



EMERGING TECH RESEARCH

Healthcare IT Report

VC and PE trends and emerging opportunities

Q1
2024





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For previous updates as well as our complete healthcare IT research, please see the designated [analyst workspace](#) on the PitchBook Platform.

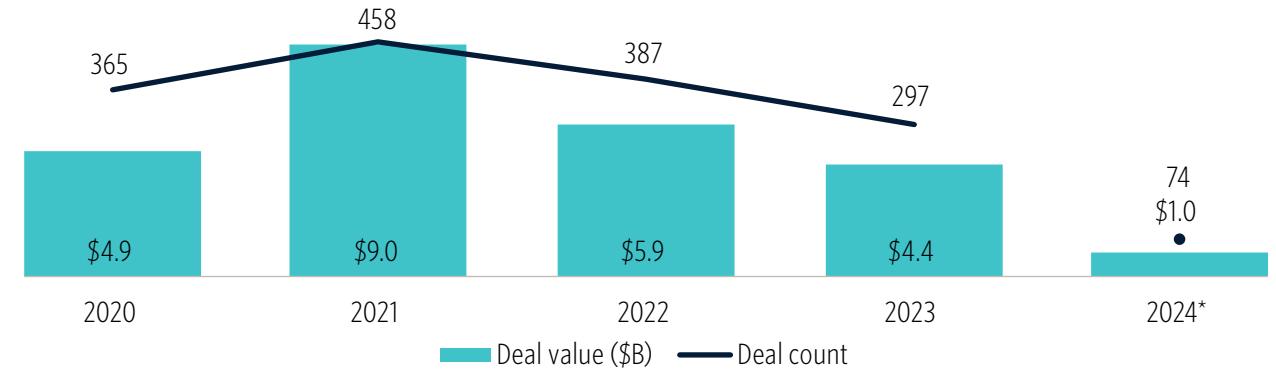


Vertical update

Healthcare IT deal activity continued to stagnate in Q1 2024, with both VC and PE deal activity remaining roughly flat compared with the pace set in 2023. Headlined by a handful of large rounds, VC deal activity remains a story of haves and have-nots, with fundraising concentrated among a few leading companies playing established themes such as large language models (LLMs), clinical documentation, coding automation, care navigation, and remote patient monitoring. For the most part, VC investors are picking winners early and making concentrated bets. This has created an ecosystem of smaller startups with fast-shrinking runways, many of them hamstrung by too-high previous valuations, and poses an opportunity for PE and strategic buyers to pick up additive technologies at a discount.

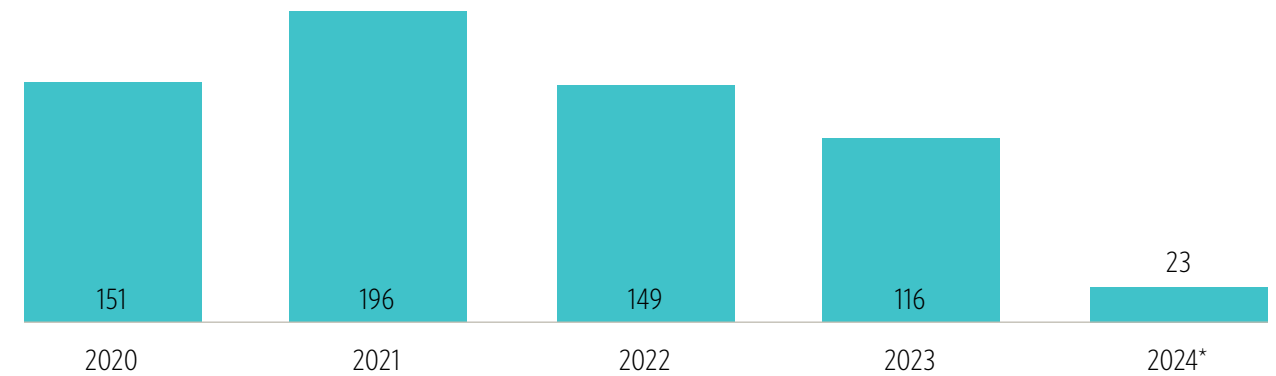
PE activity in healthcare IT also remained quiet. Many sponsors are interested in increasing their exposure to healthcare IT, but significant deal flow has not materialized. Larger managers are currently more focused on staking out territory in pharma services, where there is a more robust and growing sell-side pipeline, and we have seen firms sitting on healthcare IT theses for years without landing a suitable target at the right price. That said, quality healthcare IT companies that do come to market over the next year will likely field significant interest as PE firms look to deploy capital while veering away from investing directly in healthcare providers. With both the VC and PE asset classes in risk-off mode, healthcare IT continues to be a challenging place to deploy capital due to its inhospitality to point solutions and challenging sales cycles across the provider, payer, and employer markets.

Healthcare IT VC deal activity



Source: PitchBook • Geography: Global • *As of March 31, 2024

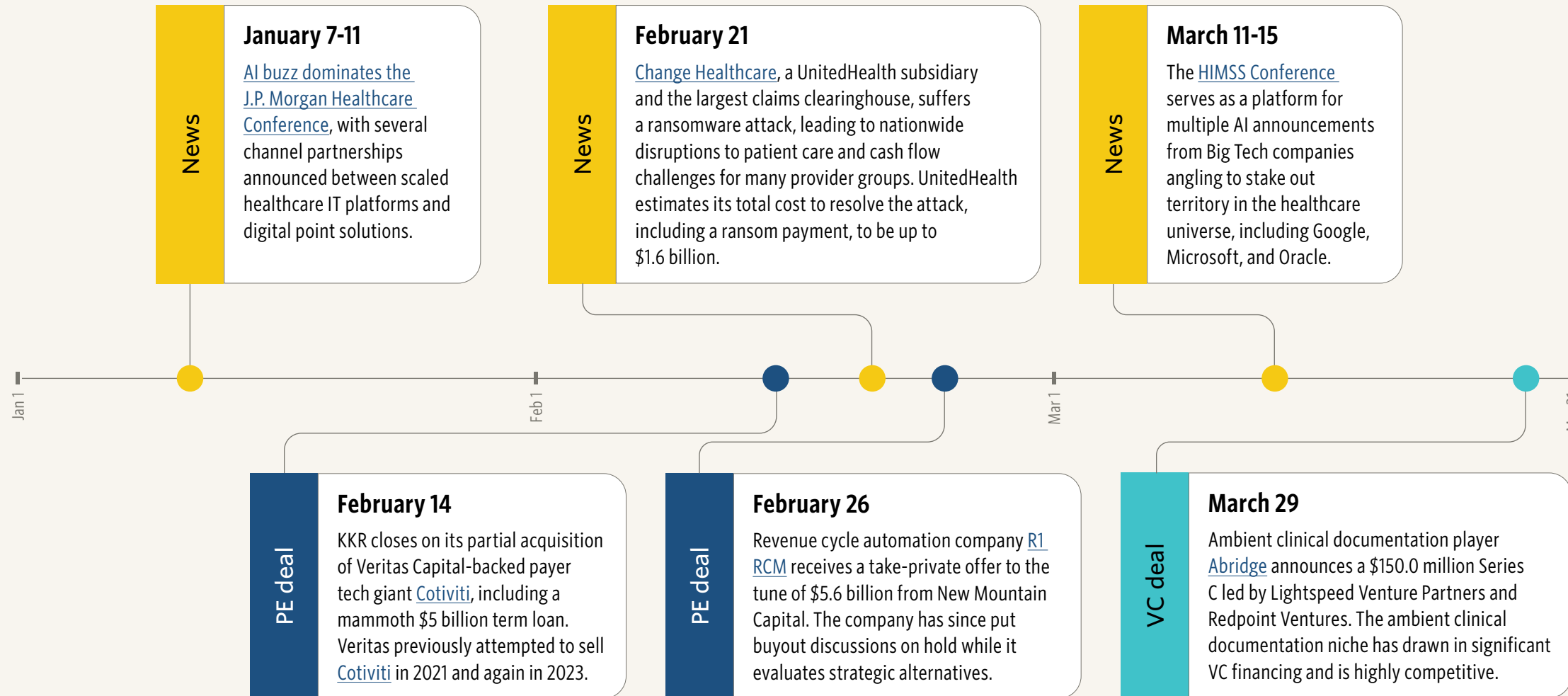
Healthcare IT PE deal count



Source: PitchBook • Geography: Global • *As of March 31, 2024



Q1 2024 timeline



Q1 VC deal activity

\$1.0B
deal value

74
deal count

3.3%
QoQ change in deal value

-11.9%
LTM change in deal value from previous 12 months

Q1 PE deal activity

23
deal count

104
LTM deal count

-14.8%
QoQ change in deal count

-25.7%
LTM change in deal count from previous 12 months



Healthcare IT landscape

- 1** Electronic health records & clinical information
- 2** Revenue cycle
- 3** Operations
- 4** Analytics
- 5** Infrastructure & compliance





Healthcare IT VC ecosystem market map

This market map is an overview of venture-backed or growth-stage companies. [Click to view the full map on the PitchBook Platform.](#)

1 Electronic health records (EHRs) & clinical information

Generalist EHRs & enterprise systems



Vertical EHRs & enterprise systems



Picture archiving & communication system (PACS), radiology information system (RIS) & clinical image workflows



Laboratory information system (LIS) & laboratory workflows



Clinical documentation



Care coordination & referrals



Care team communication



Remote patient monitoring software



2 Revenue cycle

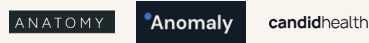
End-to-end revenue cycle management (RCM)



Patient payments



Billing & coding



Revenue optimization

Payment integrity



Payer workflow tools



4 Analytics

Population health & risk analysis



VBC enablement



Clinical decision support



Prescription optimization



Outcomes measurement



Multifunctional analytics



3 Operations

Practice management



Patient & member engagement



Scheduling & intake



Telemedicine enablement



Surgery operations



Workforce management



Resource management & procurement



Pharmacy & medication management

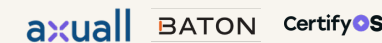


Provider education & improvement



5 Infrastructure & compliance

Directories, credentialing & networks



Security, identity & access



Cloud & software platforms



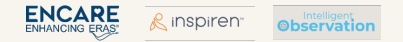
Data ecosystem



Process automation



Governance, risk & compliance (GRC) & quality assurance





Healthcare IT PE ecosystem market map

This market map is an overview of PE-backed companies in each segment that are currently active in PE portfolios. [Click to view the full map on the PitchBook Platform.](#)

1 EHRs & clinical information

Generalist EHRs & enterprise systems

Vertical EHRs & enterprise systems

PACS, RIS & clinical image workflows

LIS & laboratory workflows

Clinical documentation

Care coordination & referrals

Care team communication

Remote patient monitoring software

2 Revenue cycle

End-to-end RCM

Patient payments

Billing & coding

Revenue optimization

Payment integrity

Payer workflow tools

4 Analytics

Population health & risk analysis

VBC enablement

Clinical decision support

Prescription optimization

Outcomes measurement

Multifunctional analytics

3 Operations

Practice management

Patient & member engagement

Scheduling & intake

Telemedicine enablement

Surgery operations

Workforce management

Resource management & procurement

Pharmacy & medication management

Provider education & improvement

5 Infrastructure & compliance

Directories, credentialing & networks

Security, identity & access

Cloud & software platforms

Data ecosystem

Process automation

GRC & quality assurance

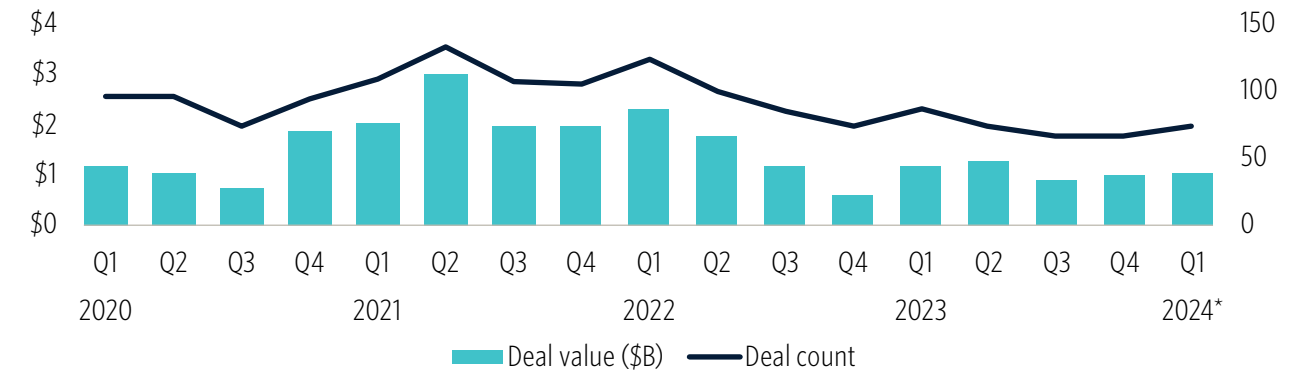


VC and PE activity

In Q1 2024, healthcare IT companies cumulatively raised \$1.0 billion in VC funding across 74 deals, representing a 3.3% increase in deal value and a 10.4% increase in deal count QoQ. Cumulative VC deal value for healthcare IT over the past 12 months decreased by 11.9% compared with the previous 12 months. The quarter's largest VC deal by far was the Lightspeed- and Redpoint-led \$150.0 million Series C by ambient clinical documentation company [Abridge](#). Broadly considered one of the leading companies in this crowded category, [Abridge](#) has notched partnerships with Epic, NVIDIA, MemorialCare, and Sutter Health and raised a \$30.0 million Series B in October 2023. The company's rapid return to the fundraising market underscores not only the enthusiasm that VC investors are displaying toward AI scribes—one of the most accessible applications of LLMs in healthcare—but also the high cost associated with training AI models. Other noteworthy fundraises included a \$40.0 million Series B for coding automation company [CodaMetrix](#) and a \$50.0 million Series B for prior authorization automation company [Cohere Health](#), which we [profiled](#) in last quarter's report.

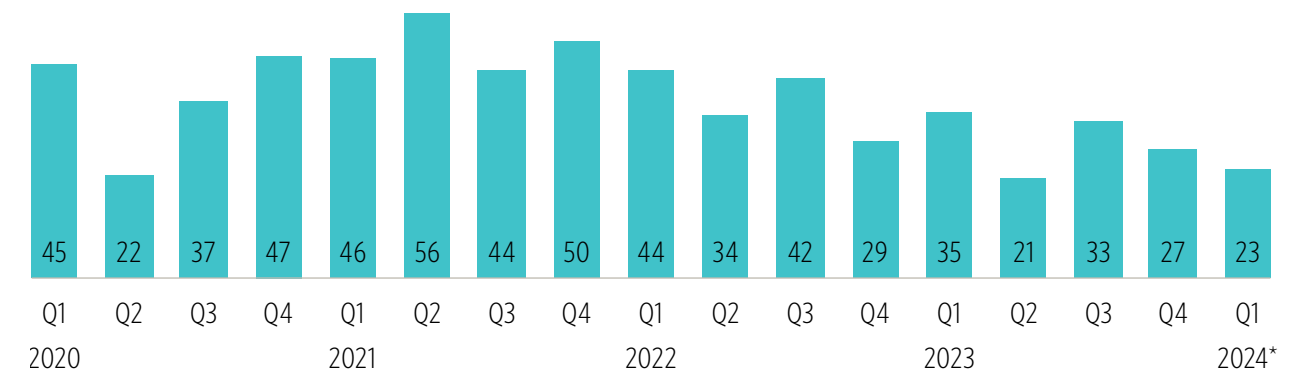
PE investors announced or closed 23 healthcare IT deals in Q1 2024, down 14.8% from Q4 2023. Over the past 12 months, PE investors have announced or closed 25.7% fewer healthcare IT deals than in the previous 12 months. The closing of KKR's stake in payer tech company [Cotiviti](#) and New Mountain Capital's approach of [R1 RCM](#) for a \$5.6 billion take-private represent the two largest deals of the quarter. Also noteworthy were Frazier Healthcare Partners' purchase of patient payments solution [RevSpring](#) from GTCR, and Sunstone Partners' acquisition of RPM services provider [Accuhealth](#). We discuss the opportunity in RPM and the [Accuhealth](#) deal later in this report.

Healthcare IT VC deal activity by quarter



Source: PitchBook • Geography: Global • *As of March 31, 2024

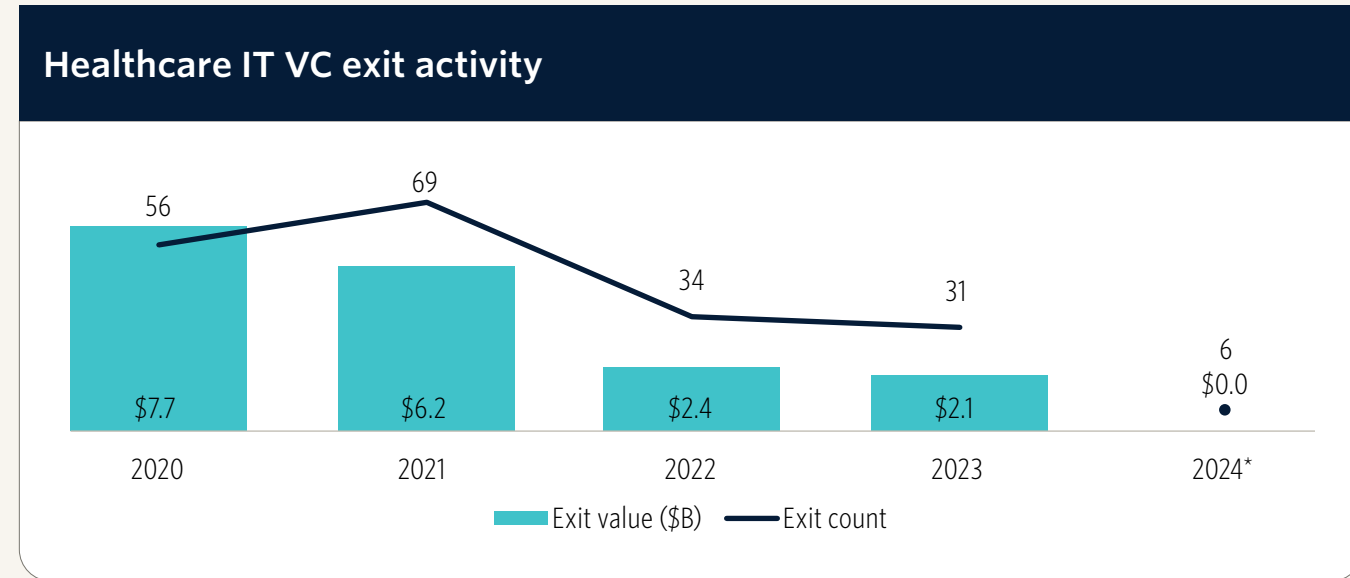
Healthcare IT PE deal count by quarter



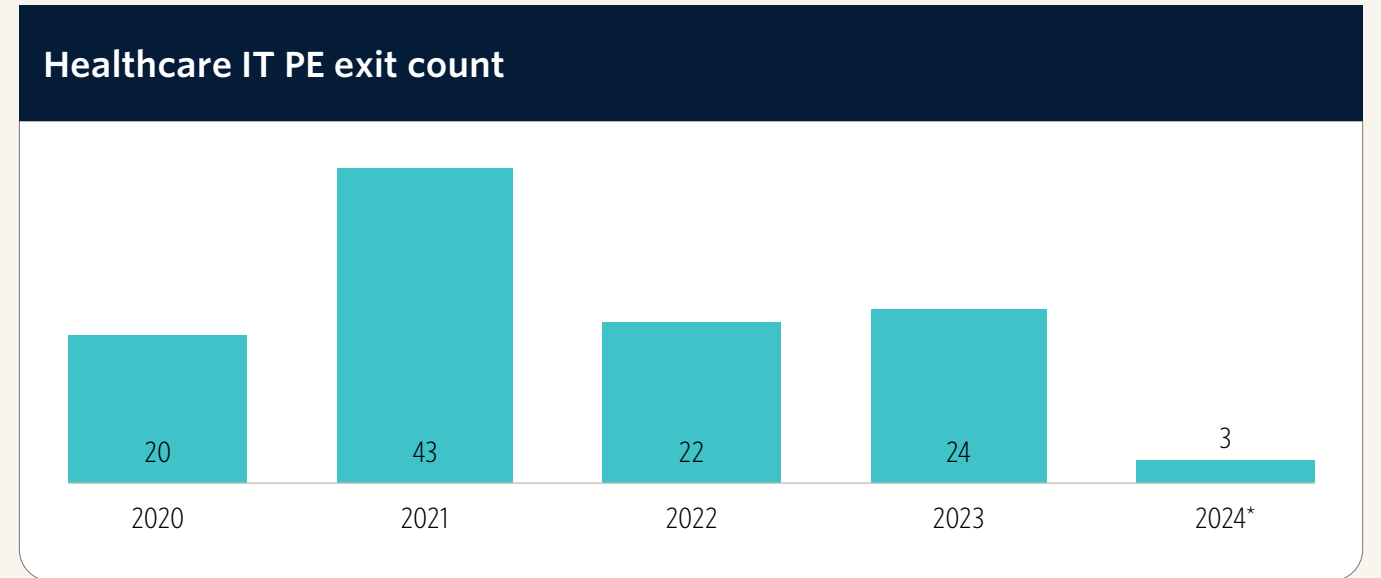
Source: PitchBook • Geography: Global • *As of March 31, 2024



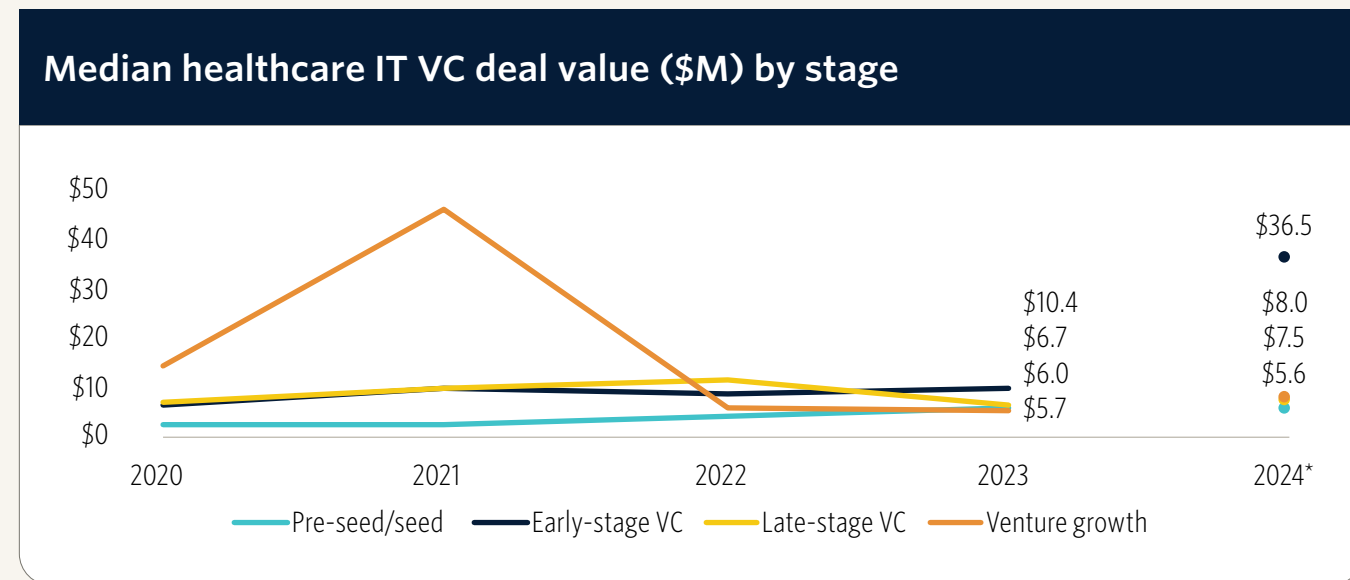
VC AND PE ACTIVITY



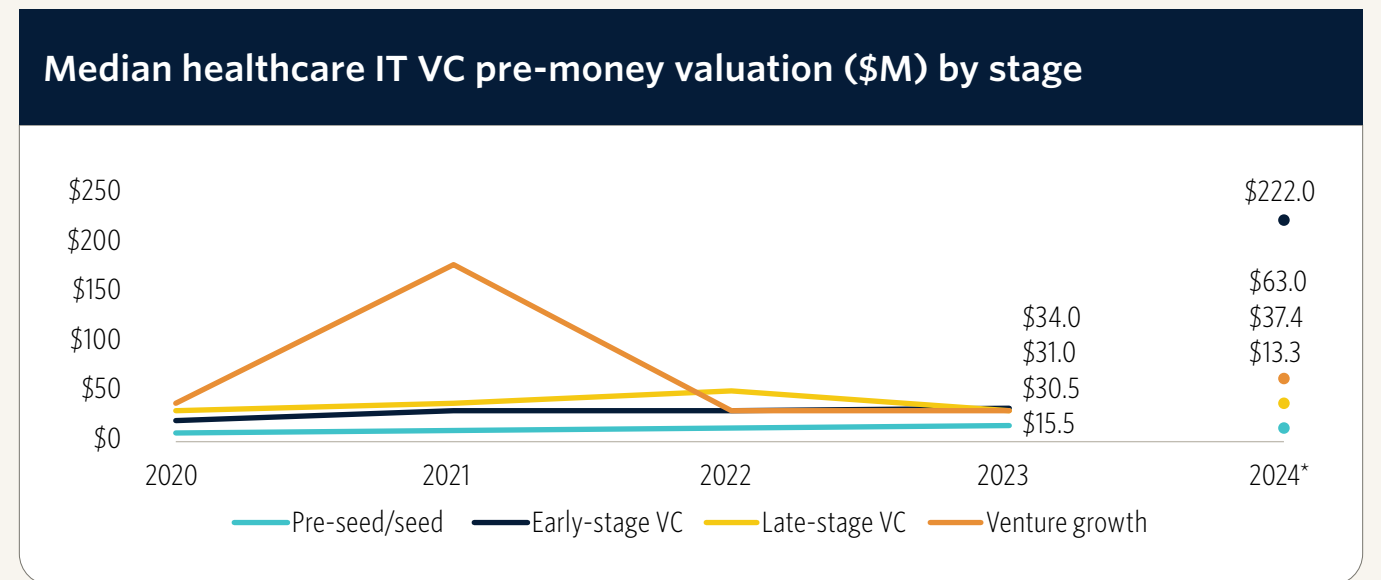
Source: PitchBook • Geography: Global • *As of March 31, 2024



Source: PitchBook • Geography: Global • *As of March 31, 2024



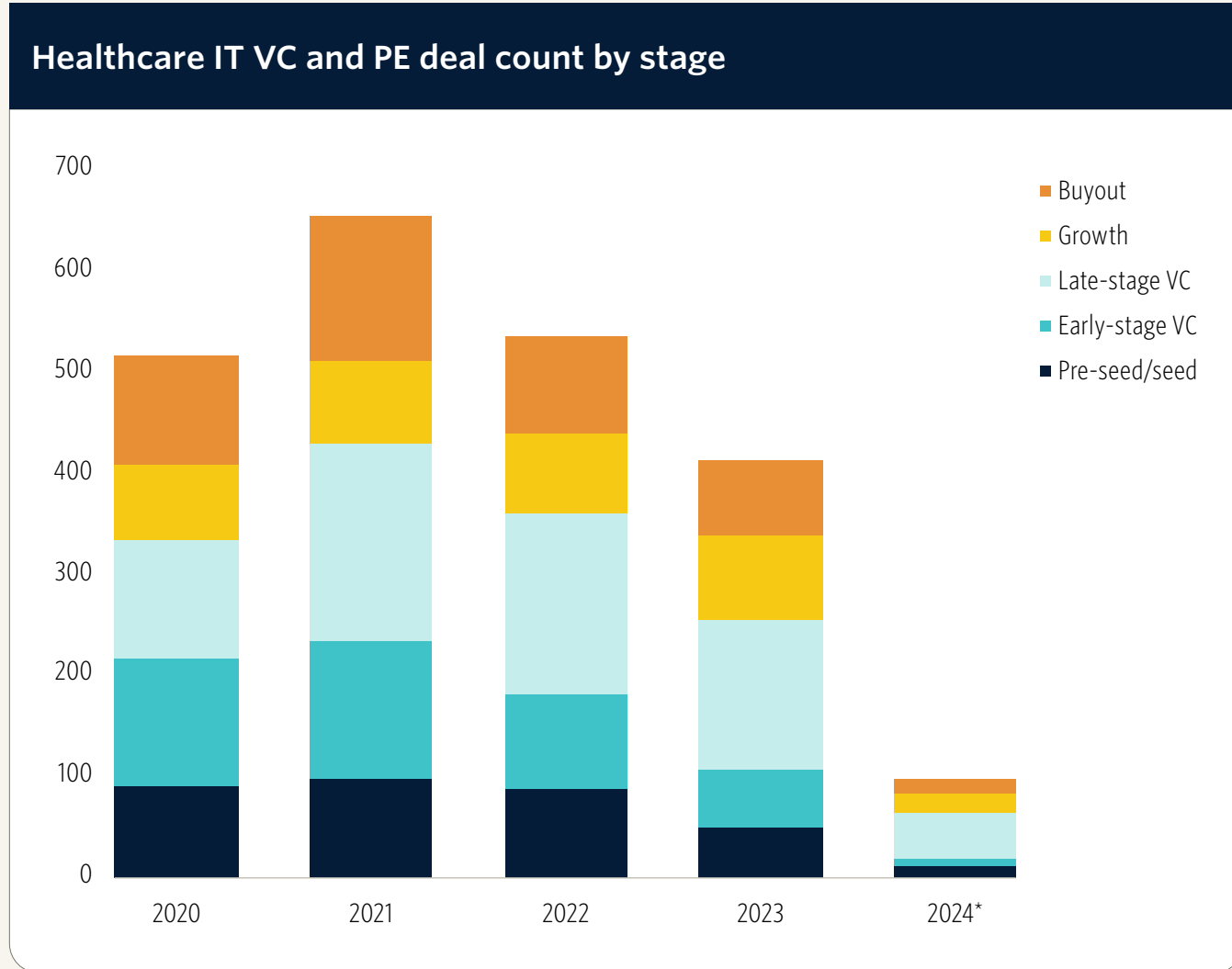
Source: PitchBook • Geography: Global • *As of March 31, 2024



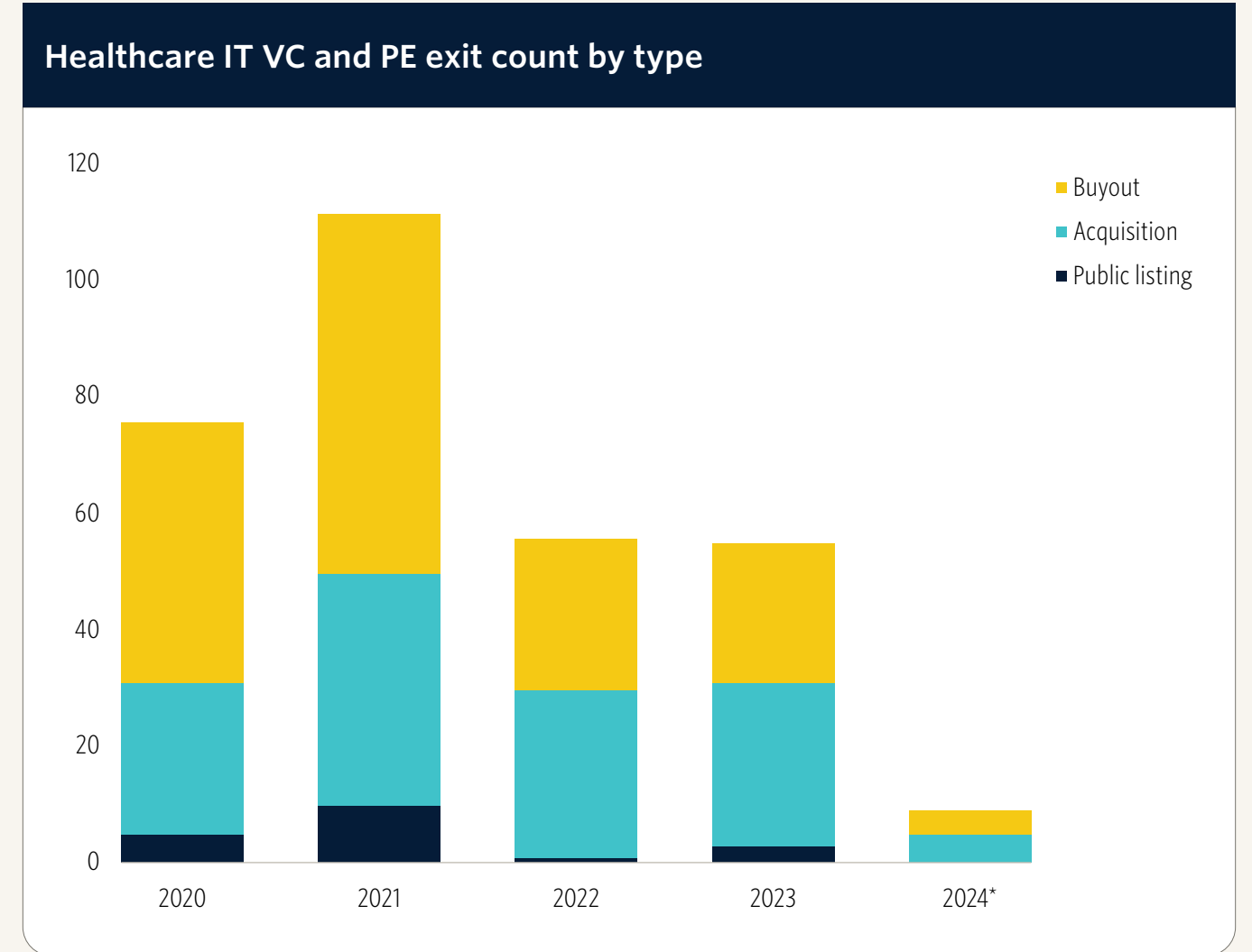
Source: PitchBook • Geography: Global • *As of March 31, 2024



VC AND PE ACTIVITY



Source: PitchBook • Geography: Global • *As of March 31, 2024



Source: PitchBook • Geography: Global • *As of March 31, 2024



VC AND PE ACTIVITY

Key healthcare IT early-stage VC deals in Q1 2024*

Company	Close date	Category	Deal value (\$M)	Deal series	Lead investor(s)
Tennr	March 26	Process automation	\$18.0	Series A	Andreessen Horowitz
Hippocratic AI	March 18	Process automation	\$55.0	Series A	General Catalyst, Premji Invest
Rad AI	March 8	Clinical documentation	\$63.0	Series B	N/A
Plenful	March 7	Process automation	\$17.0	Series A	TQ Ventures
Chamber Cardio	March 6	VBC enablement	\$8.0	N/A	General Catalyst
Fabric	February 21	Resource management & procurement	\$60.0	Series A	General Catalyst
Anatomy Financial	February 13	Billing and coding	\$7.6	N/A	Lightspeed Venture Partners
Medical Force	February 7	Vertical EHRs & enterprise systems	\$10.2	N/A	N/A
Quantile Health	February 2	Patient payments	\$7.7	N/A	Munich Re Ventures
Codex	February 1	Patient & member engagement	\$11.0	N/A	N/A

Source: PitchBook • Geography: Global • *As of March 31, 2024



VC AND PE ACTIVITY

Key healthcare IT late-stage VC and venture-growth deals in Q1 2024*

Company	Close date	Category	Deal value (\$M)	Deal series	Lead investor(s)
Abridge	March 29	Clinical documentation	\$150.0	Series C	Lightspeed Venture Partners, Redpoint Ventures
HiLabs	March 11	Directories, credentialing & networks	\$39.0	Series B	Denali Growth Partners, Eight Roads
CodaMetrix	February 29	Billing & coding	\$40.0	Series B	Transformation Capital
Reveleer	February 26	Revenue optimization	\$65.0	N/A	Hercules Capital BDC
HealthSnap	February 21	RPM software	\$25.0	Series B	Sands Capital
Cylera	February 5	Security, identity & access	\$26.0	Series B	N/A
Cohere Health	January 26	Billing & coding	\$50.0	Series B	Deerfield Management
Amigo Tech	January 26	Practice management	\$32.7	N/A	N/A
Artisight	January 11	Resource management & procurement	\$42.0	Series B	N/A
Nabla	January 5	Telemedicine enablement	\$24.0	Series B	Cathay Innovation

Source: PitchBook • Geography: Global • *As of March 31, 2024



VC AND PE ACTIVITY

Key healthcare IT PE deals in Q1 2024*

Company	Close/announced date	Category	Deal type	Lead investor(s)
Accuhealth	March 28	RPM software	Buyout	Sunstone Partners
RevSpring	March 12	Patient & member engagement	Buyout	Frazier Healthcare Partners
Cerbo	March 1	Generalist EHRs & enterprise systems	Minority	Applied Equity Partners
Cotiviti	February 14	Payer workflow tools	Buyout	KKR
Vigilanz	February 5	GRC & quality assurance	Buyout	Inovalon Holdings (Insight Partners, et al.)
OnPoint Healthcare Partners	January 16	Process automation	Minority	Peloton Equity
American HealthTech	January 16	Vertical EHRs & enterprise systems	Add-on	PointClickCare (Dragoneer Investment Group, et al.)
digmed	January 16	Surgery operations	Add-on	Logex Group (Summa Equity, Thoma Bravo)
Metadata	January 9	Payment integrity	Add-on	MedRisk (CVC Capital Partners, The Carlyle Group)
Ezderm	January 2	Vertical EHRs & enterprise systems	Buyout	Serent Capital

Source: PitchBook • Geography: Global • *As of March 31, 2024



VC AND PE ACTIVITY

Top strategic acquirers of healthcare IT companies since 2021*

Acquirer	Deal count	Investor type
Dedalus	7	PE-backed company
Netsmart Technologies	6	PE-backed company
Enovation	4	Corporation
Symplr	4	PE-backed company
Intelrad Medical Systems	4	PE-backed company
ModMed	4	PE-backed company
HST Pathways	3	PE-backed company
Agilio Software	3	PE-backed company
PointClickCare	3	PE-backed company
Datavant	3	PE-backed company

Source: PitchBook • Geography: Global • *As of March 31, 2024

Top strategic acquirers of healthcare IT companies since 2021 (continued)*

Acquirer	Deal count	Investor type
Cloudmed	3	Corporation
Visma	3	PE-backed company
SDB Groep	3	PE-backed company
Connect America	3	PE-backed company
Zelis	3	PE-backed company
WellSky	3	PE-backed company

Source: PitchBook • Geography: Global • *As of March 31, 2024



VC AND PE ACTIVITY

Top VC investors in healthcare IT companies since 2021*

Investor	Deal count	Pre-seed/seed	Early-stage VC	Late-stage VC	Venture growth	Investor type
General Catalyst	21	3	14	4	0	VC
Andreessen Horowitz	18	4	9	5	0	VC
F-Prime Capital	17	2	10	4	1	VC
500 Global	15	2	2	8	3	VC
Frist Cressey Ventures	14	1	3	10	0	VC
First Trust Capital Partners	14	2	4	7	1	VC
HealthX Ventures	14	2	4	6	2	VC
Alumni Ventures	14	8	2	4	0	VC

Source: PitchBook • Geography: Global • *As of March 31, 2024



VC AND PE ACTIVITY

Top PE investors in healthcare IT companies since 2021*

Investor	Deal count	Primary investor type
TA Associates Management	19	PE/buyout
Hg	13	PE/buyout
Main Capital Partners	13	PE/buyout
Warburg Pincus	13	PE/buyout
Ardan Equity	11	PE/buyout
Francisco Partners	11	PE/buyout
Clearlake Capital Group	10	PE/buyout
Aquiline Capital Partners	9	PE/buyout
PSG	9	Growth/expansion

Source: PitchBook • Geography: Global • *As of March 31, 2024



VC AND PE ACTIVITY

Top VC-backed healthcare IT companies by total VC raised to date*

Company	VC (\$M) raised to date	Category	IPO probability	M&A probability	No exit probability
Miaoshou Doctor	\$815.1	Patient & member engagement	N/A	N/A	N/A
DXY	\$685.0	Provider education & improvement	N/A	N/A	N/A
Aledade	\$677.9	VBC enablement	86%	7%	7%
Cedar	\$619.2	Patient payments	36%	48%	16%
Digital China Health	\$412.3	Data ecosystem	N/A	N/A	N/A
Innovaccer	\$375.6	Multifunctional analytics	89%	9%	2%
Clarify	\$353.0	Multifunctional analytics	62%	31%	7%
ShiftMed	\$350.7	Workforce management	33%	62%	5%
Main Street Health	\$342.0	VBC enablement	18%	59%	23%
Exo	\$320.4	PACS, RIS & clinical image workflows	54%	42%	4%

Source: PitchBook • Geography: Global • *As of March 31, 2024
 Note: Probability data is based on [PitchBook VC Exit Predictor methodology](#).



Emerging opportunities

Diabetes care management

Innovative companies are developing virtual and value-based care (VBC) models for a disease that affects 11.6% of the US population.

The fragmented RPM/CCM landscape

We survey investable opportunities and risks in a category buoyed by expanding reimbursement but hindered by limited clinical adoption.



Diabetes care management

38.4 million people in the US—or 11.6% of the population—have diabetes. These patients are disproportionately nonwhite and socioeconomically disadvantaged and collectively account for around one-quarter of total US healthcare spending.^{1,2} In our [Q1 2024 Healthcare Services Report](#), we unpacked PE’s opportunity in diabetes distribution following on the heels of significant Medicare coverage expansion for continuous glucose monitors (CGMs). Below, we delve into innovations in diabetes care models, including VBC and virtual care, and highlight leading companies in each category.

Value-based diabetes care

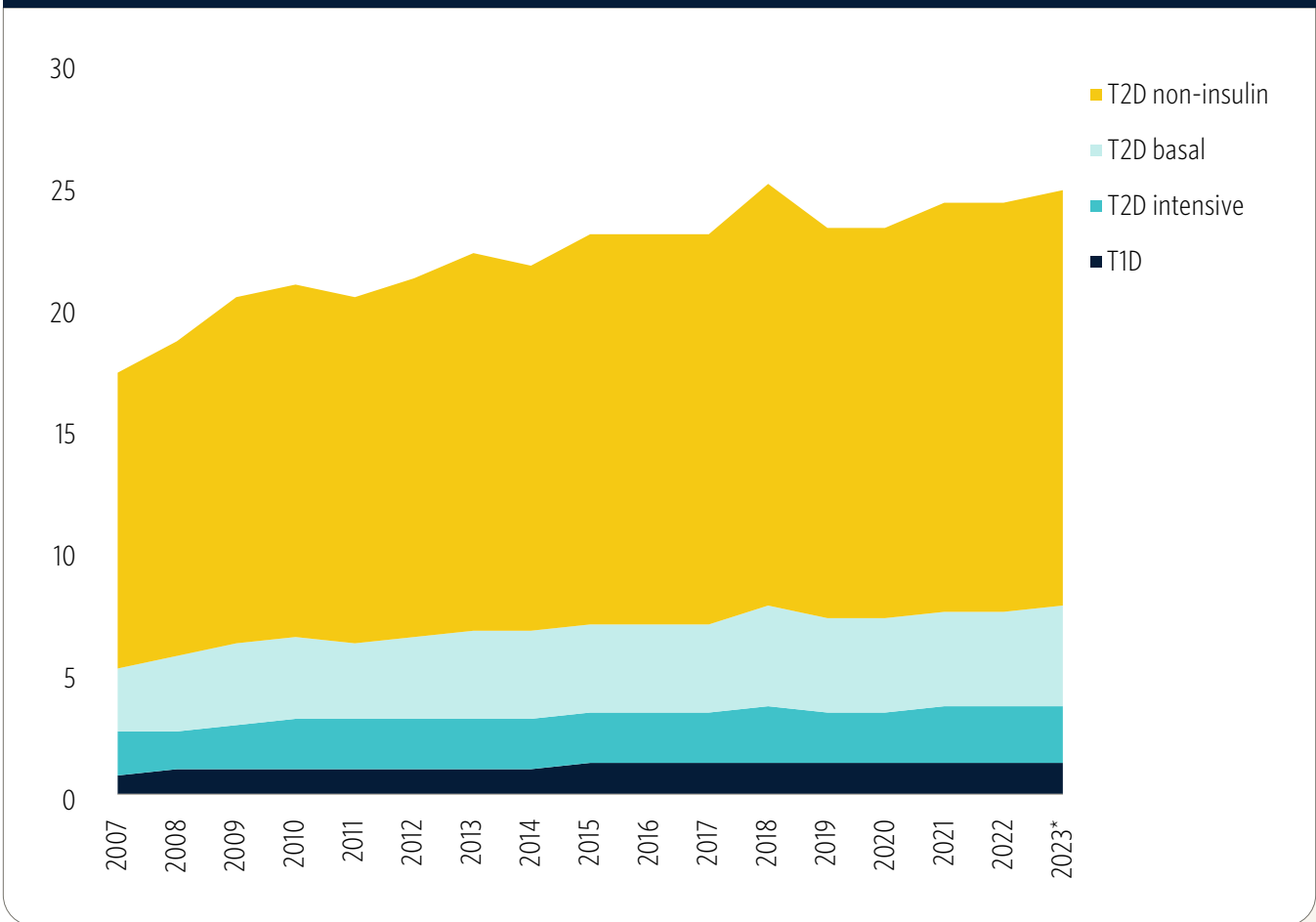
We have [asserted](#) that the primary care VBC enablement model is the most important mechanism by which the VBC transition will take place over the next five to 10 years. Our conversations with both risk-bearing primary care entities and PE and VC investors have made clear that specialty care for high-risk populations is the next frontier for care-model innovation at scale. A number of approaches are being tested, including technology-driven chronic condition programs administered by risk-bearing PCPs, network/preferred provider strategies, bilateral partnerships between primary and specialty care groups, subcapitation to specialists, and direct VBC contracts between payers and specialists for management of specific populations.

We believe there is a significant opportunity to improve diabetes treatment within VBC models. As described later in this section, resource limitations among both primary care and

1: [“National Diabetes Statistics Report,” Centers for Disease Control and Prevention, January 8, 2024.](#)

2: [“New American Diabetes Association Report Finds Annual Costs of Diabetes to Be \\$412.9 Billion,” American Diabetes Association, November 1, 2023.](#)

Count of adults (millions) diagnosed with diabetes by treatment type



Sources: Centers for Disease Control and Prevention, US Census Bureau, PitchBook • Geography: Global
*As of December 31, 2023



DIABETES CARE MANAGEMENT

endocrinology practices, coupled with the breadth of the relevant patient population and the lifestyle-driven nature of Type 2 diabetes (T2D), have made implementing robust diabetes management programs difficult.

Diabetes management for primary care

Managing diabetes at a population level is challenging because of the high prevalence of the disease, its lifetime duration, and the need for regular patient engagement between visits to support lifestyle changes and adjust treatment programs. This is compounded by provider workforce shortages. 85% of people with diabetes, including most T2D patients, have their disease managed by a PCP.³ However, because PCPs operate relatively low-margin practices with large patient panels, they are often unable to devote significant staff time to between-visits monitoring and engagement of patients with diabetes. The challenge is particularly pronounced for PCPs who focus on senior populations, because diabetes prevalence increases with age; comparing data from the Centers for Disease Control and Prevention and the census shows that around one-third of Medicare patients have diabetes.^{4,5} Risk-bearing primary care groups and VBC enablers are financially incentivized to improve diabetes management in order to reduce emergency room visits and hospitalizations, and they may track A1C levels as a value-based performance metric (for example, the proportion of patients with diabetes who have an A1C level under 9%). However, even under value-based contracts, many PCPs struggle to effectively manage diabetes cases due to bandwidth constraints and a limited understanding of the disease.

3: ["Primary Care Diabetes Fellowship Programs: Developing National Standards," American Diabetes Association, Clinical Diabetes, Jay H. Shubrook, et al., Clinical Diabetes, January 1, 2021.](#)

4: ["Diagnosed Diabetes - Total, Adults Aged 18+ Years, Age-Adjusted Percentage, National," Centers for Disease Control and Prevention, n.d., accessed May 16, 2024.](#)

5: ["2023 National Population Projections Tables: Main Series," United States Census Bureau, October 31, 2023.](#)



[Stability Health](#) offers a diabetes management solution to risk-bearing primary care providers. The [Stability Health](#) program enrolls patients with A1Cs over 9%, or over 8% for patients with comorbidities. Once patients are enrolled, they are connected with a coach. Using a questionnaire and rules engine based on American Diabetes Association (ADA) care standards, the coach constructs a personalized care plan for the patient. Using this plan, the coach monitors the patient's glucose and other physiologic data and engages with the patient via multiple modalities—including via phone, text, email, and video chat—to support incremental behavior change. Coaches are trained care navigators, and Stability's patient engagement team also includes certified diabetes educators, nutritionists, and registered dietitians. Diabetologists, including specialized nurse practitioners and physicians, do not interact directly with patients but instead review care plans and consult with client PCPs to recommend care adjustments as needed. Stability charges primary care groups a fee per enrolled patient per month that includes both patient and physician support, and the company is willing to put fees at risk. Around 60% of enrolled patients achieve a nearly two-point reduction in A1C after two months of engagement.

By augmenting and improving PCP care for complex diabetes patients, Stability believes it can reduce the total cost of care by around \$2,100 to \$2,200 per member per year on average. Stability's advantage lies in its ability to plug into existing primary-care-centric VBC models without requiring PCPs to share risk. With diabetes patients making up such a large portion of PCP panels, PCPs may be reluctant to subcontract management of this population to another provider because this reduces the share of the premium dollar they manage and, by extension, reduces their margin. All else equal, payers also prefer to consolidate point solutions and maintain primary care attribution models wherever possible.



DIABETES CARE MANAGEMENT

VBC for endocrinologists

Type 1 diabetes (T1D) and severe or complex T2D patients are best managed by a specialist. According to industry sources, there are approximately 6,000 to 6,500 endocrinologists (excluding reproductive endocrinologists) in the US, of which around 1,500 are pediatric endocrinologists. This leaves 4,000 to 4,500 specialists treating the adult population, resulting in an average appointment wait time of approximately three to four months. Endocrinologists are among the lowest-paid healthcare specialists, and the number of providers is declining due to retirements outpacing new fellows. Approximately 80% of endocrinologists are employed by health systems.

Valendo Health

[Valendo Health](#) supports endocrinologist practices in increasing patient access and revenue, including through virtual care, and in eventually moving these providers toward VBC arrangements. One of the company's goals is to help endocrinologists share in the financial upside they create by providing expertise-driven diabetes care. Preliminary data suggests that endocrinologist-managed Medicare fee-for-service (FFS) diabetes patients have fewer complications, fewer ER visits, and a significantly lower total cost of care than PCP-managed patients. These annual savings far exceed an endocrinologist's revenue per patient of around \$300 to \$400 per year, making VBC economics compelling from the endocrinologist's perspective. Additionally, many endocrinologists do not provide effective between-visits care for patients due to limited bandwidth. Even CGM adoption may sit well below eligible patient levels due to onerous prior authorization requirements and a rapidly changing device landscape.

Like its Redesign Health-founded counterpart [CardioOne](#), Valendo follows an approach similar to a management services organization and is initially focused on providing value-add services to endocrinologists in order to build toward alternative payment models. Valendo supports practices in developing team-based and virtual care models as well as in expanding chronic care management, remote physiologic monitoring, and diabetes education services via turnkey, staffed solutions. The company also offers support with data management and EHR implementation, payer contracting, revenue cycle management, network development, and other centralized clinical and administrative services.

Virtual chronic condition management

Virtual chronic condition management encompasses services that are sold primarily to employers and plans and directly engage members via digital modalities, rather than bolt-on services sold to providers.

The virtual chronic condition management market became crowded during the COVID-19 pandemic and has seen a proliferation of diabetes and obesity (metabolic condition) solutions on the heels of the GLP-1 craze. Contrary to market narratives that circulated in 2023, we believe the rise of GLP-1 receptor agonists and other obesity drugs—which were originally approved to treat diabetes almost two decades ago—is actually a net positive for diabetes care plays. GLP-1s help control, but do not cure, diabetes, and the rapid adoption and hefty sticker price of these drugs have pushed payers and employers to look carefully at their diabetes and obesity management programs (or lack thereof) and to seek out providers that can drive adherence to lifestyle modifications and eventually wean patients off of GLP-1s. The obesity drugs gold rush has also drawn numerous established virtual care players as well as well-funded new entrants into the diabetes and weight management space, in many cases with undifferentiated offerings. We expect



DIABETES CARE MANAGEMENT

this noise will eventually quiet as employers and payers sift through the solutions that drive long-term patient engagement and produce a consistently strong return on investment (ROI).

Challenges in the employer channel

Despite these tailwinds in metabolic disease specifically, many employer-channel chronic condition management tools have struggled to reach profitability due to difficulties with driving long-term patient engagement as well as extreme point solution fatigue and benefits-related belt-tightening among employers. In March, the Peterson Health Technology Institute published a paper analyzing costs and care outcomes for some of the leading virtual chronic condition management companies, namely DarioHealth, Glooko, Omada, Perry Health, Livongo, Verily, Vida Health, and Virta Health. The study found that these solutions broadly did not drive enough of a clinical benefit or total cost of care reduction to offset the cost of the solution to the employer/payer, although data used in the study was limited.⁶ Two of the key challenges for these companies are that the patients they manage are not complex or high risk enough to drive meaningful savings relative to cost, and that engagement rates are low even within the eligible population.



[Diathrive Health](#) is one solution taking a differentiated approach by identifying and engaging the highest-risk patients with support services, a best-in-class glucometer, and test strip supplies. The company contracts directly with employers as well as with third-party administrators, pharmacy benefit managers, and benefit consultants and coordinates with PCPs, including direct primary

⁶: [“Digital Diabetes Management Solutions,” Peterson Health Technology Institute, April 19, 2024.](#)

care groups. Nurses and certified diabetes educators engage with patients via the company’s app, which also allows patients to share data and review self-education materials. Although investors are heavily focused on the rapidly growing CGM category, the ADA still recommends that CGM users verify blood glucose using a glucometer twice daily. The company can help clients source wholesale CGMs and works with some payers that are requiring members to engage with Diathrive in order to be eligible for CGM use. Diathrive currently manages approximately 41,000 lives and plans to build risk stratification capabilities so that it can offer more intensive management to rising-risk patients.

Because Diathrive owns its devices, it charges roughly one-third of its competitors’ rates. It has achieved gross margins in excess of 70% and is growing revenue at 60% year over year. Diathrive’s engagement rate for diabetes patients is approximately 80%, and the company bills a per-engaged-patient fee and guarantees direct spending reduction in the vicinity of \$1,500 to \$2,000 per patient per year, determined by a historical claims analysis. We believe cost-effective solutions like Diathrive will be well positioned amid a broader contraction in the virtual chronic condition management category as employers rationalize their specialty benefit partnerships.



Remote monitoring and chronic condition management ecosystem market map

This market map is a representative overview of companies grouped by product/service type and disease focus. [Click to view the full map on the PitchBook Platform.](#)

1 RPM practice extension

Diabetes & obesity

enara Stability HEALTH twenty30health Valendo Health

Heart disease

CardioOne MOVN HEALTH murj nudjhealth NUVOOIR

OCTAGOSHealth PaceMate RECORA Rhythm storyhealth

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The fragmented RPM/CCM landscape

Remote physiologic monitoring (RPM) holds significant promise for improving patient engagement and outcomes, particularly for patients with chronic conditions and higher-complexity patients. RPM is often grouped with other services, including remote therapeutic monitoring (RTM), chronic care management (CCM), principal care management (PCM), and transitional care management (TCM) (see [accompanying table](#)).

In Q1, Sunstone Partners acquired [Accuhealth](#), a leading provider of RCM services with a reported \$30 million to \$50 million revenue.⁷ The firm intends to invest up to \$200 million in the company, including the initial purchase price, over three years. The characteristics that drew Sunstone to the deal include [Accuhealth](#)'s focus on clinical staff recruitment and training, its clinical results, and its strong growth profile, which is in excess of the market growth of 25% to 30% annually. Value creation will include adding services lines such as CCM as well as condition-specific capabilities. We believe this may be a sign of more to come as PE sponsors recognize the consolidation and tech enablement opportunities in RPM. We unpack some of the key opportunities and challenges below.

The key innovation of RPM is that it allows for longitudinal care that extends beyond office visits and into the patient's home and everyday life. RPM equips providers with more complete and contextualized data to understand how their patients are progressing, and it can allow providers to identify rising risks and nonadherence before they escalate into higher-acuity episodes. It can also provide patients with real-time feedback on how their lifestyle and treatment adherence affect health outcomes and, when paired with care navigation or virtual care services, give them a direct line of communication to their healthcare provider when they have questions between visits. RPM is particularly effective in treating chronic and "lifestyle" conditions for which effective biomarker tracking devices have been developed, such as diabetes and heart disease.

⁷: ["Exclusive: Sunstone Makes \\$200M Majority Investment in Accuhealth," Axios, Aaron Weitzman, April 16, 2024.](#)

The RPM segment has benefited from Medicare reimbursement tailwinds in recent years. Beginning in 2021, the Centers for Medicare & Medicaid Services (CMS) allowed RPM to be billed as a service for patients with acute conditions in addition to patients with chronic conditions, and in 2022, the agency introduced CPT codes for RTM and PCM. Under the COVID-19 public health emergency (PHE), certain "established patient relationship" and copay collection requirements were relaxed, which made enrolling patients in RPM programs easier. Although CMS has since allowed these PHE-related provisions to expire, the additional flexibility as well as general enthusiasm around digital and home-based care modalities during the pandemic resulted in a significant expansion of the RPM market.

RPM and CCM landscape

RPM companies may offer clinical monitoring and patient-facing software, clinical services, or, most frequently, a combination of both (see [the RPM and CCM market map](#)). A full turnkey solution typically includes the identification, insurance verification, and enrollment of eligible patients; the securing of patient consent; device shipment and support with device setup; ongoing patient education and compliance management; alert triaging and context gathering; revenue cycle management for all services provided; and clinical and financial program analytics.

In terms of ambulatory providers, RPM is most commonly deployed by primary care, cardiovascular, endocrinology, and nephrology practices. Musculoskeletal, oncology, and behavioral health providers can also engage in remote monitoring and patient management, primarily by tracking patient-reported symptoms rather than device-based data, but this generally does not qualify for RPM billing codes. Health systems also contract with RPM companies,



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Monitoring and care management Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS) codes*

Service	Definition	CPT/HCPCS codes	Earliest Medicare coverage
Remote physiologic monitoring	Collection and analysis of physiologic data that is used to develop and manage a treatment plan related to a chronic and/or acute health illness or condition	99453, 99454, 99457, 99458, 99091	2019
Remote therapeutic monitoring	Management of patients under a specific treatment plan using medical devices that collect nonphysiological data related to therapeutic response	98975, 98976, 98977, 98980, 98981	2022
Chronic care management	Care management and coordination services for patients with two or more chronic conditions	99437, 99439, 99487, 99489, 99490, 99491	2014
Principal care management	Care management and coordination services for patients with one chronic condition	99424, 99425, 99426, 99427	2020 (HCPCS codes), 2022 (CPT codes)
Transitional care management	Care management and coordination services for patients following discharge from an inpatient setting	99495, 99496	2013

Source: PitchBook • Geography: US • *As of May 14, 2024



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especially for home-based post-acute care. Payers and other risk-bearing entities such as accountable care organizations may engage RPM companies to provide enhanced management of high-complexity populations. Some specialty-focused VBC enablers offer RPM as part of a suite of services to help providers transition toward risk-bearing contracts. There is generally a clear divide between virtual chronic condition management companies, which typically contract with employers and plans to provide closed-loop services to members, and traditional RPM providers, which primarily serve government-insured populations and sell their services to providers and payers as an extension of the traditional brick-and-mortar practice.

RPM risks

Barriers to clinical adoption

Despite these tailwinds, RPM has not gained the level of clinical traction that many observers anticipated. There are several key challenges. The first is integrating RPM into clinical workflows. Because physicians are accustomed to structuring their workflows around appointments—and are often on the edge of burnout due to large patient panels and documentation requirements—they often struggle to find time to regularly review patient RPM data. Nursing and care navigation staff are similarly capacity constrained. For this reason, most RPM software providers also offer outsourced monitoring and/or care coordination services. RPM software and service providers typically set alert criteria for flagging patient deterioration or rising risk to the provider, but if this information is presented with too-frequent false positives, insufficient context, or insufficient clarity as to appropriate follow-up actions, the provider may not respond adequately.

These issues are exacerbated when RPM software platforms are built as standalone portals that providers must log into separately from the EHR. Yet this arrangement is common, as EHRs are fundamentally architected around recording discrete patient encounters and do not lend themselves easily to RPM workflows. Finally, many patients struggle to use RPM devices as prescribed. Patient engagement and adherence is a perennial challenge with any longitudinal monitoring or health management solution, and this is exacerbated in RPM because the patient population most likely to qualify and be admitted to RPM programs also skews toward older, polychronic, and socially disadvantaged patients.

Unit economics

RPM can offer ROI under both FFS and VBC arrangements, but margins are often slim. DocGo, a publicly traded RPM provider, has reported EBITDA margins in the mid- to high single digits since 2021, though consensus forecasts expect low-double-digit margins in 2024 to 2026. Gross margins for a healthy staffed RPM business sit in the 40% to 60% range. RPM must be provided by clinical professionals who are eligible to bill evaluation and management codes—that is, physicians, physician assistants, and nurse practitioners. In an FFS contract, providers bill for time units of RPM review and analysis once per 30-day period, and additional revenue may be generated if the need for a virtual or in-person care visit or procedure is identified. RPM services are currently only billable if the patient submits at least 16 readings per 30-day period. Data monitoring, patient engagement, and triage—often performed by nurses or other allied professionals—as well as upfront device costs can quickly eat into the modest revenue generated by RPM codes. In a VBC model, the goal of RPM shifts from billing monitoring codes and driving additional visit volume



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to risk-stratifying patients, preventing emergency department visits and inpatient admissions by identifying deterioration early, and improving treatment plans. In reality, many RPM programs serve both functions simultaneously. Under both payment models, the financial and clinical success of an RPM program is highly dependent on the degree of long-term patient and provider engagement.

Commercial coverage and cost containment

In our conversations with market players, it has become clear that commercial and Medicare Advantage payers are keeping a close eye on RPM expansion to evaluate the effect these services have on overall care utilization and patient outcomes. Commercial payer coverage of RPM is mixed and does not consistently mirror Medicare coverage. To date, RPM has not become a major focal point for cost containment efforts because clinical adoption remains relatively limited. However, widespread clinical adoption would likely prompt payers and utilization management companies to take a closer look at providers billing high levels of RPM services to examine whether these services are clinically justifiable and effective. The increasing cost containment focus on telehealth is one instructive example of this pattern.

RPM opportunities

Continued reimbursement expansion

Despite ongoing challenges, the reimbursement landscape for RPM and related services appears to be moving in a positive direction. In June, the American Medical Association's CPT Editorial Panel will publicize actions from its May meeting, in which it was set to consider revisions to RPM, RTM, and CGM codes to allow clinicians to bill these codes if a patient collects data for two to 15 days in a month (compared with at least 16 days under current guidelines) and if the

clinician spends 11 to 20 minutes on patient consultation (compared with the current threshold of 20 minutes).⁸ This change would increase revenue for existing RPM programs by reducing nonbillable months, because 20% to 40% of RPM patients on average fall short of the 16-day threshold.⁹ It would also enable growth and more reliable income streams for RPM programs in treatment areas that do not necessarily require a daily data reading, such as obesity.

Technology enablement opportunities

At the device and patient engagement level, low-tech solutions such as cellular-connected (rather than Bluetooth-connected) devices and text messaging or phone-call-based communication are sometimes preferable in RPM because they reduce both upfront costs and barriers to adoption. At the call-center level, RPM providers can lean into automation to improve efficiency and care quality. In the future, more care management work may be automatable using AI. [UpDoc](#), an early-stage startup that raised an undisclosed VC round led by Polaris Partners in January 2024, has published results from a randomized clinical trial of 32 T2D patients who take basal insulin showing that its conversational AI medication management solution improved the time to optimal insulin dosing and insulin adherence.¹⁰

We also see opportunities for RPM/CCM players to partner with AI-driven population health analytics companies to improve their ability to identify patients who would most benefit from monitoring or care management, flag rising-risk patients with greater accuracy, and prioritize patient engagement and care navigation outreach. Device data can also be utilized to more

⁸: ["Remote Patient Monitoring: Is a Change Coming for Codes?" Medical Economics, Richard Payerchin, May 7, 2024.](#)

⁹: ["The End of the Public Health Emergency for Physicians: What You Need to Know," Accuhealth, David Medeiros, April 3, 2023.](#)

¹⁰: ["Use of Voice-Based Conversational Artificial Intelligence for Basal Insulin Prescription Management Among Patients With Type 2 Diabetes," JAMA Network Open, Ashwin Nayak, MD, MS, et al., December 1, 2023.](#)



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accurately model clinical and financial outcomes and support risk adjustment. We surveyed major care management companies in our [Q4 2023 spotlight](#) on cost containment. One leading player in this space is [ZeOmega](#), a care management and population health software provider. In 2022, [ZeOmega](#) partnered with [CCS Medical](#), a PE-backed diabetes distributor, to integrate device and care utilization data to inform interventions.

Consolidation opportunities

The RPM landscape is a highly fragmented. We believe investors may begin to aggregate RPM providers in line with long-established trends in other managed services businesses, such as revenue cycle management. Since RPM and CCM/PCM/TCM can be provided to a single patient concurrently, it makes sense to combine these functions, as well as care navigation and case management functions, under one roof. Investors may also seek to combine RPM/CCM companies with durable medical equipment (DME) distributors, particularly in areas such as diabetes, where CGMs can be billed concurrently with RPM. As we wrote in our [Q1 2024 Healthcare Services Report](#), leading DME distributors already have robust patient engagement apparatuses and are increasingly seeking to provide value-add chronic condition management services for payers.

Value creation and due diligence

Value creation levers for an RPM play include increasing call-center efficiency, improving software user experience and connectivity into key EHR platforms, improving revenue cycle management and reporting, adding additional services and therapeutic areas, and scaling service offerings to accommodate a greater portion of the provider's patient panel. One of the key goals for an RPM company is to increase a practice's utilization of RPM among its eligible patient population, which not only helps to grow revenue for the practice but also improves the lifetime value of each client institution from the RPM company's perspective. Additionally, RPM providers must stay abreast of not only reimbursement and payer trends but also developments in the device market. Key due diligence points include patient retention, provider adoption and engagement, ease of coordination between managed services and staff, clinical outcomes, quality of clinical staff recruiting and retention, and margin/unit economics.

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