityPoint Health, which operates hospitals, clinics, and home care services in Iowa, Illinois, and Wisconsin with more than 32,000 employees.[68] In 2019, UnityPoint called off an $11-billion merger with South Dakota-based Sanford.[69]

[66] Source: "Bankruptcy court approves sale of Mercy Iowa City to U of Iowa Health," Becker's Hospital Review, November 6, 2023
[67] Source: "Essentia Health, Marshfield Clinic Health System sign integration agreement," Essentia website, July 27, 2023
[68] Source: "UnityPoint Health to merge with Presbyterian Healthcare Services," Health Exec, March 3, 2023
[69] Source: "Sanford, UnityPoint to merge in $11B deal," Health Exec, June 29, 2018

Outlook for M&A in 2024

Despite extensive industry consolidation and regulatory concerns, we expect a few megadeals in the year ahead. Geisinger, Google, and private equity players may not see many large-scale opportunities, but many larger hospital and health systems will continue to look for promising targets—mainly smaller acquisitions such as struggling physicians' practices, community hospitals that need resources to manage the changing dynamics between in- and outpatient services, and ancillary providers such as urgent care centers.

Advances in AI, especially generative AI, are making headlines across industries, but they have yet to deliver the kinds of improvements in efficiency or care that are likely to drive dealmaking in 2024.

Some innovators are attempting to ease shortages of skilled caregivers. HCA Healthcare, with more than 180 hospitals and 2,300 sites of care in 20 US states and the United Kingdom, announced in May that it would invest more than $200 million to expand Galen College of Nursing, and about $136 million to open the new HCA Healthcare Centers for Clinical Advancement.

Tailwinds and headwinds

Tailwinds

Boomers to increase demand. A growing and aging population will continue to drive steady growth in demand, particularly as more baby boomers enter their senior years and live longer. By 2040, more than 24 percent of Americans will be 65 or older, up from 16 percent in 2019, while the number of those 85 and older will have more than doubled to over 14 million.[70]

A healthy economy. We expect the overall economy to remain healthy in 2024, with a mid-year slowdown in consumer spending but no recession, and inflation falling below 3 percent. Continued low unemployment should mean more people with insurance coverage.

Headwinds

Lagging reimbursements. Margins will stay low overall in hospitals and health systems as reimbursements continue to trail relatively high prices of labor, supplies, and services.

Pressure from debt. We do not expect the Fed to raise rates again, but they will remain elevated, putting additional pressure on health systems with excessive debt. That said, a few large, well-integrated healthcare systems now have substantial cash reserves that could help them pursue major acquisitions while taking on little or no debt.

Cross-industry competition. Many hospital workers now earn more but will be lured away to other employers; some positions, especially in skilled nursing, will remain difficult to fill due to enduring nationwide and regional shortages arising in part from the aging of the workforce and declines in nursing school admissions. As noted, institutions in small and rural markets may struggle to attract and retain skilled staff.

CMS scrutiny. The Centers for Medicare and Medicaid Services (CMS) appears to be ramping up enforcement of hospital price transparency, fining more than a dozen institutions in 10 states between July and mid-September 2023.

[70] Source: "2020 Profile of Older Americans," U.S. Department of Health and Human Services, May 2021

FTC could make hospital M&A even more challenging

The Federal Trade Commission (FTC) has proposed changes to antitrust enforcement and premerger notification rules in healthcare markets, and proposed rulemaking to ban non-compete agreements that can discourage or prevent physicians and other workers from leaving their employers.

The American Health Association (AHA) and other stakeholders have urged the agency to reconsider the changes. In a letter to the FTC chair, the AHA said the new premerger rules are "largely unnecessary" and would require dealmakers to submit more information than agencies could review in just 30 days, as proposed in the new rule. In a separate statement, the association called removing antitrust guidance without consulting hospitals "unnecessary and reckless."

The agency says banning non-compete contracts could increase wages by almost $300 billion per year—at a time when reimbursements are rising slowly or not at all and staffing costs are putting intense pressure on balance sheets. Depending on how the agency modifies its final rule, likely in 2024, it may be overturned in court challenges.

The take-away

Mergers, acquisitions, and new partnerships and alliances will continue to be inevitable in today's hospital and health system marketplace, where scale is a key to maintaining positive margins. That said, years of consolidation have reduced the number of targets; only about one in four hospitals in the US still operates independently.[71]

We expect more megadeals in 2024 that help to unlock value via scale, capabilities, and new revenue models that are cognizant to accommodate antitrust concerns. Some health systems will also seek in-market deals that can help improve efficiencies and community access to a wide range of care.

[71] Source: "The 2024 Outlook For Global Pharma Calls For More Difficult Days Ahead," Forbes, November 21, 2023

Physician practices: More cautious, more strategic dealmaking

Physician practices began to draw more attention from deal makers toward the end of 2020, with more than 130 acquisitions in each of six consecutive quarters through Q1'22. Financial investors' fever has cooled since then. Our survey respondents say the challenges most likely to limit growth or investments in the space today include reimbursement pressures, the increasing shift towards value-based payments, and potential regulatory changes.

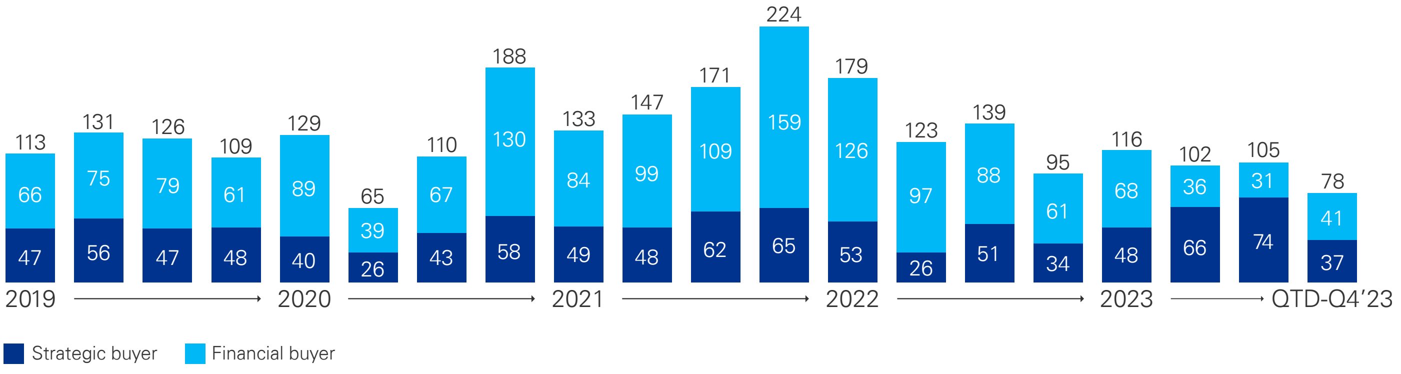
Strategic buyers have stayed hungry, however, making more deals in 2023 (Exhibit 25). They tell us they are now looking for higher-quality assets with stronger management teams. Physician practices at the forefront of value-based care arrangements will be highly attractive to financial buyers.

Some private equity and other financial investors have found that integrations have taken longer than expected. This has led to longer holding times, less ancillary growth, and smaller financial rewards. Many of these investors have slowed their hunt for new targets and are now working harder to integrate the acquisitions they have already made, especially targets acquired at particularly high valuations in 2021 and 2022.

Some large acquirers are attracting the ire of the physicians who now work for them as employees; for example, more than 100 doctors at Allina Health in Minnesota voted in March to unionize. "I've been asking and asking and asking for improvements for years," one of the physicians told the New York Times. "Now we're not asking any more—we're demanding it."[72]

Despite the sobering realities, we believe deals will keep closing because many still make good sense to buyers that can improve efficiencies and grow revenues, and to physicians who want to focus more on patients and less on back-office management.

Exhibit 25: Strategic buyers take the reins in physician practice dealmaking



Notes: HC data has been sourced from Capital IQ, Refinitiv, and Pitchbook; data is updated until December 10, 2023.
Sources: Capital IQ, a division of Standard & Poor's; Pitchbook; all accessed in December 2023

[72] Source: "Why Doctors and Pharmacists Are in Revolt," New York Times, December 3, 2023

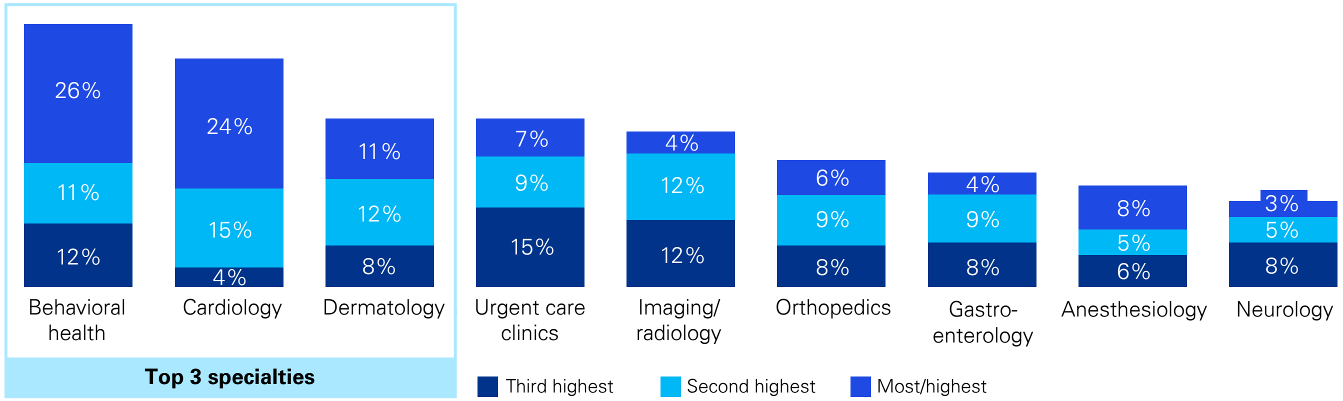
How physician practices fared in 2023

Physician practices in most specialties continued to see strong patient volume in 2023. Despite margin pressures from reimbursement challenges and the relatively high costs of labor, capital, and other inputs, many practices are on sound footing and make attractive acquisition targets.

The top two investment priorities for 2024 of more than half our survey respondents in the space include acquiring providers or clinical practices to expand services in current and/or new markets, or expanding provider networks. Fewer than a third of respondents prioritize gaining new capabilities or expertise. About half of respondents looking for an exit expect to sell to a hospital, health system, or private equity buyer; only about a third expect to find a buyer among payers or other physician groups.

Exhibit 26: Investors expect behavioral health, cardiology, and dermatology to attract more investment

Q: What specialties do you see as most likely for investment in next 12-24 months?



Note: Based on respondents who work, have investments, or have expertise in physician groups; Bar total based on respondents who ranked the given specialty
Source: 2023 KPMG HCLS Investment Survey

A number of important trends in this space emerged in 2023, including:

Certain specialties are especially appealing to investors. Our survey respondents ranked behavioral health as the specialty most likely to continue attracting investment in the next 12 to 24 months, followed by cardiology, dermatology, and urgent care (Exhibit 26).

Urology, orthopedics, and some ophthalmology practices are also becoming more attractive as they invest in in-office dispensing and pharmacy, imaging, and office labs to build new revenue streams. More practices now offer lucrative services not covered by insurance, from liposuction in dermatology, to Lasik and premium cataract treatment in ophthalmology.

Remote patient monitoring is generating fresh revenues in cardiology, nephrology, and some other specialties.

Psychiatry has become more appealing to investors partly because it is now more scalable, thanks to the almost universal acceptance of telehealth. We expect musculo-skeletal practices to become more appealing as they make progress in their value-based care journeys.

Short holding periods and big paydays are now less common. In previous years, a PE investor might have rolled up practices in a specialty for seven or eight times earnings, improved efficiencies, and expected to exit two or three years later at 12 times earnings, with handsome rewards for the physicians and investors. That is less common today, with lower multiples and higher interest rates.

In that earlier transaction environment, many buyers, including some with little or no healthcare experience, rushed through due diligence without grasping all of the value-creation opportunities—or the challenges of integration, such as doctors' potential resistance to deep cost cuts or aggressive buildouts of ancillary services. Many acquirers have had to revise rosy forecasts on rate and reimbursement uplifts, back-office savings, ancillary growth, and integration.

Buyers and sellers alike are looking at transactions more carefully. More physicians now grasp the implications of becoming employees in ecosystems where they would have far less autonomy or authority to make business decisions. Some failures have been complete: a few that acquired practices when values were at their peak are now handing the keys back to the physicians or lenders.

Many of the most sophisticated acquirers are now paying closer attention to what they already own, improving operating model efficiencies, investing the time and effort to integrate assets, and investing more in the data side of the business, where multiple systems and lack of knowledge can be barriers to growth and profitability.

The year in M&A

Just over 400 M&A deals were made for physician groups in 2023, an average of about 100 per quarter, compared to 120 per quarter in 2019 before the pandemic began. Looking more closely at the numbers reveals a startling change, however: the number of strategic deals rose for four consecutive quarters, reaching a more than four-year high of 74 in Q3'23.

Indeed, 2023's largest deal was strategic: in January, VillageMD, owned by Walgreens Boots Alliance and specializing in value-based care, completed its $8.9-billion acquisition of Summit Health, a provider of primary, specialty, and urgent care with 13,000 employees in more than 370 locations, from PE firm Warburg Pincus. Evernorth, Cigna's healthcare unit, became a minority owner in VillageMD with a favorable structure with guaranteed return. In October, as part of an effort to cut costs by $1 billion and improve the profitability of its acquisition, Walgreens announced that it would close about 60 locations in 2024, including some that are underperforming.[73]

In February, Amazon completed its $3.9-billion acquisition of One Medical, a virtual and in-person primary care company serving more than 800,000 One Medical members that includes more than 200 brick-and-mortar physicians' offices and primary care clinics in 25 US markets.

In another significant deal, private equity firm TPG and drug wholesaler AmerisourceBergen, which changed its name to Cencora during FY23, announced in April that they would acquire OneOncology, a network of leading practices, from General Atlantic for $2.1 billion. TPG will own a majority; Cencora will pay $685 million in cash for a 35 percent share. As a management services organization, OneOncology allows practices to make independent decisions while helping with drug purchases, analytics, clinical trials, value-based care, and other services. It can appeal to oncologists who would like to move out of hospital settings without taking on debt or financial risk.[74]

During the economic turmoil of the pandemic and its wake, some PE firms set up "continuation funds" to hold the promising but not sale-ready assets of funds nearing the end of their lifespans, giving limited partners more flexibility, including the option to cash out.[75] Some investors have become skeptical, however, citing short decision-making horizons and misalignment with the interests of fund managers.[76]

Madison Dearborn Partners LLC plans to acquire a 25 percent stake in Sevita Health, according to a report from Axios Pro. If the deal goes through, Madison will join Centerbridge Partners LP and Chicago-based Vistria Group LP as investors. Sevita has 40,000 employees in 40 states and serves about 50,000 people with intellectual and developmental disabilities.[77]

[73] Source: "Walgreens to Close 60 VillageMD Clinics as It Cuts $1 Billion in Costs," costar.com, October 12, 2023
[74] Source: "Consolidation Concerns: What Does $2.1 Billion OneOncology Deal Signal?," obroncology.com, May 2, 2023
[75] Source: "Continuation funds: How GPs are holding on for longer," PitchBook, February 3, 2021
[76] Source: "Investors See Both Promise and Risk in Continuation Funds," Wall Street Journal, January 20, 2022
[77] Source: "Madison Dearborn to Buy 25% of Sevita at Roughly $3B Valuation," Behavioral Health Business, January 2022

Outlook for M&A in 2024

Many physician practices are still attractive assets, and we expect deal volume to remain steady in 2024, even though fewer small physician groups are still independent, and buyers and sellers alike have become more cautious. Private equity and strategic acquirers will be interested in high-quality assets making progress on the value-based care journey, such as those in orthopedics, nephrology, and some other specialties. Some orthopedics practices, for example, also have the potential for ancillary revenue streams from ambulatory surgery centers, imaging, and other sources. Some strategic buyers may also explore markets that are less mature, where services are still moving out of hospitals.

More than half of our survey respondents say their top two investment priorities in 2024 will be expanding services in current or new markets, or expanding provider networks. Fewer than one in three rank new capabilities, such as in value-based payments, among their top two priorities (Exhibit 27).

We expect consolidation to continue at a modest pace, mostly in the lower middle market and with specialties that are still relatively fragmented. Primary care may remain fragmented.

A few ambitious investors may try to build large cardiology, orthopedic, or podiatry platforms, for example, but we expect most buyers to be cautious, focusing on specialties they have already invested in, and being more aggressive in finding value in those areas.

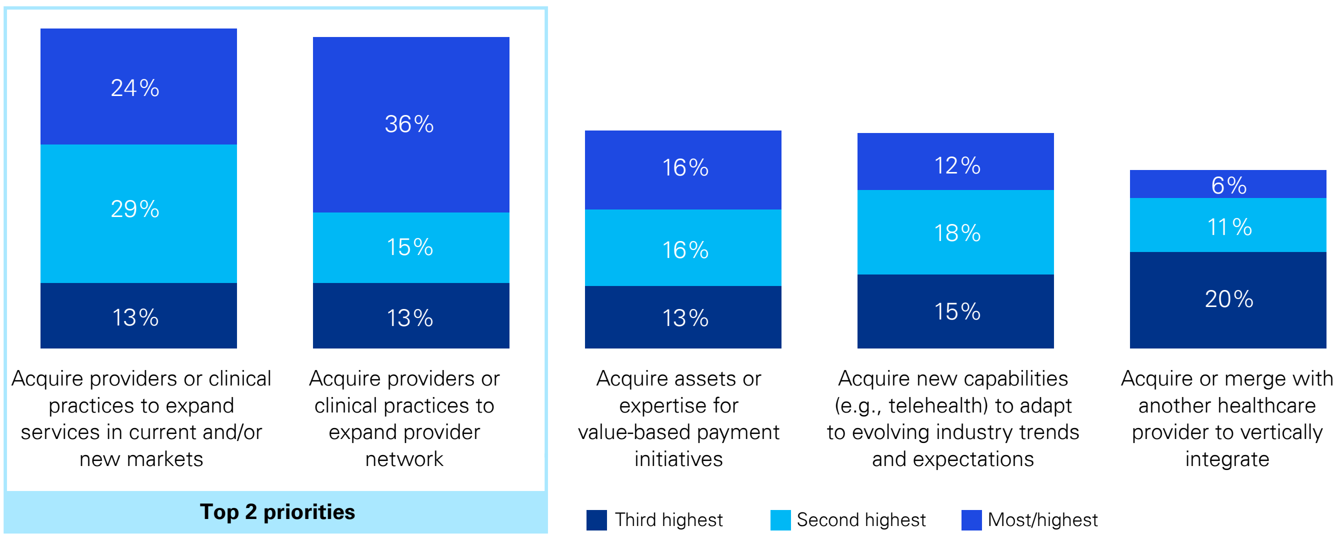
Considering debt market challenges, we do not foresee many billion-dollar deals for specialty groups in the near future. Physician practices will continue to benefit from investments in technology, especially revenue cycle management tools.

As in almost every industry, many physicians' practices will continue to struggle to recruit and retain the staff they need in clinical and non-clinical roles. In response, leading practices will make sure that providers and clinicians at all levels are performing at the top of their licenses and mastering specific procedures or skills outside what typical clinicians do, from respiratory therapy to wound care. Some practices continue to recruit staff from hospitals who want more regular hours.

The handful of private equity investors who make deals in the space are likely to take one of two approaches: pay more for practices with ancillary revenue streams in place, or aggregate smaller groups at low valuations and invest to create those ancillaries, boost efficiencies, and make them more profitable.

Exhibit 27: 2024 investment priorities include expanding services and provider networks

Q: What are your firm's priorities as you invest in physician practices?



Notes: Data is updated until December 10, 2023.
Sources: Capital IQ, a division of Standard & Poor's; Pitchbook; all accessed in December 2023

Tailwinds and headwinds

Tailwinds

Recession fears recede. We expect no new interest rate hikes by the Fed and no recession, but believe growth in consumer spending will slow from 1.8 percent to 1.1 percent in the first half of 2024 and then rise to 2.1 percent in Q4. Unemployment should remain low, meaning more people will have medical insurance and the income to pay out-of-pocket costs. Many top economists believe interest rates have plateaued and will start to decline in 2024, and that a soft landing without a recession is looking more and more probable.

Staffing issues coming under control: For most physician offices, staffing costs are no longer rising at double digits each year. Talent shortages will continue, but more practices are helping nurses and other caregivers master new skills and earn micro-credentials, and work at the top of their licenses. Many are training nonclinical workers to provide more support to nurses. AI and other technologies are helping to alleviate some staffing shortages and boost efficiencies.

Headwinds

Lending concerns. Interest rates will remain relatively high, and lenders will be cautious.

Reduced physician payments. Adjusted for inflation, Medicare physician payments have dropped by more than 25 percent since 2001, while payments to hospitals and nursing facilities have kept pace with inflation, according to the American Medical Association.[78,79] The physician fee schedule for 2024 proposes a new cut of 3.37 percent on top of the 2 percent cut in 2023.

Changing telehealth payments. CMS may create a different payment model for telehealth for commercial payers, especially pure telehealth companies.

Antitrust issues. Regulators are likely to maintain close scrutiny on proposed deals in the subsector.

Stricter regulations. Under new rules in California, some managed services organizations could be classified as "healthcare entities" and become subject to stricter regulations. To avoid serious consequences, physicians and MSOs alike will need to tread carefully, especially in the corporate practice of medicine, fee-splitting, and the Stark Law, which prohibits physicians from referring patients to entities where they have a financial relationship.

Technology costs. Some practices need to make significant technology investments to stay up to date.

The take-away

Private equity and other financial investors will tend to avoid the subsector in 2024 even if the overall economy steadies in line with our forecasts. But we expect strategic acquirers to continue looking for well-run practices that can help them reach their long-term goals, including expanding provider networks and services—especially offerings that can raise revenues and margins.

The most successful deal makers will have an array of strong capabilities in place, such as in value-based payer contracting, home health, remote monitoring, and telehealth, depending on the specialty. As in other healthcare subsectors, scale will become increasingly important in improving operational efficiency and negotiating with payers.

[78] Source: "Address at the 2023 Interim Meeting of the House of Delegates," Jesse M. Ehrenfeld, MD, MPH, American Medical Association, November 10, 2023
[79] Source: "Medicare cuts are 'relentless,' AMA president says," Beckers Physician Leadership, November 13, 2023

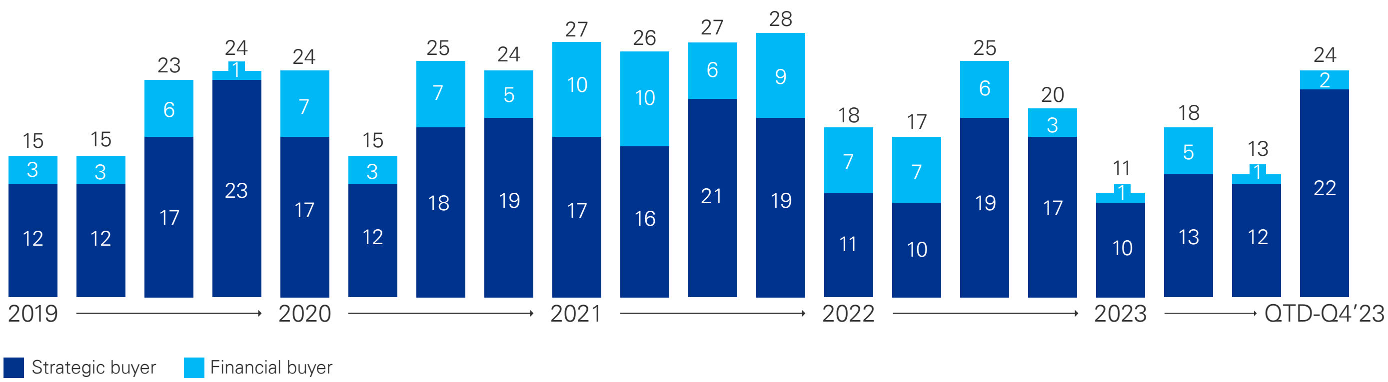
Healthcare payers: Dealmaking gets more dynamic

No discussion of healthcare in the US would be complete without insights into the payer segment. It is playing an ever-larger role, blurring distinctions among insurers, payer-enablement companies, risk-bearing providers, and even retailers, expanding the ranks of "payviders." Reimbursement increases, spikes in care delivery and pharma and biologic utilization, upgrades to patient-facing and other capabilities, vertical integration, growth in scale, and shifting portfolio compositions are driving big deals. This dynamic is beginning to raise deal volumes to pre-pandemic levels after a more than four-year low of just 11 deals in Q1'23, despite a lack of investment by private equity for more than a year (Exhibit 28).

Major players in the segment are pouring billions into acquisitions while also divesting or even shuttering select assets to focus their portfolios and improve margins. Walgreens, for example, is doing all of the above. In 2021, the company divested the majority of its Alliance Healthcare wholesale pharmacy businesses to Cencora for about $6.5 billion.[80] In January 2023, its Village MD unit completed its $9 billion acquisition of urgent care provider Summit Health from Warburg Pincus,[81] and in October announced that it would close 60 underperforming clinics. Also in October, Walgreens said it would complete its $870 million acquisition of CareCentrix, a leader in post-acute and home care, care coordination, and outsourced benefit management services.[82]

The value of scale, including the promise of better operating efficiencies, will continue to drive many strategic deals in this space. The most successful payers will have first-rate expertise in areas including patient engagement, coding, risk adjustment, and compliance to turn a profit in Medicare Advantage (MA), where more than half of Medicare recipients are now enrolled. Better outcomes will require superior care coordination and management.

Exhibit 28: Payer deals are on the rise despite a pullback among financial buyers



Notes: Data is updated until December 10, 2023.
Sources: Capital IQ, a division of Standard & Poor's; Pitchbook; all accessed in December 2023

[80] Source: "Walgreens Boots Alliance Accelerates Full Acquisition of CareCentrix," Walgreens press release, October 11, 2022
[81] Source: "VillageMD Finalizes Acquisition of Summit Health-CityMD," Summit Health, January 5, 2023
[82] Source: "Walgreens Boots Alliance Accelerates Full Acquisition of CareCentrix," Walgreens press release, October 11, 2022

How healthcare payers fared in 2023

As the payer industry becomes increasingly competitive, scale, expertise, and efficiency will continue to underpin strategy and drive investment. Important trends in 2023 that are likely to extend into 2024 and beyond include:

Economies of scale help protect margins. The importance of scale helps explain why five large players—United, Humana, Cigna, Blue Cross Blue Shield, and CVS—now represent about 75 percent of the MA market. Many payers without sufficient capabilities or efficient operations are divesting business segments, citing slow payments, high denial rates, administrative burdens, and even longer hospital stays.[83] In general, payers are sharpening their business models rather than trying to do everything well. Bright Health is exiting Medicare to improve liquidity, for example; Humana has gotten out of the commercial side completely and is now strictly a Medicare and Medicaid provider.

Investors have clear priorities. Asked to rank 2024 investment priorities by subsector, respondents revealed clear preferences:

- **Clinical services support:** 84 percent ranked data analytics first or second, compared to about two-thirds for clinical AI solutions, and just over half for delivery care assets.
- **Pharmacy care services:** More than half ranked specialty pharmacy first or second, versus a third for in-home and community-based infusion.
- **Data and tech services:** Three-quarters ranked care coordination and population health management first or second, compared to 64 percent for patient engagement.

While similar shares of respondents expect to build, buy, or partner to expand their clinical support services, more than half expect to buy data analytic capabilities (Exhibit 29).

Strategic dealmaking will dominate. More than 60 percent of survey respondents expect valuations across subsectors to rise by 10 percent or more in 2024.

We expect plenty of dealmaking as cash-rich acquirers look to tap large profit pools and exit less-profitable geographies and lines of business. That said, some of the largest companies may pull back as they focus on integrating the companies they acquired in 2023. We expect financial investors to remain mostly on the sidelines.

Large payers with healthy balance sheets and market shares, and access to capital, have increasingly acquired provider and pharmacy capabilities in recent years, strengthening and diversifying their portfolios. Walgreens, CVS, UnitedHealth, and Cigna have all acquired significant numbers of physician practices, for example, in addition to investing in home health, telehealth, and urgent care. Indeed, UnitedHealth and Optum, its subsidiary, are now the nation's largest employers of physicians, with more than 70,000.

This vertical integration is helping these and other large players offset at least some of the impact of rising utilization. For example, while the increasing utilization of GLP-1 drugs for weight loss is pressuring payers' margins, it is contributing to the business of the country's three largest pharmacy benefit managers (PBMs): CVS (Caremark), Cigna (Express Scripts), and UnitedHealth (OptumRx).

Federal policies will continue to challenge many payers. Utilization continues to rise in Medicare Advantage plans with revenue headwinds due to multiple CMS program updates, including the 2024 rate announcement and RADV program updates. Meanwhile, more hospitals are dropping some or all contracts with MA plans, citing prior authorization denial rates and slow payments from insurers, among other complaints.[84] The share of MA plans with prescription drug coverage that received a rating of four or more in 2024 dropped to 42 percent from 51 percent in 2023.[85] While CVS, Cigna, and Humana rated well, several other MA plans could see a hit to their quality bonus revenues. Elevance Health, for example, will face a $500 million revenue hit due to the star rating decline. Smaller plans impacted by 2024 ratings may not be able to absorb the revenue losses, which could accelerate the exodus of subscale plans from the MA market.

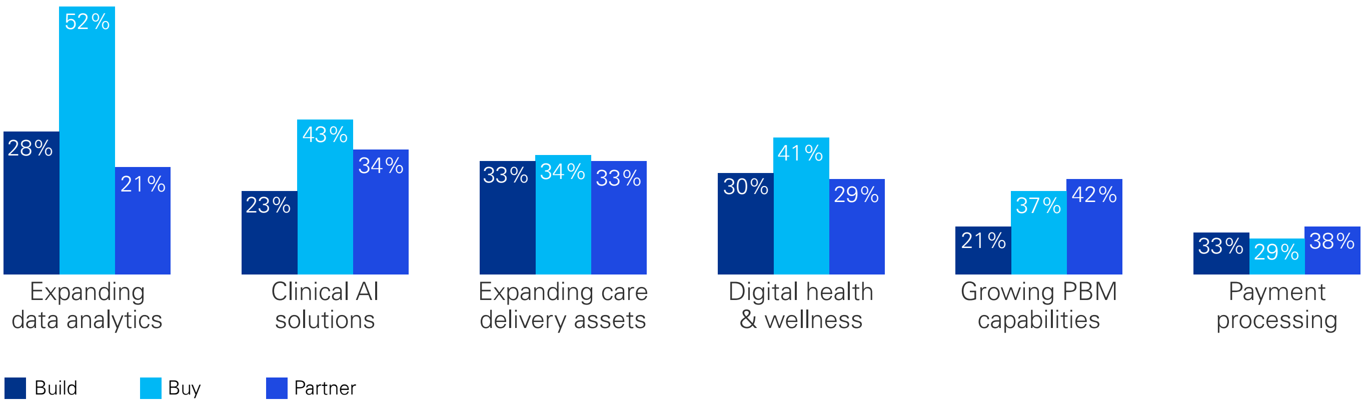
[83] Source: "Hospitals are dropping Medicare Advantage left and right," beckershospitalreview.com, November 16, 2023
[84] Source: Ibid.
[85] Source: "Medicare Advantage plan star ratings decline again in 2024," Fierce Healthcare, October 13, 2023

Payers with large government business, such as Molina and Centene, have seen significant pressure on Medicaid enrollment due to the redetermination process. Nationally, more than 11 million had been disenrolled as of November 2023, with 71 percent of coverage terminations for procedural reasons. While the full impact of redeterminations remains to be seen, plans expect added administrative burdens to recapture eligible members in Medicaid or transfer to the ACA marketplace or employer-sponsored plans to minimize net membership loss.

In this shifting landscape, large players continued to stake out territories and hone business models. Humana is choosing to work closely with the government, for example, while United and other payers are taking commercial routes. Cigna aims to grow Evernorth, its subsidiary that offers risk-bearing services in pharmacy, benefits management, care, and "intelligence," including advanced analytics, predictive models, and data-driven insights.

Exhibit 29: Respondents are open to building, buying, and partnering for several investment areas; most expect to buy data analytics.

Q: How do you expect your organization to invest in the following?



Notes: Data is updated until December 10, 2023.
Sources: Capital IQ, a division of Standard & Poor's; Pitchbook; all accessed in December 2023

The year in M&A

Payer deals began to pick up steam in 2023 from a deep low of just 8 deals in Q1 to 16 in Q4, in line with the average quarterly deal volume in 2019. This occurred despite stubborn inflation, sharply higher interest rates, recession concerns, and stricter antitrust enforcement.

Payviders are now playing such large roles in the subsector that some of their biggest moves in 2023 are worth noting:

- In March, as noted, CVS Health completed its $8 billion acquisition of Signify Health, a post-acute provider, and in May, its $10.6 billion purchase of Oak Street Health, which will continue to operate as a multi-payer, value-based primary care provider serving seniors in 169 medical centers in 21 states.[86, 87]
- Humana, a $64-billion health insurer that has exited the commercial space, as noted, now serves more than a quarter-million seniors and continues to grow as a provider. In June, it announced that it had opened its 250th CenterWell clinic, which also provides home health care, and that it plans to open 30 to 50 more through 2025.[88]
- In September, UnitedHealth Group's Optum agreed to a $3.3-billion acquisition of Amedisys, a home and hospice care provider based in Baton Rouge.

[86] Source: "CVS Health to acquire Oak Street Health," CVS press release, February 8. 2023
[87] Source: "CVS Health completes acquisition of Oak Street Health," company news, May 2, 2023
[88] Source: "Humana opens 250th primary care center, eyes further expansion," Fierce Healthcare, June 6, 2023

Optum now employs more physicians than any other firm in the country. In October, Senator Elizabeth Warren and Representative Pramila Jayapal asked the Department of Justice and Federal Trade Commission to scrutinize the deal, which the legislators called "the latest example of massive health care conglomerates using anti-competitive mergers to increase their market dominance, reducing competition, hurting patients, and increasing health care costs."[89] In November, Emanate Health filed a lawsuit in federal court in California accusing Optum of anticompetitive practices, including a "concerted effort to prevent patients from contacting their doctors who chose to leave [Optum] to join competing medical groups."

- Optum will get 29,000 employees from home health and hospice company LHC Group, which was acquired by UnitedHealth Group in February for $5.4 billion.[90] Optum also forged partnerships with Northern Light Health in Maine and Owensboro Health in Kentucky, bringing nearly 2,000 revenue cycle management and IT experts into Optum's talent pool.[91]
- In September, state senators and the attorney general of Louisiana put Elevance's $2.5-billion acquisition of Blue Cross and Blue Shield of Louisiana on hold, citing anticompetitive concerns.[92]
- In October, Cigna announced that MDLIVE, the telehealth arm of Evernorth, would acquire Bright.md, a technology platform. Cigna's aim is to launch "asynchronous options for virtual urgent care" in 2024, and to expand offerings to other chronic disease management services and wellness visits. Financial figures were not disclosed.[93]
- Also in October, Davies Group Ltd., a professional services and technology solutions provider in risk and insurance, announced it would acquire four third-party administrator businesses from Brown & Brown, an insurance brokerage, for $205 million, and begin a long-term strategic commercial relationship with the brokerage.[94]

Outlook for M&A in 2024

We expect recession fears to ease in the US and the Fed to stop raising interest rates, but the effects on M&A in the payer space are likely to be small: many of the largest strategic acquirers have the resources they need to make deals without borrowing significant sums, and private equity will tend to stay on the sidelines.

We expect many payers to work to hold onto market share rather than look for growth in provider-sponsored health plans. Some will continue to benefit from a resurgence in elective procedures and other services due to pent-up demand, while many providers will continue to seek better reimbursement as labor and other costs continue to put pressure on their margins.

Some subscale payers are likely to go out of business or be folded into larger entities. Walmart is reportedly exploring a multi-billion-dollar acquisition of a majority share of ChenMed, a physician-led, full-risk primary care chain serving moderate- to low-income seniors with complex chronic conditions.[95, 96] There could also be more deals in payer services as companies seek to improve containment, utilization management, or complex claim management.

Congress is considering legislation to govern provider/payer contract language, which advocates say could help patients get care in lower-cost, higher-quality facilities. The new rules are in a section of the Bipartisan Primary Care and Health Workforce Act, which was passed by the Senate in September. It would ban hospitals from anti-steering and all-or-nothing contracting provisions that can squeeze out lower-cost competitors.

[89] Source: "Letter to DOJ and FTC re United Health Amedisys Acquisition," U.S. Senate, October 3, 2023
[90] Source: "Optum and LHC Group to Combine," United Health press release, March 29, 2022
[91] Source: "Optum's biggest deals of 2023," Becker's Healthcare, Oct. 25, 2023
[92] Source: "Elevance Health, BCBSLA press pause on $2.5B merger, Fierce Healthcare, September 26, 2023
[93] Source: "HLTH23: Evernorth's MDLIVE to acquire Bright.md," Fierce Healthcare, October 10, 2023
[94] Source: "Brown & Brown, Inc. announces sale of certain third-party administrator businesses and enters into long-term strategic relationship with Davies Group Ltd.," Brown & Brown, Inc., October 31, 2023
[95] Source: "Walmart reportedly exploring ChenMed acquisition," Healthcare Dive, September 11. 2023
[96] Source: "Walmart reportedly eyes buying majority stake in ChenMed," Fierce Healthcare, September 11, 2023

Tailwinds and headwinds

Tailwinds

Reduced recession fears. We expect economic growth to slow towards the middle of 2024 but rise in the third and fourth quarters, with no recession and no new interest rate hikes by the Fed.

Cost of premiums. Premiums are likely to rise sharply for some members.

Margin pressures. Large and small providers will continue to face margin pressures, which will spur some to consider being acquired.

Asset integration. Vertical integration of acquired provider assets is likely to increase.

Access to insurance. Persistent high employment will maximize commercial enrollment.

Headwinds

Lending concerns. Interest rates will remain relatively high, making lenders more cautious.

Antitrust scrutiny. Federal antitrust enforcement will almost certainly remain strict, killing some deals and delaying and raising the costs of others.

Top-tier talent. First-rate technical talent will continue to be difficult to attract and retain. Companies that innovate to create superior employee value propositions may gain important competitive advantages and create virtuous circles of successful innovation and recruiting.

Issues with MA plans. Margin pressures are likely to rise for MA plans, given slower growth and increased reimbursement pressures due to increasing CMS scrutiny, as evidenced by the recent update to the RADV program, a CY2024 rate announcement of a 3.32 percent average payment increase compared to over 8 percent in 2023, and updates to star rating programs. In October, experts testified to Congress that while some MA plans offer important services not available in traditional Medicare, many seniors have trouble navigating more than a hundred options, multiple complications, and misleading and even fraudulent marketing.[97] Earlier in the month, Cigna agreed with HHS to pay $172 million to settle claims that it submitted inaccurate MA diagnostic codes to raise reimbursements.[98]

Closer scrutiny of PBMs. In September, the American Medical Association reported that vertical and horizontal consolidation of PBMs reduces price competition, hurting patients, self-insured employers, and insurers that aren't partnered with PBMs. Regulators and legislators may look more closely at PBMs' role in the drug supply chain.[99]

[97] Source: "Medicare Advantage marketing practices draw ire from senators," Fierce Healthcare, October 18, 2023
[98] Source: Cigna agrees to $172M settlement over alleged MA overpayments Fierce Healthcare, October 2, 2023
[99] Source: "New AMA report slams PBM industry for lack of competition," Fierce Healthcare, September 12, 2023

The take-away

Powerful trends make M&A inevitable in the payer space: scale, capabilities, and expertise will become increasingly important in the years ahead. Acquisitions will therefore become even more essential to profitable growth and strategic success—and smaller players will need to sell or forge new alliances to stay relevant. With this in mind, we expect valuations of the most appealing targets to rise, and owners of smaller and less successful businesses in the space to seek suitors more urgently in 2024 and beyond.

Despite the daunting array of uncertainties in the economy and in Washington, D.C., some trends are unstoppable: the population is aging, and the burdens of chronic disease will continue to rise, for example. The number of people in the US aged 50 and older is likely to increase by more than 80 million in the next three decades, and the share of these older adults with at least one chronic disease will roughly double.[100]

Payers, and companies that help payers succeed, will become ever more important in the US healthcare system. We believe that well-planned and executed M&A will continue to define the outperformers—firms that can navigate a changing landscape, shape their portfolios wisely, and harness powerful new tools will become increasingly valuable. They will move faster than their peers to improve operating efficiencies, patient engagement, care coordination, coding, risk adjustment, compliance and, ultimately, outcomes, creating value for patients, communities, providers, and shareholders.

[100] Source: "Projecting the chronic disease burden among the adult population in the United States using a multi-state population model," National Institutes of Health, January 13, 2023

Healthcare IT: Rumors of revolution

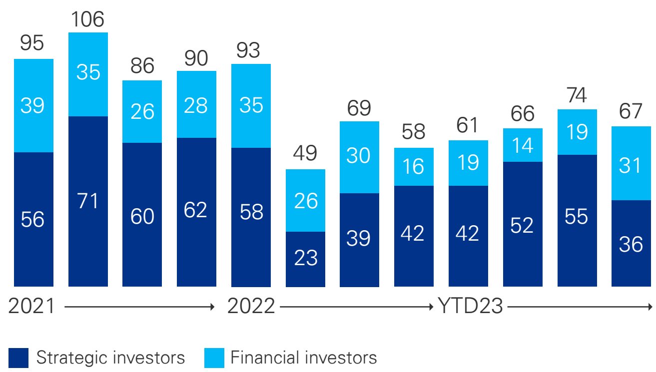
After many years of major advances, healthcare information technology (HCIT) and technology-enabled services appear to be entering a new era as companies harness increasingly massive data sets, more computing power, and generative AI. Pharmaceutical researchers, for example, are showing that generative AI can help them find potentially therapeutic compounds in nature and even design new molecules. Downstream advances could include faster, more accurate diagnostics and tools that can help physicians identify which treatments are most likely to benefit specific patients.[101]

Two-thirds of our survey respondents expect AI and ML to be the most disruptive tech trends, with most applications in the back office, where administrative tasks are still ripe for automation. Deal volume was fairly consistent across all four quarters (Exhibit 30), driven mostly by well-capitalized strategic buyers looking for new offerings to keep pace in a winner-take-all marketplace.

More than half of respondents ranked electronic health records and virtual health, such as telemedicine and remote monitoring, among the most attractive areas for investment in 2024; more than in 4 in 10 ranked clinical workflow solutions and population health management among the most appealing.

More than half expect the shift towards value-based payments and reimbursement to drive the greatest demand for HCIT. Asked about investment headwinds, more than half pointed to interoperability challenges; about 4 in 10 cited patient privacy issues or strained hospital budgets. Some AI-driven decision-making, such as in claims management, is already sparking legal, regulatory, and reputational challenges.

Exhibit 30: After an exceptional 2021, HCIT deal volumes returned to previous levels.



Notes: Data is updated until December 10, 2023.
Sources: Capital IQ, a division of Standard & Poor's, Pitchbook, and Refinitiv, all accessed in December 2023

How healthcare IT fared in 2023

A number of noteworthy trends impacted this subsector in 2023:

Some technology advances more slowly than expected. Progress in HCIT can parallel that of self-driving vehicles: quick, exciting advances followed by long struggles to get the life-or-death details right. In radiology, for example, AI is serving as a "co-pilot," helping doctors read scans, but it is also beginning to help integrate radiology workflows and reduce paperwork—vitally important in a field with labor shortages.[102] Progress has been slower in actually influencing clinical behavior, such as with new screening and diagnostics tools.[103] For now, most acquisitions in

[101] Source: For more on this topic, please see "Artificial intelligence and its expanding role across the biopharma landscape" at kpmg.com
[102] Source: "How Microsoft and Nuance empower radiologists with AI-powered solutions," microsoft.com, December 1, 2023
[103] Source: "AI can identify women with high risk of breast cancer in screening examinations," Karolinska Institutet, July 12, 2023

the subsector are made by large companies to improve efficiencies in documentation, workflows, patient communications, and remote patient monitoring.

Big players gained more ground than startups. Vendors that have earned the trust of large healthcare systems—and have embedded products with those customers—can have big advantages over new entrants in gathering data and developing and selling in new offerings. Large vendors may also be more likely than PE firms to acquire a smaller HCIT company with a proven offering because they know they can quickly persuade customers to adopt it.

Talent shortages. As in other industries, HCIT providers struggle to find, attract, and retain the top technical talent they need to drive innovation, especially in software development. Many companies underestimate how long it will take to assemble capable teams, and how much they will cost. Some elements of software, such as front- and middle-end product development and launches, cannot be easily offshored. Epic, a major electronic health records (EHR) company, reportedly retains some employees by holding them to non-compete agreements that can last up to two years.[104]

Value-based care (VBC) is driving demand for more sophisticated HCIT. To succeed in a VBC environment, healthcare providers large and small must be able to gather the right data about each patient from a wide array of care settings and payers. Leading HCIT players are developing powerful new tools and platforms to help providers find and share that data with caregivers, labs, pharmacies, payers, and others—to improve care and to be able to show the value of the care provided.[105]

Advances in datasets and software are improving population health management. Health information exchange platforms, for example, help hospitals and healthcare systems share health-related data while maintaining privacy, and new predictive analytics tools are better at identifying people at greater risk and predicting outcomes. Remote monitoring now gives caregivers real-time insights into patients' health at home, and digital platforms allow them to engage with patients who need help. These and other advances can help slow the rise in healthcare costs, such as with more effective preventive care, better care coordination and chronic disease management, and utilization improvements.

The year in M&A

Valuations in the subsector declined overall in 2023, but financial investors moved cautiously in 2023, given high interest rates and questions about growth prospects. We expect them to remain cautious. Private equity leaders tell us that targets that are first movers in a technology do not always maintain their competitive advantages.

Strategic acquirers, meanwhile, looked carefully for targets whose capabilities and offerings were mature and dovetailed with their current needs and long-term ambitions. For example, we tracked about 20 revenue cycle management deals in 2023, many designed for specialty areas such as behavioral care and complex claims. Regulatory scrutiny, including antitrust concerns, continued to reduce the appeal of high-risk targets in some HCIT subsectors.

We counted 268 HCIT deals in 2023, closely tracking volume in 2022, and well above 2019's pre-pandemic total of 221. Dealmaking ticked up in each quarter of 2023, as noted, despite relatively high interest rates, recession concerns, stricter antitrust enforcement, and a sharp pullback in financial investor interest. Financial buyers made just under 21 deals per quarter in 2023, below the average of 24 per quarter in 2019.

Notable deals announced or closed in 2023 included:

- Thoma Bravo, a PE firm, agreed to acquire NextGen Healthcare, an EHR vendor, for $1.6 billion in cash, and is reported to be seeking to borrow $1 billion for the transaction.
- Vista Equity Partners Management, LLC, bought EngageSmart, Inc., which provides vertically tailored customer engagement and integrated payments solutions, for $2.54 billion.

[104] Source: "Why health systems don't compete with Epic for talent," Becker's Hospital Review, December 7, 2023

[105] Source: "Healthcare payment models are evolving: 5 key capabilities providers need to ace the shift to value-based care," Becker's Hospital Review, November 29, 2023

- TPG Capital bought Nextech Systems, LLC, a provider of healthcare technology solutions for specialty providers, for $1.4 billion.
- L Catterton Management bought Thorne HealthTech, a provider of solutions and personalized approaches to health and wellness.
- Exact Care Pharmacy bought Tabula Rasa HealthCare, a healthcare technology company, for $658 million.
- Konica Minolta, Inc., bought REALM IDx, a provider of health intelligence and a visualization platform that offers novel sets of data from genes, proteins, and cells, for $220 million.
- Quest Diagnostics bought Haystack Oncology, a developer of a CT-DNA detection technology for transformative MRD testing, for $450 million.
- Waters Technologies bought Wyatt Technology, an electronic equipment and instruments company, for $1.36 billion.

Outlook for M&A in 2024

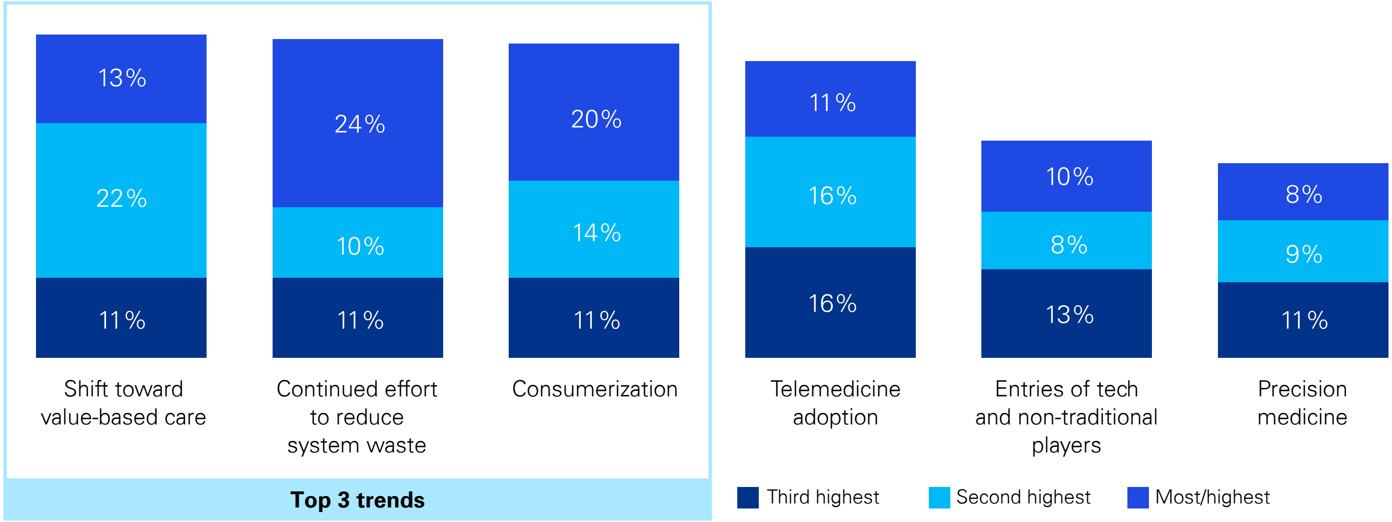
While we expect recession fears to ease in the US and the Fed to stop raising interest rates, we do not foresee a sharp rise in deal volume in the year ahead. Bid/ask spreads remain wide—a particular challenge given the relatively high costs of capital.

Acquisitions will be made, of course, including some large ones, mainly of companies that can prove their products or services offer real value to customers. Lenders will remain relatively risk-averse but willing to finance high-quality deals. The majority of deals will be strategic, as players in this highly competitive space look for complementary offerings and capabilities and growth opportunities.

Survey respondents expect several trends to drive HCIT demand in the year ahead. Topping the list are the shift to value-based care, ongoing efforts to reduce waste and improve efficiencies, consumerization of the marketplace, and telemedicine adoption (Exhibit 31).

Exhibit 31: Respondents expect many trends to drive demand for HCIT

Q: Which trends do you expect to drive the most growth in demand for HCIT in 2024?



Notes: Based on respondents who work, have investment, or have expertise in healthcare IT or digital industry; Bar total based on respondents who gave some rank to the given trend

Source: KPMG HCLS Investment Survey 2023

Tailwinds and headwinds

Tailwinds

Vibrant economy. We expect the economy to remain robust in the year ahead, with no recession and no new interest rate hikes by the Fed.

HCIT efficiencies. Providers large and small will continue to face margin pressures, which will spur them to keep looking for the cost savings and efficiency improvements made possible by HCIT.

Increasing interest via AI. Buzz about generative AI will pick up as powerful new tools emerge, spurring interest in the overall HCIT space.

Headwinds

Lending concerns. Interest rates will remain relatively high, making lenders more cautious.

Antitrust scrutiny. Federal antitrust enforcement will almost certainly remain strict, killing some deals and delaying and raising the costs of others.

Top-tier talent. First-rate technical talent will continue to be difficult to attract and retain. Companies that innovate to create superior employee value propositions may gain important competitive advantages and create virtuous circles of successful innovation and recruiting.

The take-away

Stakeholders across the healthcare landscape have only begun to tap the industry's huge and growing troves of data. Advances in HCIT will yield new insights that will help protect people's health and save lives, give caregivers more time with patients, and help providers, payers, and other players use financial and human resources more wisely.

As the population ages, chronic disease burdens grow, and consumers look for better experiences, demand for innovative HCIT will continue to accelerate, driving dealmaking. Given the challenges of identifying which early-stage companies are most likely to succeed, we expect acquirers to be strategic, focusing on targets with proven offerings, not just promising ideas.

Conclusion

To judge solely by the number of transactions, 2023 was a difficult year for deal makers across the HCLS landscape, which was challenged by persistent economic headwinds and a long list of subsector-specific issues. But look more closely, and you discover companies that adapted and evolved, responding with resilience and creativity to craft acquisitions, strategic partnerships, and creative financing arrangements that positioned them for success now and into the future.

Optimism about the coming year is widespread among the industry leaders who responded to our annual survey. Some 70 percent said they invested more into M&A than expected during 2023, and 61 percent planned to ratchet up dealmaking further in 2024. They cited familiar challenges—competing for a limited number of prime target companies, forecasting the future performance of potential acquisitions, and dealing with the still-elevated cost of capital, among others—but remained sanguine about improving economic and industry conditions and their ability to find potent opportunities.

Our research for this report focused on key trends and opportunities for investors, who continue to face concerns about heightened regulation, uncertain valuations, and shortages of skilled labor. But the appetite for creative dealmaking is unabated, and as 2024 begins, we believe companies in all HCLS subsectors will move forward with vision and diligence to capture their fair share of the innovation of the future.

How KPMG can help

KPMG LLP is one of the largest providers of professional services—advisory, strategy, audit, and tax—to the healthcare and life sciences industry globally with more than 4,200 industry-specific partners and professionals. The KPMG Healthcare and Life Sciences Strategy practice specializes in advising corporate, private equity, and public organizations across all phases of the M&A lifecycle, from deal strategy to diligence to post-close value creation.

Our integrated, multidisciplinary approach provides clients with critical insights into value opportunities—and obstacles to value—at deal speed. The ability to go beyond standard diligence methods will be increasingly important in the post-COVID-19 M&A market. Further, KPMG has a proprietary set of tools and methodologies to deliver data-driven insights.

Our dedicated healthcare and life sciences M&A teams have extensive experience in mergers, acquisitions, affiliations, JVs, and partnerships across all segments and subsectors of the healthcare and life sciences industry. We understand the regulatory, commercial, operational, and accounting complexities unique to the industry and provide a client-centric, integrated suite of services across the deal lifecycle to assist our clients in achieving business results. For more information about our Healthcare and Life Sciences practice, please click here.

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