Life Sciences Snapshot

A Quarterly Report on Financing Trends

Healthtech Horizons: Navigating Regulation, Investment, and Strategy in a Transforming Market

orrick

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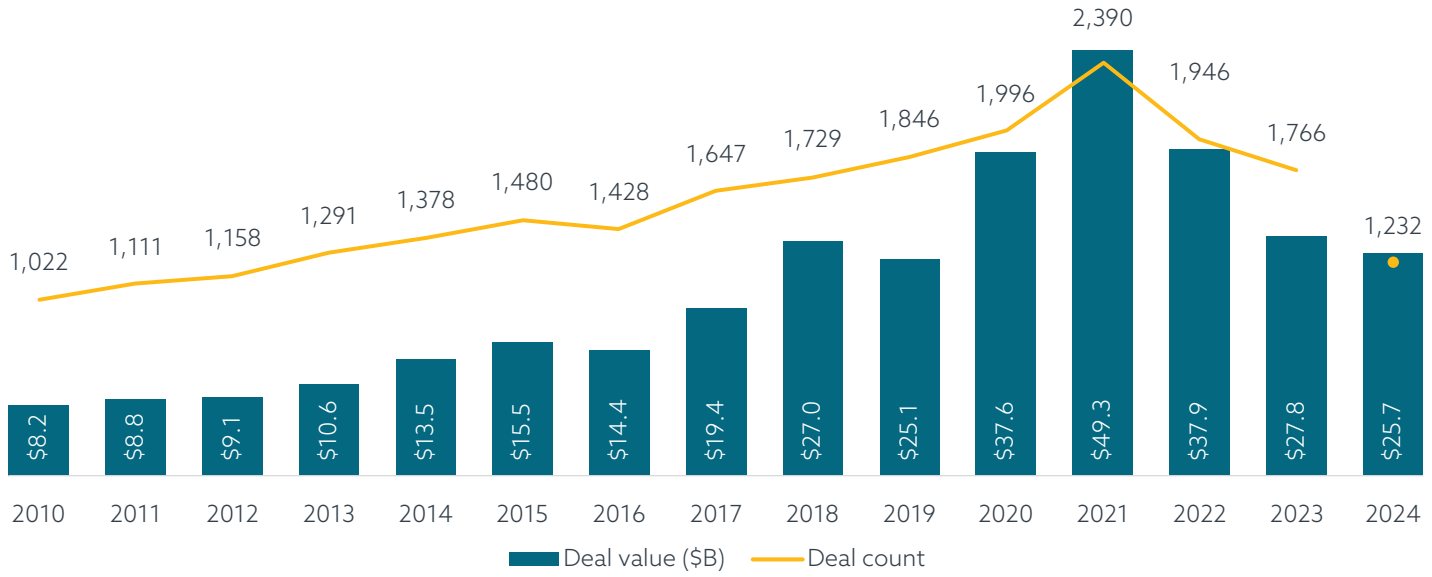
Key Takeaways

Life sciences VC deal activity



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As of September 30, 2024

Since the previous quarter's Life Sciences Snapshot, robust dealmaking activity in Q3 has launched YTD life sciences VC deal activity to near parity with 2023 figures, firmly positioning 2024 as the year to break the two-year declines in venture activity. This report series examines quarterly trends in life sciences venture investments, and the key takeaways include:

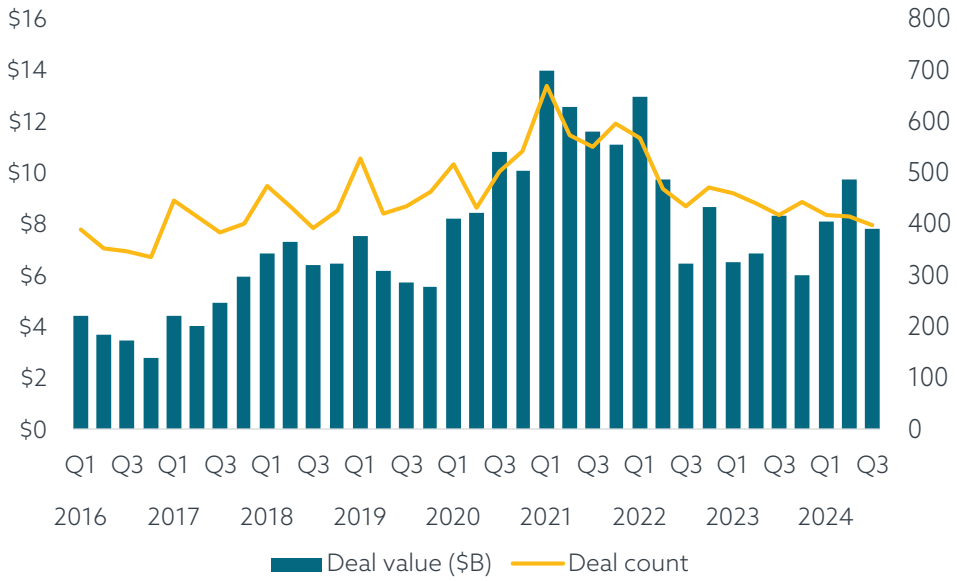
- Median life sciences deal sizes and valuations remain elevated compared with previous quarters, with notable strength in early-stage VC deal sizes and venture-growth stage valuations. The median early-stage deal size grew to $10.6 million from the previous quarter's $10.1 million and still far exceeds 2023's $7.7 million median figure. While life sciences deal counts remained relatively stable from Q3, the increase in the check size median is a beacon for the broader VC market and shows a growth in investor risk appetite. Valuation medians for all stages are also higher than ever, with venture-growth median valuations peaking at $115 million YTD compared with its previous high of $100 million in 2022.
- Life sciences check sizes grew larger each year, and 2024 is no exception. Life sciences deals exceeding $25 million sustained a decadelong trend toward check size inflation, with the share of $25 million-plus check size total deal value growing to 84.3% of 2024 deal value YTD compared with 78.1% in 2023. The share of $25 million-plus check size by deal count also grew to 17.5% compared with 14.1% the previous year. In fact, the share of deal value and deal count of checks exceeding $100 million has grown again this year. A flurry of investments into pharmaceuticals and biotechnology companies, specifically drug discovery, at both the early and late stages this quarter underpins this trend.
- Unlike dealmaking activity, life sciences exit activity was more sluggish this quarter compared with prior quarters. The $5.4 billion in value generated across 29 deals is far below the past decade's average deal value and average deal count of $10.3 billion in exit value and 43 deals, respectively. However, exit activity YTD is still in a much better position than 2023. Life sciences companies generated $34 billion across 83 exits YTD, sustaining a two-year streak of post-COVID-19-pandemic exit growth, and displaying a return to exit activity norms. The technological acceleration and compounding medical innovations may support long-term exit activity and raise the ceiling of life sciences exit activity.

Market Analysis

Life sciences venture activity YTD marked the end of negative YoY growth, as 2024 is slated to meet if not exceed 2023 life sciences VC activity. Life sciences companies raised $7.8 billion across 399 deals in Q3, inflating YTD deal activity figures to $25.7 billion raised across 1,232 deals. In comparison with 2023's $27.8 billion raised across 1,766 deals, life sciences activity is due to eclipse the prior year. Novel and emerging healthcare innovations in gene editing technologies, 3D printing, diagnostics, wearable devices, digital health, and AI integrations undergird sustained funding strength in the industry and warrant ever-growing check sizes and valuations.[1, 2]

Median life sciences VC deal sizes and pre-money valuations YTD are larger across all stages as the spillover effects of technological advancements

Life sciences VC deal activity by quarter



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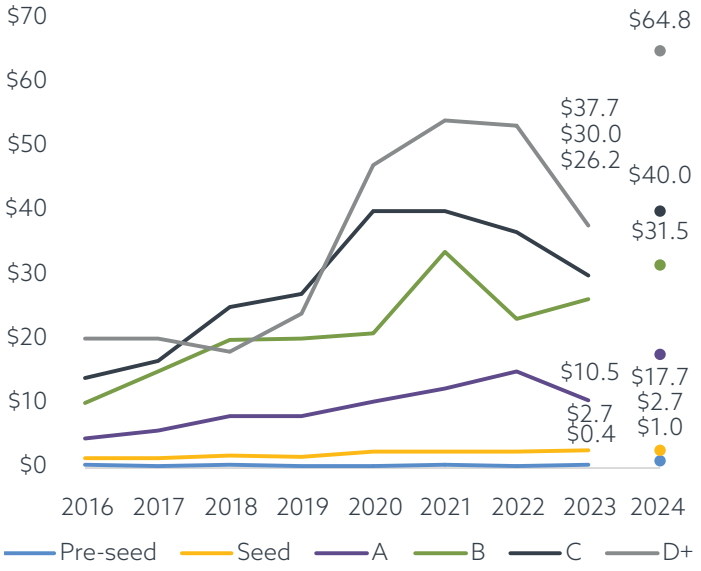
Median life sciences VC deal value ($M) by series



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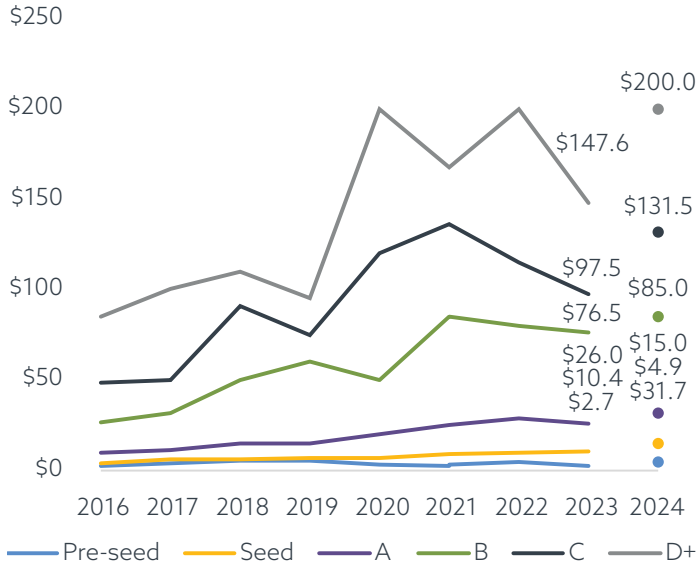
Median life sciences pre-money valuation ($M) by series



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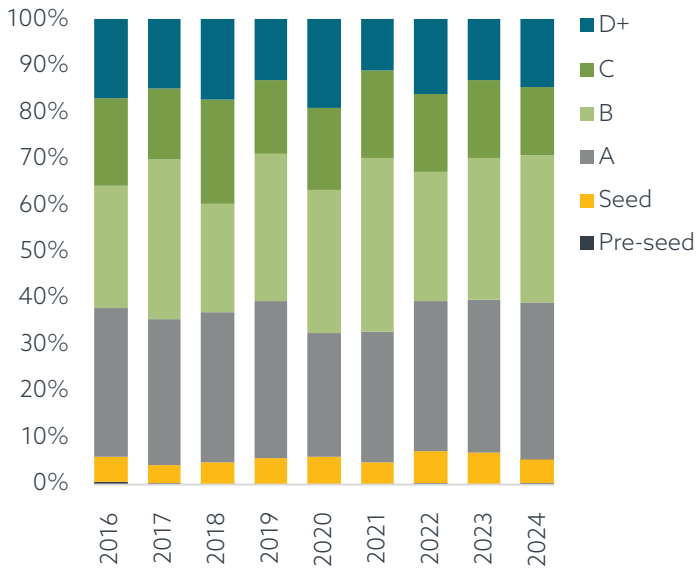
1: "eePASSIGE Engineers Gene-Sized Edits in Human Cells," Genetic Engineering & Biotechnology News, June 10, 2024.
2 : "8 Medical Technology Trends to Watch in 2025," AMN Healthcare, October 28, 2024.

Share of life sciences VC deal value by series



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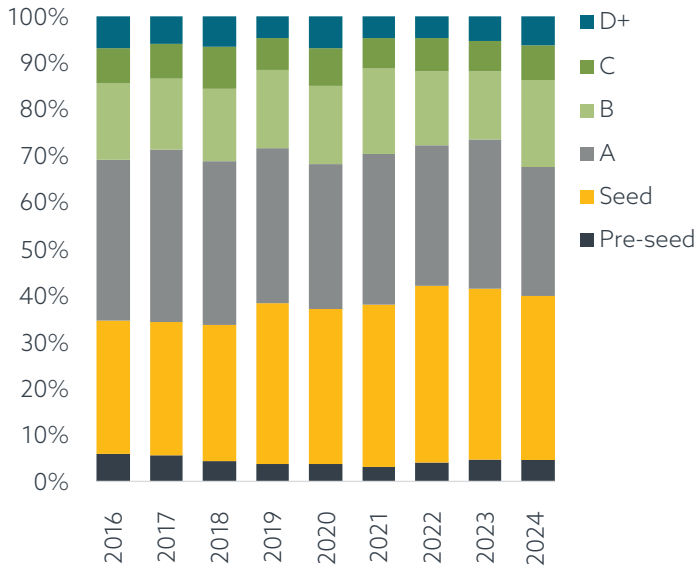
Share of life sciences VC deal count by series



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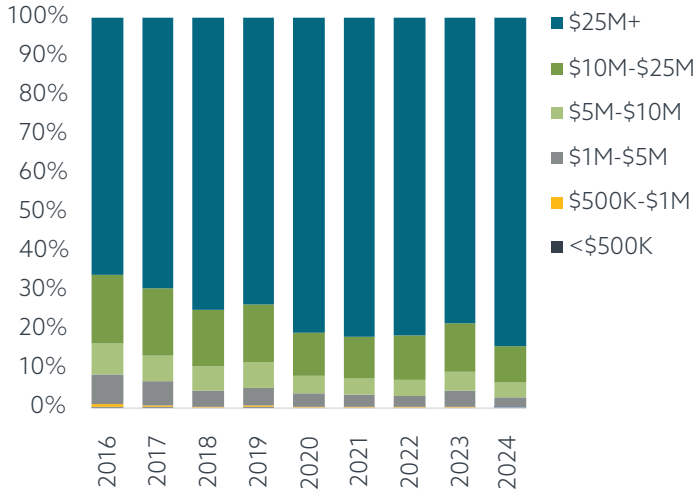
foster greater productivity and innovation in the industry. Early-stage deal sizes and valuations are growing larger after drug discovery and biotechnology startups fueled venture activity in Q3. For instance, generative biology and chemistry company Superluminal Medicines' $120.0 million Series A megadeal—defined as a deal exceeding $100 million—in September will enable next-generation AI-driven small molecule drug discovery. Life sciences companies remain agile by integrating digital infrastructure to accelerate drug research, but technological upgrades drive up operational costs and warrant more capital support.

Drug discovery and biotechnology companies also drove activity at the late stages, signifying healthy investor appetite to provide long-term support for these companies with longer time horizons to profitability. The share of late-stage VC deals has ticked up every year since 2019, representing 51.2% of life sciences VC deals closed YTD, or $10.8 billion raised across 496 deals. Regulatory support helped drive the growth in late-stage funding, as drugmakers were shown an assured pathway to commercialization and revenue generation, given safety criteria is met. In 2017, the Food and Drug Administration launched the New Drugs Regulatory Program to modernize regulatory standards and processes to ensure increasingly complex therapies did not create bottlenecks in their approval pipelines.[3] Given an industry trend toward developing capital-intensive "nichebuster" drugs—which are drug treatments targeting rare diseases—a seamless drug-approval process is critical to enabling late-stage companies to bring their drugs to market and return capital to their investors.[4, 5]

Venture-growth companies are structurally inclined to garner higher valuations, but the growth of median valuations to a record high of $115 million YTD is indicative of mature companies preferring to nurture their value-generating assets. Rather than an exit, medical diagnostics company Imperative Care prioritized market synergies and acquired Truvic in 2021; it recently raised a $150 million Series E megadeal in July, valuing it at $1.7 billion with a 92% chance of a successful IPO exit, according to PitchBook's VC Exit Predictor. In 2024, only 10 companies whose last VC financing round was venture growth successfully exited; this is the lowest figure compared with the 47 formerly venture-growth companies exited in 2021. Mature companies that can successfully exit are staying private for longer, and they may be justified in doing so given a slow but recovering exit environment.

3: "CDER Gives Update on New Drugs Regulatory Program," Pharmtech.com, Susan Haigney, June 26, 2024.
4: "The Unbearable Cost of Drug Development: Deloitte Report Shows 15% Jump in R&D to $2.3 Billion," Gen Edge, Alex Philippidis, February 28, 2023.
5: "Trends in FDA Drug Approvals Over Last 2 Decades," National Library of Medicine, Journal of Family Medicine and Primary Care, Angelika Batta, Bhupinder Singh Kalra, and Raj Khirasaria, January 28, 2020.

Share of life sciences VC deal value by size bucket



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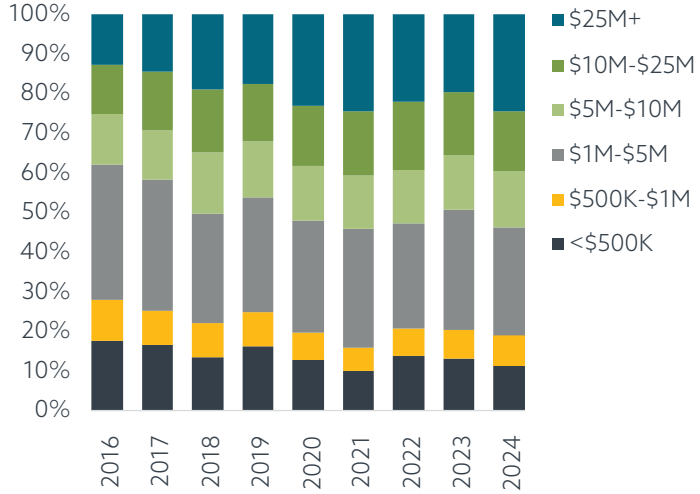
Share of life sciences VC deal count by size bucket



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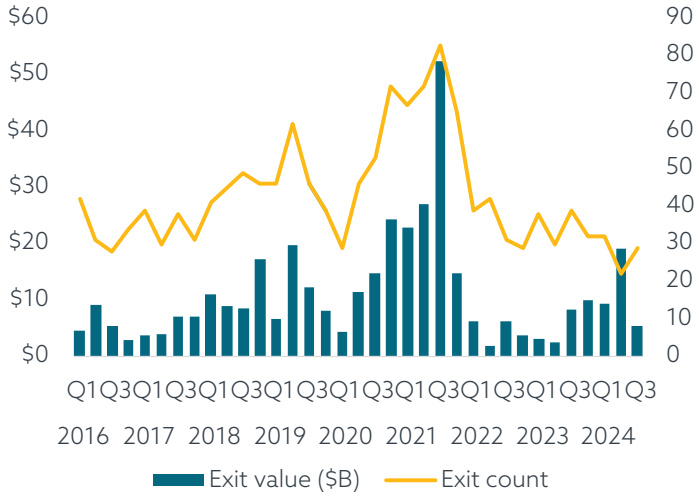
Life sciences VC exit activity by quarter



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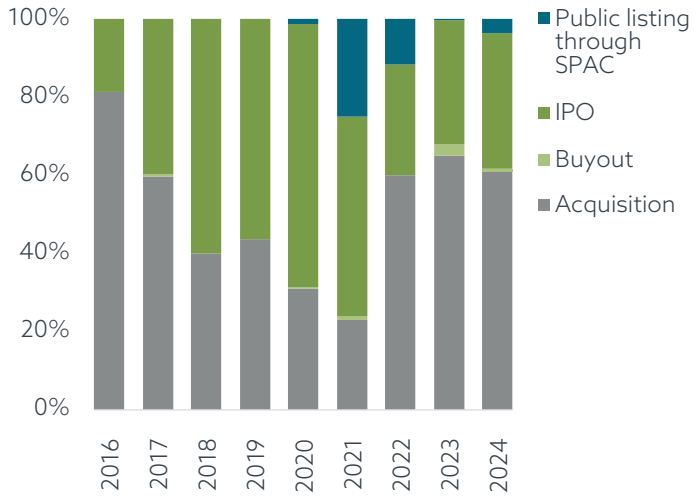
Share of life sciences VC exit value by type



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Life sciences exits sustained a second consecutive year of growth in terms of value generated, but exit counts are in a trough as a significant drop-off in acquisitions and SPAC listings weigh down on this year's exits data. Exit values increased by $10 million from 2023 to $34 million generated, while exit counts plummeted from 139 to 83 deals YTD. The 44.8% and 87.5% YoY drops in acquisition and SPAC deals, respectively, ultimately created a slower exit environment, while IPO activity held steady from the prior year. The Federal Reserve's tight monetary policy adversely impacted valuations and deterred debt-financed exits. However, with more rate cuts on the horizon and sustained progress in technological and medical innovations, the exits outlook may pivot for the better in 2025.[6]

6: "September 2024 Fed Dot Plot Sees Sub-3% Fed Funds by 2026," Bondsavvy, Steve Shaw, September 18, 2024.

Roundtable

INTRODUCTION

As healthtech innovation transforms healthcare delivery, companies face evolving regulatory frameworks, shifting venture capital dynamics, and increasing pressure to align with payer and provider priorities. This discussion explores how startups can navigate compliance challenges, secure funding in a competitive market, and leverage AI, consumer health tools, and strategic partnerships to drive growth. Insights will also highlight trends in reimbursement, interoperability, and industry consolidation shaping the future of healthtech.

Panel

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Neel Lilani: What areas within healthtech are capturing the most venture interest today?

Josh Beser: The hottest areas in healthtech include AI-driven diagnostics, precision medicine, and digital health tools focused on chronic disease management. With the shift towards value-based care, platforms that enable remote monitoring and real-time patient engagement are particularly appealing. Investors are also showing interest in tools that leverage AI for drug discovery and clinical trial optimization.

Jeremy Sherer: In terms of care delivery, areas with access problems and where clinical workforces are stretched continue to command attention. Behavioral health and women's health are good examples. But compared to the virtual care boom early in the pandemic, VCs want to see more today – more data supporting proof of concept, and workflows which do more than simply delivering care virtually. Telehealth platforms leveraging AI tools to help providers access information that improves the care they deliver, for example, are popular at the moment. Finally, as it becomes clear that telehealth platforms will be part of our healthcare landscape moving forward, there is more and more emphasis on operational tools built to help those virtual care companies in areas like revenue cycle management and clinical staffing. Obesity medicine is also getting a lot of attention.

Neel Lilani: How is the rise of consumer health tools (e.g., wearables, digital therapeutics) changing the traditional care delivery landscape?

Stephen Thau: Wearables and apps health apps are now providing consumers with vast amounts of health data. The true transformation in care will come when physicians integrate this data into care decisions, improving prevention, diagnosis, and treatment. While tools and AI platforms are evolving, challenges remain in achieving seamless data integration and ensuring clinical utility.

Jeremy Sherer: These tools are blurring the lines between wellness and traditional healthcare. By enabling individuals to monitor and manage their health outside of clinical settings, they're promoting preventive care, which is a hugely important cultural shift underway. However, the challenge lies in validating the clinical value of these tools and integrating them into traditional healthcare workflows.

Amy Joseph: The rise of consumer health tools is redefining patient engagement, making healthcare more personalized. These tools can bridge gaps in access to care, especially in underserved areas, and encourage patients to take a more proactive role in managing their health.

Stephen Thau: How can the market balance healthtech innovation with regulatory and customer access risks?

Amy Joseph: Given the highly regulated nature of health care, companies must adopt a dual focus on compliance and scalability. Assessing regulatory considerations early in designing the business model can help set up an innovative company for long term success while mitigating regulatory risk. For example, growth and customer acquisition strategies can be subject to additional rules in health care, beyond rules that may apply to other consumer products or technology solutions.

Jeremy Sherer: Patients increasingly expect to access and receive healthcare services like any other consumer good, and that has forced the healthcare industry to adopt commercial practices they haven't used in the past. That is driving impactful change in healthcare innovation, but those developing new technology need to prioritize transparency with patients. Innovators with the best of intentions sometimes seek to streamline processes in a way that makes for a smooth user experience but sacrifices confirming the patient's understanding of who is delivering their medical care, what financial relationships exist between different stakeholders in healthcare delivery, and what interests other than patient care might be motivating those stakeholders.

Neel Lilani: How are agencies like the FDA approaching the regulation of AI/ML-based healthtech tools in drug discovery?

Georgia Ravitz: The FDA is taking a thoughtful yet evolving approach, emphasizing transparency and explainability in AI/ML models. New frameworks, like the FDA's proposed updates for continuous learning systems, aim to address the unique challenges of AI tools while maintaining patient safety. Early engagement with the FDA is crucial for navigating this rapidly changing landscape. We likely will see numerous proposed guidances and policies from FDA in the coming year.

Stephen Thau: How are regulators addressing the rise of digital health solutions like telemedicine, remote monitoring, and mobile health apps?

Amy Joseph: The laws and regulations around this area have evolved significantly in recent years, though still not keeping pace with the rise of new digital health solutions as a means to deliver care. Challenges remain in various ways, including uncertainty around interpretation of rules on the books as applied to

newer, innovative technology, and navigating a patchwork of varying requirements across various states as well as federal laws. And, with the rise of digital health solutions – and related reimbursement – comes increased scrutiny and enforcement.

Jeremy Sherer: There are plenty of technical changes to legal standards and regulatory requirements federal regulators like CMS and state medical boards have had to introduce, from interstate licensure processes to coverage and reimbursement parity and beyond. That said, we're far from out of the woods – as it stands, we still don't know how Medicare will cover telehealth services in 2025, and we won't know where the DEA lands on virtual examinations and prescribing controlled substances until late next year. Given the speed at which healthcare delivery evolves, the hope is that regulators embrace modality-agnostic standards which rely upon practitioners themselves to determine whether they can use technology to safely improve patient care, and focus on the quality of care provided rather the technology that practitioners utilize to deliver care.

Neel Lilani: How are evolving health data privacy laws (e.g., HIPAA updates, states-specific privacy acts) influencing healthtech innovation?

Thora Johnson: As health information privacy continues to be a patchwork of federal and state law, healthtech companies are having to rethink their data strategies.

On the federal stage, the Office for Civil Rights (OCR), within the U.S. Department of Health and Human Services, regulates patient health information and the FTC regulates consumer health information that falls outside of HIPAA. OCR is under resourced and that is unlikely to change with the new administration. The administration change may also mean that the FTC will have priorities other than consumer health data going into next year.

In contrast, we expect to see the states continue to take the lead in regulating health data. Many states have passed comprehensive state privacy statutes that provide additional protections for health data. We have also seen an increase in health-data specific privacy laws like Washington's My Health My Data, and we expect that trend to continue into next year.

These state law trends are pushing healthtech companies to innovate in terms of their patient consent frameworks, secure data sharing mechanisms, anonymization processes, and document retention policies. Companies that address privacy proactively are gaining a competitive edge.

Stephen Thau: Are current frameworks for Software as a Medical Device (SaMD) adequate for the pace of innovation in healthtech?

Georgia Ravitz: Current SaMD frameworks provide a baseline, but they struggle to keep up with rapidly advancing technologies like adaptive AI. Regulators are exploring updates, but companies must navigate ambiguities with a risk-based approach. Strong documentation and robust clinical validation are key to staying compliant.

Neel Lilani: What synergies are emerging between healthtech startups and traditional healthcare providers or insurers?

Thora Johnson: Startups are partnering with providers to deliver data-driven care, while insurers are integrating digital health tools into benefit offerings. These synergies are accelerating innovations in remote patient monitoring, predictive analytics, and population health management. The collaboration helps startups scale while addressing providers' and payers' efficiency goals.

Amy Joseph: We are seeing a large number of strategic affiliations, ranging from contractual arrangements to joint ventures, with healthtech companies. Such collaborations allow providers and payors to offer innovative solutions to help improve quality of care, access to care, and reduce costs. Common examples include collaborations with providers where the healthtech company offers patient engagement tools to increase touchpoints, administrative solutions to help alleviate workforce burden, and offering of a virtual care line where the provider may not have the clinical staff or technical resources to offer on their own.

Neel Lilani: With funding pressures increasing, what sectors within healthtech do you see as most ripe for consolidation (i.e. telemedicine) and why? Do you see private equity taking a more active role in consolidation (roll up) strategy?

Stephen Thau: Telemedicine is a clear candidate, with overlapping services and declining margins pushing companies to consolidate. PE firms are drawn to these opportunities because they can unify fragmented players to create stronger networks and economies of scale.

Jeremy Sherer: Healthtech infrastructure, such as revenue cycle management and clinical workflow tools, is also ripe for consolidation. Private equity sees potential in creating comprehensive platforms that providers can adopt end-to-end.

In pediatrics, there are a number of platforms focused on behavioral health, and others focused on non-medical services often delivered in

school-based settings like speech language pathology, occupational therapy, and physical therapy. “End-to-end" solutions that can deliver multiple services to a single population in an integrated way would be attractive to private equity. Partnership strategies have allowed some of these companies to dip their toes in the water without committing to full-on M&A, but I think we’ll start seeing more traditional consolidation soon.

Thora Johnson: Remote monitoring solutions are seeing a surge in M&A activity. Consolidation allows companies to integrate monitoring tools with care coordination systems, enhancing patient engagement and long-term outcomes.

Josh Beser: Behavioral health is a growing area for consolidation, as demand continues to outpace supply and fragmented providers struggle to scale. Private equity is stepping in to create integrated networks that combine digital tools with brick-and-mortar services, addressing both access and operational challenges.

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