

Health IT & Health Information Services

Semi-Annual Market Review

January 2019

www.hgp.com



Health IT & Health Information Services: Market Review – January 2019

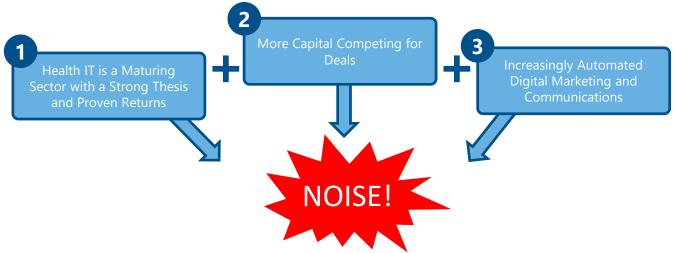
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1 Health IT Executive Summary

It's Getting Louder in Here!

If there is any change that we have noticed in the Health IT M&A and private equity world since HGP's founding in 2006, we would boil it down to one word: **Noise**. Talk to any corporate CEO, and they will tell you that they receive multiple calls or emails in a given day or hundreds of calls in a given year, mostly from private equity (and, admittedly, from our peers in investment banking). The level of noise did not increase overnight, but in the last few years it appears that the competitive dynamics within Health IT private equity have reached a new level of ferocity due to the following:



- As a sector, Health IT has reached a level of maturity that makes it core to the investment thesis of most software- and business services-oriented private equity investors, expanding the number of funds targeting the market.
- The amount of private equity capital has ballooned, and funds, large and small, are widening their investment criteria to compete further downstream, source more creative transactions, or simply pay the highest price. While still remaining disciplined, investors have a surge of capital to put to work across a market of private companies that has not increased at the same rate.
- Private equity investors are increasingly leveraging sophisticated CRMs, company databases and tapping digital communications and content-based marketing to expand their reach and their brands. Many investors utilize these tools to approach deal origination with a volume-based strategy that can dilute the efforts of a value-based strategy for everyone.

Collectively, the number of funds pursuing Health IT, the overall capital base, and number of outbound calls per fund has compounded to a level that is empowering executives and leaving many investors feeling exasperated and sometimes wondering whether winning a deal in this hyper-competitive environment ultimately means they were the ones crazy enough to pay the highest price. Investors will be happy to know that based on our latest Health IT Private Equity Survey, they are not crazy (at least the majority that responded to our survey).

Health IT

Market

Specific

Private

Equity & Structural

Paradiam



1 Health IT Executive Summary

It's Getting Louder in Here!

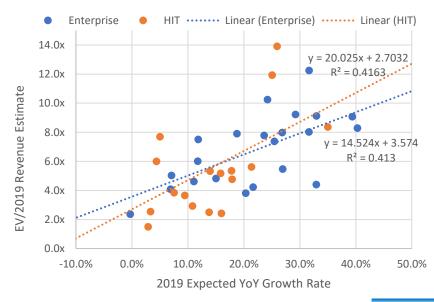
While the market is hypercompetitive and private equity investors may feel as though valuations are priced to perfection, the reality is that investment valuations are priced to perform, and, based on the findings from our latest Health IT Private Equity Survey, they seem to be doing just that:

Aggregate Health IT valuations have remained relatively steady in recent years

We'll be the first to admit that Health IT is as competitive as any segment in the market. And while it may not feel this way, our data indicate that aggregate HIT valuations have been stable in recent years. Valuations ticked up in 2018, a trend we will closely monitor for significance.

Health IT Revenue Multiples by Period							
Date Range	xRev Median	Median Deal Value	# of Disclosed Deals				
2013 - 2014	3.90x	\$109.4	52				
2015 – 2016	3.85x	\$116.6	78				
2017 – 2018	3.74x	\$180.0	60				
2018 Only	4.62x	\$215.7	25				

Health IT trades at comparable valuations to Enterprise SaaS



To make the comparison, we performed a simple regression analysis of Health IT and Enterprise SaaS. Put another way, we compared revenue multiples to growth rates across the two sectors to determine whether the two markets are valued similarly when growth is the primary consideration. As evidenced by the best-fit lines, Health IT trades at comparable valuations to counterparts in Enterprise SaaS, at least using this basic formula across a sample size of 40 publicly traded companies.

Looking at our survey data, in 2016, Health IT was viewed to trade at a premium to Enterprise SaaS. Based on our 2018 data, the results are more evenly distributed such that Health IT is now viewed to trade in-line with Enterprise SaaS.

Does Health IT Trade at a Premium to Enterprise SaaS?						
Response	2016 Survey	2018 Survey				
Yes	52%	34%				
Maybe	34%	45%				
No	14%	21%				

The regression data can be used as a guidepost for SaaS valuations. Using the y-intercept as a measure, at a 0% growth rate a HIT SaaS company can expect to trade at 2.7x revenue. For each 10% increase in growth, there is approximately a 2x increase in revenue multiple, and the steepness of that slope underscores the importance of growth for the public company set. This is just one admittedly oversimplified way of looking at the very complex formula of valuation.



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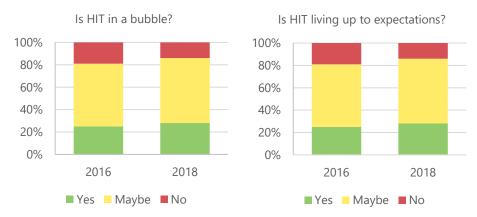
Health IT Executive Summary

It's Getting Louder in Here!

Health IT investments are generally living up to expectations, and, if anything, there is increasing investment interest rather than increasing fear of a bubble

Based on the 105 participants in our 2018 Health IT Private Equity Survey, private equity investors are more than satisfied with their Health IT investment performance and strategy. Only 5% of respondents reported that Health IT is not living up to their investment expectations. When asked whether Health IT is in a bubble, the mix of responses did not shift materially from our 2016 survey, with 28% responding that Health IT is in a bubble today versus 25% two years ago.

Valuations correlate with expectations, and expectations for Health IT are high, but they've been at these levels for years. A breakdown occurs when reality does not meet expectations, and even deep into this investment cycle, this has yet to occur.



Taken together, valuations are priced for performance more than perfection. Given the confluence of favorable fundamentals, the Health IT market is performing and has a strong thesis to do so for years to come. However, valuations are priced with little margin for error, and in order to sustain performance over the course of time, competitive dynamics will force investors to either step up or step out. We hope that amid the moral hazard of healthcare, investors seek the high road of driving strong returns while supporting the greater good of health and wellness.



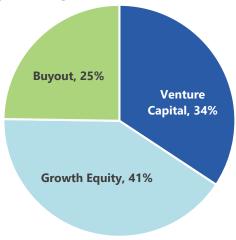
Results and Commentary

Survey Background

HGP surveyed hundreds of private equity funds across all stages and received 105 responses. Responses concentrated toward Growth Equity and Venture Capital investors, who respectively invest in early and earlier stage companies. The distribution of responses across the stages of investing is consistent with the distribution of investment activity across the company lifecycle. The majority of institutionally funded health IT companies are receiving venture and growth investments, with relatively fewer buyout transactions. This investment distribution pattern is consistent across almost any growth industry.

It is important to note that our survey likely has selection bias, which we cannot fully assess given the confidential nature of the survey response data. Anyone with a propensity to respond to a survey about investing in health IT is likely to have stronger interest in health IT than those who did not respond to the survey. Furthermore, we are more likely to generate responses from individuals who are familiar with HGP, and HGP generally interacts with investors interested in health IT transactions. It is safe to conclude that our survey findings have a bias toward respondents who are more interested in health IT investments than not. However, we believe that the data set is broad enough to be meaningful and deliver insights, particularly in mapping out the priorities and criteria of active health IT investors. We begin by summarizing the composition of respondents.

Q1: What type of fund do you manage?



Q2: What is the size of your most recent fund?

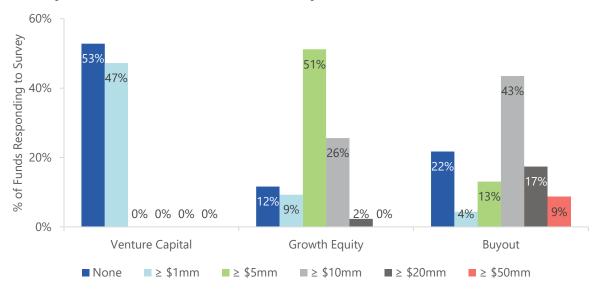
		Most Recent Fund Size						
	< \$100mm	\$100mm - \$500mm	\$500mm - \$1B	> \$1B	Total			
Venture Capital	21	13	1	1	36			
Growth Equity	4	19	11	7	41			
Buyout	3	12	6	4	25			
Total	28	44	18	12	102			

*3 respondents did not answer this question



Results and Commentary

Q3: Do you seek a certain revenue threshold for your investments?



The response to this question highlights the key distinction of revenue criteria between each investor category. 100% of Venture Capital respondents have a revenue threshold under \$5mm with 53% having no revenue threshold at all. This result shows a shift from the 2016 survey results which showed 13% having a \$5mm threshold. This news appears exciting for young companies as it indicates that the vast majority of Venture Capital funds having low thresholds and potentially a large share are willing to invest in companies under \$1mm. However, it is important to note that as the revenue threshold shifts to being entirely \$1mm or none, the opportunity (aka, competitive) set grows larger. Institutional funding for pre-revenue companies remains nearly impossible - with funding odds increasing with the proven background and credentials of the entrepreneur.

On the other hand, 79% of Growth Equity investors require revenue in excess of \$5mm which is consistent with the 83% from the 2016 survey results. However, just over a quarter reported a threshold greater than \$10mm, which is a drop from over half in 2016. This drop is consistent with what we saw among venture investors and is in-line with our perspective that investors across the board are stretching into the lower end of their investment criteria to put capital to work in health IT.

While \$10mm in revenue no longer appears to be a key threshold for Growth Equity investors, it remains key for Buyout investors, with 69% requiring \$10mm as a threshold (exactly the same as 2016). What differentiates Growth Equity from Buyout is control and profitability. Buyout investors typically make control investment by buying out the interests of existing shareholders (secondary purchase), often with the help of debt (or leverage) which generally requires profitability to borrow against. Growth Equity investors may buy some secondary shares, but they mostly deploy cash into newly issued shares of the company that is then utilized to make investments in growing the team, expanding the product, or making acquisitions.



2 HGP 2018 Corporate Survey

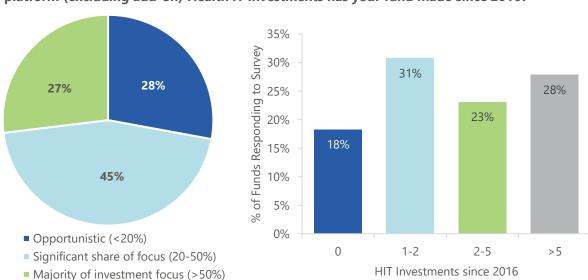
Results and Commentary

Q3: Do you seek a certain revenue threshold for your investments? (Continued)

The data on revenue thresholds underscore the continued immaturity of the health IT market as well as the vast amount of capital chasing a still relatively small sector. Venture Capital and Growth Equity investors continue to shift towards lower revenue thresholds allowing low revenue companies to choose from an increasingly wide array of investors. This relatively low revenue threshold is undoubtedly bolstering valuations, heightening competitive dynamics across investor classes, and creating opportunity for large returns for early stage companies and investors who can grow into this highly sought investment tier. On the other hand, the large number of well-funded vendors makes for a very competitive market landscape.

Due to the scarcity of larger platform investments relative to the supply of capital seeking those investments, many buyout investors are making investments near or even below their minimum investment threshold. This has several implications. For one, buyout investors are competing with Growth Equity investors, resulting in competition that may raise valuations. When reaching downstream, buyout investors are making smaller platform investments but still have the need to deploy capital, which may result in a desire to put additional capital to work through follow-on acquisitions by the platform investment. The latter point is driving significant M&A activity. Private equity backed platforms present an excellent landing spot for earlier stage companies to exit, especially if those early stage companies might consider a deal that involves a portion of the transaction consideration to be paid in the form of rollover equity or earnout.

Q4-5: How do you prioritize Health IT as an investment vertical? Approximately how many platform (excluding add-on) Health IT investments has your fund made since 2016?



We broadly define Health IT as any health software, data, information, consulting, or technology enabled outsourcing company that may serve providers, payers, pharma, employers, or consumers. This includes both health software and health business services.



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HGP 2018 Private Equity Survey

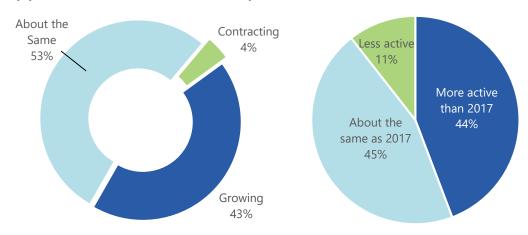
Results and Commentary

Q4-5: How do you prioritize Health IT as an investment vertical? Approximately how many platform (excluding add-on) Health IT investments has your fund made since 2016? (Cont.)

Of the 105 responses to our survey, a little more than ¼ focus the majority of their investments on health IT, a similar share are opportunistic (<20% directed toward health IT), and the remaining 45% focus between 20-50% of efforts on Health IT. This distribution is similar to that of the 2016 results, with a minor shift away from majority to significant focus. In line with our 2016 results, over half of the respondents have completed more than two health investments since 2016, and the percentage completing more than 5 has slightly increased.

While there is some bias in our survey findings, this bias means that our respondents are likely to be more knowledgeable of the health IT space than the typical investor. In our opinion, this makes the following responses more valuable and meaningful to companies in the space.

Q6-7: Is your investment focus on Health IT growing or contracting? How does your Health IT deal pipeline (aka, deal flow) in 2018 compare to 2017?



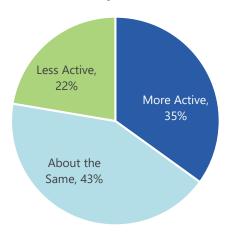
Of the 105 respondents, 43% reported a growing interest in health IT investing and only 4% reported a contracting interest, consistent with 2016 results. 44% reported a more active deal flow and only 11% less deal flow, compared to 38% and 20% in 2016.

This understated question is an incredibly positive signal for the health IT industry. Investors across all classes, Venture, Growth, and Buyout, are showing more interest and seeing more deals in health IT. Effectively, one could interpret this to mean that supply of capital is generally trending upward along with demand for that capital.

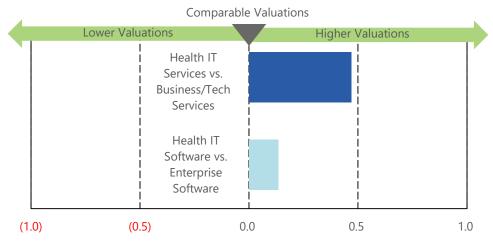


Results and Commentary

Q8: How does your Health IT deal flow compare to other sectors?



Q9: How do Health IT valuations (or valuation expectations) compare to other comparable software or information/business services sectors that you evaluate?



Survey respondents were asked whether Health IT Software and Health IT Services valuations are lower, comparable, or higher than their counterparts in enterprise software and business/ tech services, respectively. With regards to Health IT Services valuations, 55% of respondents claimed higher valuations, 36% comparable valuations, and 8% lower valuations in Health IT Services versus Business/ Tech Services. With regards to Health IT Software valuations, 34% of respondents claimed higher valuations, 45% comparable valuations, and 21% lower valuations in Health IT Software versus Enterprise Software.

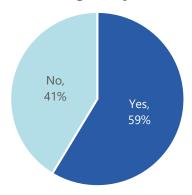
The premium for IT-enabled healthcare services is consistent with our 2016, however health IT SaaS is increasingly coming inline with its counterparts in enterprise software.



Results and Commentary

Q10: Do you have strategic LPs that can serve as potential commercial relationships or business opportunities for your Health IT portfolio companies in a meaningful way?

The market for strategic investments is rapidly evolving. Strategic investing may take many forms in varying degrees of strategic influence. Responses to this question mirror those of 2016 in which 44% of respondents answered "no" and 56% answered "yes". This slight uptick in funds having strategic LPs shows a continuation of the trend we saw in 2016. Key to this trend is greater forgiveness in the market for the conflict-ofinterest that a strategic investment may create. Strategic investors include a cross section of corporate venture capital, healthcare organizations (payers, providers, pharma), and an active mix of institutional private equity with a strong base of strategic limited partners.







Council Capital















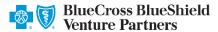




























Merck Global Health Innovation

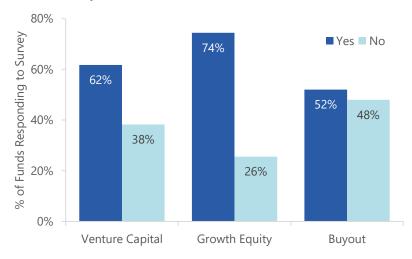






Results and Commentary

Q11: Do you frequently use structure as a strategy (eg, participating preferred) to lift valuations to be more competitive in transactions?



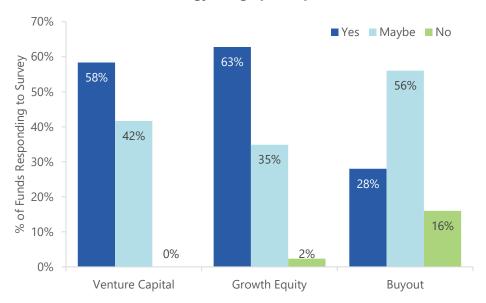
Although some very early stage venture and later stage buyout funds invest in the form of common stock, the majority of minority and partial control investments involve a preferred security. The 2018 results mirror those of 2016, with the exception of buyout shifting more towards "yes", signaling a drop in the use of common stock. Governance preferences that come with preferred securities typically include board seats, investment rights, and operational controls. Financial preferences generally include an array of liquidation rights, such as payment of dividends, anti-dilution, liquidation preferences, and participation. Any and all of these rights juice returns for investors and provide downside protection, sometimes at the expense of other shareholder classes, or worse, at the expense of misaligning the interests of all shareholders on the cap table. However, risk equals return, and whether the risk is in the form of taking on an early stage investment or paying an inflated price, investors will often structure preferences that compensate for the risk they undertake. Structure is frequently used to bolster valuations, a trade that shareholders are often willing to make.

It is admitted a challenge to create perfect alignment across shareholders who invest at different valuations at different stages of the risk cycle. We advise a thoughtful analysis to best align transaction structure with shareholder incentives across all investors and founders, both considering upside and downside scenarios. These models and general common sense should help red flag situations that may cause shareholder misalignment.



Results and Commentary

Q12: Is your Health IT investment strategy living up to expectations?



Investment interest, deal flow, and valuations in health IT track higher than comparable software and business services sectors. We are certain that dozens if not hundreds of private equity investors have set aside larger capital allocations to health IT investing. These trends beg performance questions about the strategy. Overwhelmingly, investors across all classes are satisfied by the performance of their health IT investment strategy and portfolio, more so even than they were in 2016.

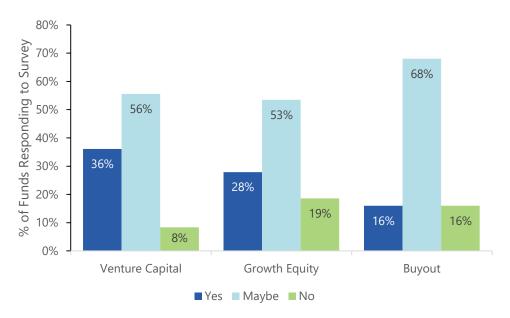
As a whole, only 5% of respondents reported being dissatisfied, a slight drop from 2016. Growth Equity investors had the highest satisfaction, with 63% reporting a health IT investment strategy that lives up to expectations and 35% responding maybe, followed closely by Venture Capital with 58% "yes", 42% "maybe", and 0% "no". Buyout investors showed less conviction, with 56% responding maybe, but only 16% indicating that their health IT strategy is not living up to expectations. Notably, there was an increase this year in Buyout respondents answering "maybe", though results are overall in line with those in 2016. Either investors are delusional, or health IT is proving to be a sound investment thesis.



Results and Commentary

Q13: Do you think Health IT is in a bubble?

As previously discussed, bubble sentiment has changed little in recent years. Investors have a modest weighting toward bubble sentiment, however these results nearly mirror those from our 2016 survey. Bubble sentiment declines as investors progress further along the growth curve, with venture investors reporting bubble behavior at a much higher rate than buyout investors.



Q14: If you haven't made as many Health IT investments as you'd like, what is a common cause?

The responses from this open-ended question generally cut across four themes: challenging business models/ lack of high quality assets, deal sourcing, competition from strategic investors, and valuation. It is notable that in addition to the detailed quotes outlined below, 17 firms simply responded with "valuation" (or a similar variation of this) as to why they have not made as many Health IT investments as they would have liked. Notable responses are included on the following page.



Results and Commentary

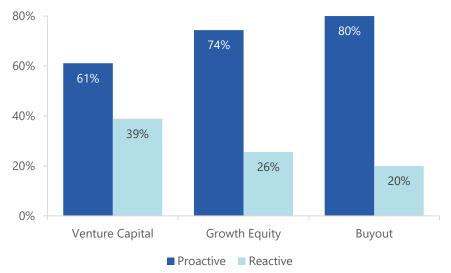
Q14: If you haven't made as many Health IT investments as you'd like, what is a common cause? (Continued)

Category	Fund Comments
Business Model	"Not that many high quality assets out there; lots of gimmicky point solutions with inexperienced entrepreneurs; the high quality companies are going for valuation that will make it tough to have an OK return given the sizable risk still bound to these assets." "Few high quality assets out there, lots of noise; those companies that are notable have insane valuations." "Lack of investible business models" "The stage is too early for us (e.g. the go-to-market plan missing, the product is not yet ready, no initial pilots/customers)."
Deal Sourcing & Investment Strategy	"Limited resources and time spent elsewhere." "Flow of appropriately sized opportunities" "Not seeing enough deals, minimal specialization internally." "Didn't have an operating partner focused on that sector" "Focus on more innovative tech-enabled services models that may or may not have better valuations." "Finding quality deals that meet our investment requirements at a reasonable valuation." "We invest non-control structured equity stakes, and sellers are often times looking for a complete exit given the high multiples." "Lack of knowledge about the specific niche industry." "Round sizes are increasing in size and moving earlier, so that many "Series A" deals that historically would be post-recurring revenue are now during pilot trials or even pre-pilot."
Strategic Competition	"Competitive deal environment makes it difficult to win." "Competitive strategics." "Competition and associated high valuation multiples result in low chance of signing up a deal."
Valuation	17 funds responded "valuation" (responses below are in addition to the 17) "Inflated valuations - there is a lot of money to go around the market right now. It's definitely an entrepreneur's market." "Valuation expectations relative to financial performance." "Valuations are too high at the A, B and beyond ranges (vs seeds that are OK). Given dearth of venture scale exits, it becomes hard to justify investments and there are other sectors where the \$ can go with better success." "Finding the right quality assets at the right price." "Valuations are also significantly higher than years past."



Results and Commentary

Q15: Do you proactively develop a thesis for investing in specific market verticals or do you take a more general, reactive approach to investment opportunities as they present themselves?



A proactive strategy is defined as an investment strategy that targets specific investment opportunities based on a preconceived investment thesis that addresses specific market and competitive dynamics. True proactive investors will filter investment opportunities that do not meet their investment thesis. In order to not limit themselves, proactive investors generally require multiple theses across multiple segments in order to ensure active and diverse deal flow. On the other hand, reactive investors tend to focus less on a market thesis and more on opportunism. In some respects, it is hard to say that the two strategies are mutually exclusive. A reactive investor generally will not make an investment unless it stands up to a strong investment thesis, which may be consciously or subconsciously the rationale behind the positive reaction to the investment. However, the approaches tend to be different. Proactive investors generally pursue a more aggressive outbound campaign of identifying and contacting potential companies that meet their thesis.

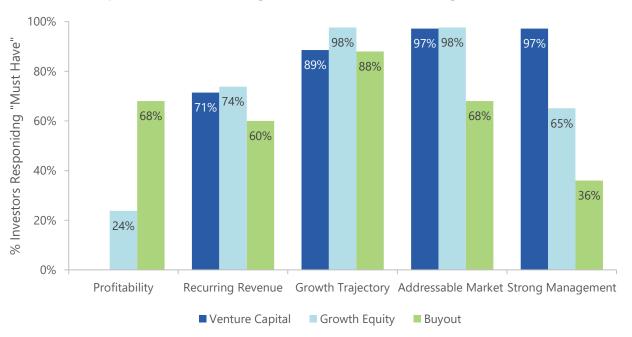
On occasion, HGP makes select investments, and despite our sharp industry focus, we are often reactive investors. As a generalization, two criteria make us react. First, strong, trustworthy, and ideally proven management teams. Second, regardless of market segment or size, we look for companies that offer a go-to market and pricing strategy capable of shortening the sales cycle and aligning value across the conflicting stakeholder incentives that are unique to this complex market. The complexity of the healthcare market makes delivering value and designing a go-to-market strategy around the value proposition as critical and complicated as ever. In this market, it is easy to be misled by theoretically sound solutions that are practically difficult to implement.

The 2018 survey results were overall in line with those in 2016. Venture capital swung towards being more reactive (39% in 2018 vs. 20% in 2016) and growth equity and buyout swung the opposite direction showing a slight increase in proactive responses.



Results and Commentary

Q16: How important are the following characteristics when assessing an investment?



Investment criteria varies widely by stage of investment. In order of priority, Venture Capital investors seek strong management, a large addressable market opportunity, growth, and recurring revenue. This order of priority is consistent with the 2016 results, though there was a notable increase in the number of respondents assigning recurring revenue as a must have (71% vs. 48% in 2016). Profitability is not a requirement for Venture Capital with zero respondents assigning it as a must have, but obviously a path to it and the ability to demonstrate scale is important.

Living up to their categorical name, Growth Equity investors rate growth and addressable market at the top, followed closely by recurring revenue, then strong management. Profitability was of lower importance to Growth Equity investors; however, we believe that most Growth Equity investors will be less forgiving about losses than their Venture Capital counterparts.

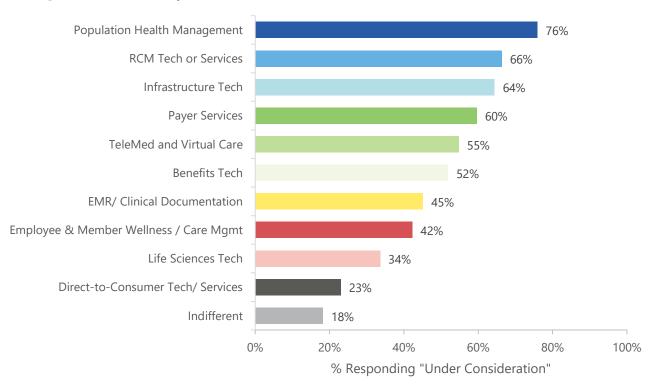
Finally, Buyout investors scored growth trajectory highest, followed by addressable market, profitability, and recurring revenue. There appears to be a larger emphasis on growth trajectory this year than in the past. It is no surprise that profitability is of high priority for these investors as they typically prefer to borrow against a company's profits – as much or more than 6x EBITDA. Similar to 2016, strong management came in last, with only 36% marking it as a must have. This is most likely due to the fact that management shareholders may sell during a recapitalization or buyout transaction, and in many cases, the Buyout investor will install their own executive leadership at the time of investment.

We did not ask what investors avoid. We would guess that most investors avoid companies with large losses with a challenging line of sight to profitability. Second to operating losses would be a low gross margin that makes scalability a challenge. Significant losses even with impressive revenue growth may cause a significant drag on valuation or simply make a company un-fundable or unable to sell.



Results and Commentary

Q17: Within Health IT, which sectors or themes are under consideration for investment?



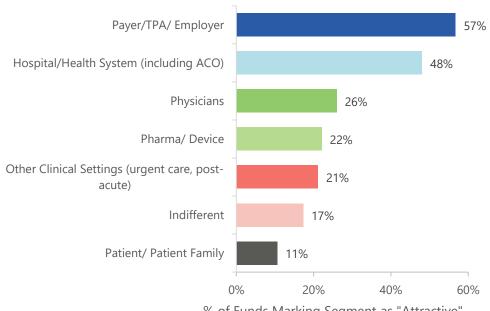
Consistent with our 2016 results, the sector of highest interest is Population Health Management, which generally encompasses technologies and services that support value-based care delivery models as well as the decentralization of care. Revenue Cycle Management is the second most favored sector, closely followed by Infrastructure Technology. We imagine the interest in RCM encompasses both payer- and patient-based payments based on the transaction themes over the last year. RCM leaped from 50% to 66% between our 2016 and 2018 surveys, the largest swing in any subsector.

Additional detail about the sector/theme definitions was provided in the survey question. The survey further defined Population Health Management to include analytics, care coordination, and patient engagement; Infrastructure Tech to include resource management, supply chain, and compliance; and Benefits Tech to include insurance portal, enrollment, and exchanges. Approximately 18% of respondents said they were indifferent (these are probably funds that categorize themselves as Reactive investors), and several investors submitted write-in responses which included clinical coding, digital therapeutics, and data integration amongst others.



Results and Commentary

Q18: What is the most attractive customer segment represented by Health IT companies you evaluate?



% of Funds Marking Segment as "Attractive"

Payer/TPA/Employer took over the top spot in our 2018 survey, with 57% of respondents viewing it as a "Most Attractive" segment. This marks a change from our 2016 survey, which reported Hospital/Health System (including ACO) as the most attractive segment, with 62% of responses. Payer/TPA/Employer received 48% of responses in 2016.

We speculate that Payers/TPA/Employer took over the top spot as a result of the increasing number of self-insured employers since implementation of the ACA. In 2017, 79% of employers with over 200 employees self-insure their health benefits, and 91% of employers with over 5,000 employees are self-insured. The employer is effectively the largest insurer in the United States, and unlike a traditional health insurance company, they are not equipped with the tools required to manage patient populations. And since employers are keenly focused on maximizing profits and enhancing employee satisfaction and retention, this is an extremely attractive customer segment for dynamic companies that offer solutions capable of bending the healthcare cost curve such as population health management, telemedicine, advocacy, care management, predictive analytics, benefits administration, patient engagement, and worksite health.





Health IT Market Trends

HGP Analysis of HIT Sector Valuations

HGP keeps close tabs on M&A valuations to see how the market evolves over time. While we can only draw data from deals we observe with disclosed multiples, we can still get a good sense for how the market values companies within the different subsectors of Health IT. The following table and accompanying box-and-whisker plot show the distributions of revenue multiples in 13 subsectors of Health IT. The sectors were sorted according to median revenue multiple from largest to smallest.

Reported	Deals with Disclosed	Deals with Disclosed .	Revenue Multiple					EBITDA Multiple
2014 – 2018	Revenue Multiples	EBITDA Multiples	25th %-tile	Median	75 th %-tile	Mean	Std. Deviation	Median
Telemed	7	2	4.5x	5.6x	10.0x	7.3x	4.2x	18.1x
Clinical Trial Mgmt	4	3	2.1x	4.5x	6.9x	4.5x	2.7x	12.9x
Analytics	18	8	3.0x	4.2x	5.0x	4.5x	2.4x	16.2x
Population Health	39	10	2.6x	3.9x	6.9x	6.2x	6.1x	14.2x
PM/EMR	33	18	1.7x	3.9x	5.0x	3.6x	2.0x	14.0x
Benefits Mgmt	14	1	2.2x	3.9x	6.8x	5.9x	6.1x	20.0x
Content	14	2	2.8x	3.8x	6.9x	5.0x	3.0x	11.2x
RCM Tech	18	15	2.7x	3.4x	5.3x	4.1x	2.1x	16.0x
Infrastructure Tech	25	17	2.3x	3.2x	5.3x	3.7x	2.0x	11.0x
Utilization Mgmt	7	4	0.7x	2.5x	3.2x	2.7x	2.6x	10.4x
RCM Services	11	9	1.6x	2.3x	3.5x	2.4x	1.0x	9.6x
Consulting	17	9	1.2x	1.7x	2.5x	2.2x	1.4x	9.8x
Outsourced Services	17	10	1.2x	1.6x	2.7x	2.0x	1.2x	9.7x

We believe it's important to keep dispersion in mind when assessing valuation data, which is why we include the 25th percentile, 75th percentile, and standard deviation in our summary statistics. While measures of central tendency like the median and mean are certainly indicative of how buyers are valuing assets, the dispersion shows that with higher multiples, we also see higher risk. This becomes especially apparent when we chart the data using a box-and-whisker plot. While telemedicine, population health, and analytics see the highest median revenue multiples, these sectors also see a large amount of variability and positive skew. For instance, while 25% of the observed population health oriented companies received 6.9x revenue or more in sale transactions during the period, another 25% received less than 2.6x revenue at exit. Companies in these hot spaces cannot forget that they still need to show strong operating metrics in order to recognize premium valuation multiples from buyers.

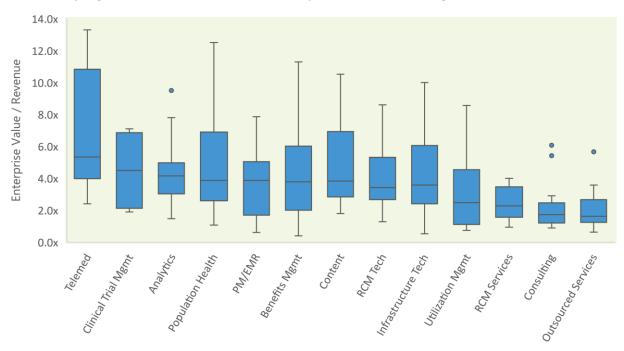


3

Health IT Market Trends

HGP Analysis of HIT Sector Valuations

The box-and-whisker plot graphically displays the Median, 25th Percentile, 75th Percentile, Minimum, and Maximum; where points beyond 1.75 times the Inter-Quartile Range are shown as outliers. The Inter-Quartile Range (blue columns) is the 75th Percentile minus the 25th Percentile and serves to describe the variation in the range of outcomes. Note that point estimates such as the mean or median can often be misleading on their own, as they do not convey the level of variability which can be very high such as in the Telemedicine, Analytics, or Benefits Management sectors.



The sectors were sorted according to decreasing median revenue multiple, and show a trend of decreasing IQR as median revenue multiple decreases. Thus, while companies that fall within sectors further to the right on the graph can expect a lower revenue multiple in a transaction, the transaction is also much more predictable. A company that falls within a sector on the left, however, cannot have as strong a confidence in their expected outcome. These observations follow a common theme in investment theory: that with greater potential upside, there is also greater risk and volatility.

The table on page 22 provides additional context on the valuation trends within each sector as well as a sample of recent transactions within each. While the metrics presented here may be used as a guidepost for expected outcomes, the end result often depends on buyer circumstances as much as on seller or market fundamentals, and buyer circumstances tend to be extremely unpredictable. It is not uncommon for the clearing price of a transaction to be significantly higher than the cover bids. This usually occurs when a buyer has unique circumstances that justify a higher price than the rest of the buyer universe. Identifying those buyers and appropriately positioning in relation to them is part of the art of running a successful transaction process.



3

Health IT Market Trends

HGP Analysis of HIT Sector Valuations

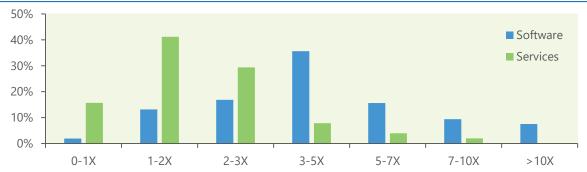
Sector	Description	Representative Deals		
Telemed (7 deals) Median: 5.6x Std. Dev.: 4.2x	Contains a mix of pure telemedicine services and connected device transactions.	PillPack (Amazon), Best Doctors (Teladoc), Advance Medical (Teladoc), Healthiest You (Teladoc)		
Clinical Trial Mgmt (4 deals) Median: 4.5x Std. Dev.: 2.7x	Includes traditional CTMS vendors as well as other vendors that deliver value in the clinical trial process.	Bracket Global (Genstar Capital), Phlexglobal (Vitruvian Partners), NOTOCORD (Instem)		
Analytics (18 deals) Median: 4.2x Std. Dev.: 2.4x	Primarily represents a mix of life sciences and provider analytics, and to a lesser extent, payer analytics.	Explorys (IBM), Truven (IBM), Strata (Roper), IMS (Quintiles), MedeAnalytics (Thoma Bravo)		
Population Health Mgmt (39 deals) Median: 3.9x Std. Dev.: 6.1x	Comprised of patient engagement, provider connectivity, and care management technologies.	Propeller Health (ResMed), Emmi (Wolters Kluwer), Press Ganey (EQT), Wellcentive (Philips), Phytel (IBM)		
PM/EMR (33 deals) Median: 3.9x Std. Dev.: 2.0x	Includes ambulatory, acute, post- acute, alternate site, and departmental EMR/PM systems.	athenahealth (Veritas), Kinnser (Mediware), Mediware (TPG), Netsmart (Allscripts/GI), Merge (IBM)		
Benefits Management (14 deals) Median: 3.9x Std. Dev.: 6.1x	Includes benefits management and admin software companies serving payers and employers.	Connecture (Francisco Partners), HealthX (JMI), Benaissance (WEX), bswift (Aetna), Matrix (Express Scripts)		
Content (14 deals) Median: 3.8x Std. Dev.: 3.0x	Transactions are a mix of online consumer content and provider-oriented clinical content.	WebMD (Internet Brands), Quantum Health (Great Hill Partners), Everyday Health (j2 Global)		
RCM Tech (18 deals) Median: 3.4x Std. Dev.: 2.1x	Includes tech-oriented RCM vendors serving hospitals and physicians, and to a lesser extent, payers.	Cotiviti (Verscend), ABILITY (Inovalon), Zirmed (Navicure), Brightree (ResMed), MedAssets (Pamplona)		
Infrastructure Tech (25 deals) Median: 3.2x Std. Dev.: 2.0x	Compliance and resource management software generally serving provider organizations.	Symplr (Clearlake), Datix (Rothschild), Morrisey (HealthStream), CenTrak (Halma), VendorMate (GHX)		
Utilization Mgmt (7 deals) Median: 2.5x Std. Dev.: 2.6x	Payer-oriented software and services vendors focused on traditional utilization management.	New Century (Evolent), HealthHelp (WNS), Alere (Abbott), HSM & CDMI (Magellan)		
RCM Services (11 deals) Median: 2.3x Std. Dev.: 1.0x	Outsourced revenue cycle management services generally serving hospitals and physicians.	MedPartners (AMN), Intermedix (R1), Anthelio (Atos), Cardon (MedData), Equian (New Mountain)		
Consulting (17 deals) Median: 1.7x Std. Dev.: 1.4x	Project-based IT consulting and staff augmentation companies generally serving provider organizations.	Kinapse (Syneos), Advisory Board (UnitedHealth), HCI Group (Tech Mahindra), CynergisTek (Auxilio)		
Outsourced Services (17 deals) Median: 1.6x Std. Dev.: 1.2x	Includes non-RCM outsourced services primarily serving payers as well as providers.	Sedgwick & MedRisk (Carlyle Group), InVentiv (INC Research) Patriot National (Ebix), HealthPlan Holdings (Wipro)		



Overview

HGP has observed a number of tangible and intangible company and transaction characteristics that typically define where a deal falls on the valuation distribution. Growth, profitability, and recurring revenue are the most commonly identified factors used to justify valuation multiples. Not all health IT companies capture premium valuations just because they operate in health IT. However, those companies that offer a combination of growth, address an unmet need, and fit into the vision of healthcare reform are seeing valuations significantly higher than historical patterns of activity. Premium value is also created when a seller fulfills the specific needs of a buyer at a specific point in time. Timing and serendipity are external factors that play a large and sometimes unpredictable role in the creation of value.

Health IT Revenue Multiples Distribution



Among the many business and market characteristics that drive superior valuations, the following are core components to healthcare IT businesses that have established themselves as outliers:

SaaS Architecture and Delivery

- Single database enabling robust analytics
- Delivery model that creates scale on the cost side, and recurring revenue on the top line

Pricing Alignment with ROI

- Pricing methodology that aligns with customer ROI - the vendor wins when the customer wins
- **Scalable Distribution Model**
 - Efficient distribution model (eg, customer acquisition cost < customer value)
- **Data Rights**
 - Contract structures that contain explicit rights to data

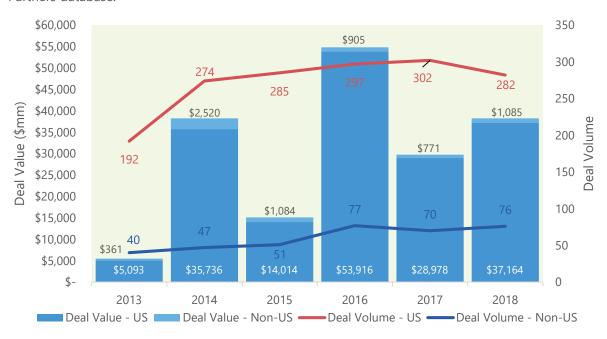
Reform-Centric Value Proposition

- Addresses healthcare structural flaws rather than take advantage of them in an effort to deliver sustainable change in a policy-based environment
- **General Considerations**
 - Market leadership (or opportunity to lead) = favorable supply/demand characteristics at exit
 - · Large and growing market opportunity with strong financial characteristics = recurring revenue and growth, inherent scalability if not profitability, strong management, and size



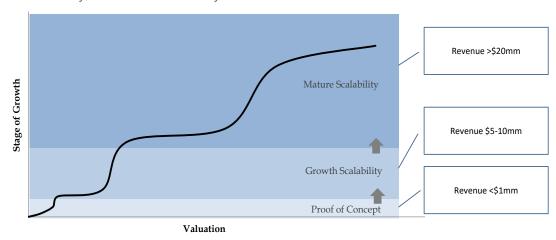
Health IT M&A Activity

The following chart summarizes annual M&A activity since 2013, according to the Healthcare Growth Partners database.



While deal valuation has remained healthy, the volume of Health IT M&A activity seems to have leveled off since 2016, and 2018 has been no exception to that rule. After 372 transactions in 2017, health IT M&A activity remained steady in the 350+ range, closing 358 transactions in 2018. Total transaction value tends to be much more volatile than deal volume since it only takes one or two very large deals to skew the data and the majority of transactions do not disclose value, thus HGP looks toward transaction volume as a better indicator of deal activity.

Generally, sub \$100 million companies have three valuation inflection points: proof-of-concept, growth scalability, and mature scalability.







Health IT M&A Valuation

Proof-of-concept is value created when a company shows that its product can be successfully sold and deployed in a commercial setting. The proof-of-concept inflection point is generally of more importance to venture investors than it is to acquirers, as companies at this stage tend to be too immature to realize significant value through a sale. Growth scalability occurs when an earlier stage company begins to show profitability or at least scale at high levels of growth, although the organization is still small and lean. Mature scalability takes place after a company has matured to a level where it takes on real infrastructure, and the company begins to show strong profitability after building out a mature corporate organization.

Although the size of a company at each inflection point can vary significantly based on a company's product or services and sector, the general rule of thumb in health IT is that proof of concept occurs at revenue of less than \$1 million, growth scalability occurs in the \$5 to \$10 million revenue range, and mature scalability occurs starting in the \$20 million revenue range.

		HIT S	HIT Software Companies			Services Comp	anies
		Revenue Multiple	EBITDA Multiple	Transaction Value	Revenue Multiple	EBITDA Multiple	Transaction Value
	# of Transactions	169	76	174	56	33	56
All Transactions	Median	3.8x	14.0x	\$ 133.40	1.9x	9.8x	\$ 154.36
	Mean	4.8x	15.2x	\$ 544.16	2.3x	10.8x	\$ 637.62
	# of Transactions	44	10	42	14	8	14
<\$30mm Transactions	Median	2.3x	9.3x	\$ 9.50	1.3x	9.0x	\$ 14.70
	Mean	4.3x	10.7x	\$ 11.23	1.7x	9.2x	\$ 13.76
	# of Transactions	33	14	33	12	7	12
\$30-100mm Transactions	Median	3.8x	10.5x	\$ 50.29	1.5x	8.0x	\$ 54.50
	Mean	5.2x	12.5x	\$ 54.48	1.7x	8.0x	\$ 56.99
	# of Transactions	59	26	64	19	11	19
\$100-500mm Transactions	Median	4.2x	14.5x	\$ 207.50	2.1x	10.9x	\$ 247.30
	Mean	4.9x	16.7x	\$ 227.06	2.8x	11.0x	\$ 294.68
	# of Transactions	14	10	16	5	2	5
\$500mm-\$1B Transactions	Median	4.6x	16.1x	\$ 712.50	2.7x	11.5x	\$ 690.00
	Mean	5.0x	16.9x	\$ 684.03	2.8x	11.5x	\$ 665.64
	# of Transactions	19	16	19	6	5	6
>\$1B Transactions	Median	4.4x	15.8x	\$ 2,366.42	2.6x	15.5x	\$ 4,193.29
	Mean	5.0x	16.9x	\$ 3,523.09	2.7x	16.4x	\$ 4,317.16





Health IT M&A Valuation, continued

	HIT Softwa	re Revenue Mul	tiple Distributior	by Target Enterp	rise Value
Percentile	<\$30mm	\$30-100mm	\$100-500mm	\$500mm-\$1B	>\$1B
90 th Percentile	8.5x	10.0x	9.0x	7.3x	8.6x
75 th Percentile	4.4x	6.9x	6.3x	6.5x	6.9x
50 th Percentile	2.3x	3.8x	4.2x	4.6x	4.4x
25 th Percentile	1.7x	2.8x	2.8x	3.8x	3.2x

	HIT Services Revenue Multiple Distribution by Target Enterprise Value							
Percentile	<\$30mm	\$30-100mm	\$100-500mm	\$500mm-\$1B	>\$1B			
90 th Percentile	4.3x	2.6x	5.7x	nm	nm			
75 th Percentile	2.0x	2.4x	3.6x	4.8x	3.3x			
50 th Percentile	1.3x	1.5x	2.1x	2.7x	2.6x			
25 th Percentile	1.0x	1.1x	1.6x	0.8x	2.3x			

Continuing the analysis on the prior page, HGP evaluated the distribution of transaction size by target enterprise value. HIT Software valuations experience a nice inflection above \$30mm in value, which steadily climbs until approximately the \$1B valuation mark. HIT Services multiples experience a similar inflection at \$30mm, and a second inflection at \$100mm especially with higher percentile transactions. The second inflection is in part due to a private equity universe that has expanded leverage capacity for larger transactions, which in turn drives up valuation multiples.

In 2018, Healthcare Growth Partners monitored 358 health IT and related services M&A transactions, compared to 372 transactions in 2017. In terms of aggregate deal size, HGP observed \$38.2 billion of total transaction value in 2018, far surpassing the \$29.7 billion of total transaction value reported in 2017. The median revenue multiple in 2018 was 3.8x for HIT Software, on par from 3.7x in 2017, and 1.9x for Health IT Services, on par for trends from 2017.

Detailed annual trends can be found in the following bar chart. It should be noted that multiple trends can be very volatile given the limited availability of data. Refer to Appendices A and B for a list of notable M&A and Buyout transactions in 2018.



4

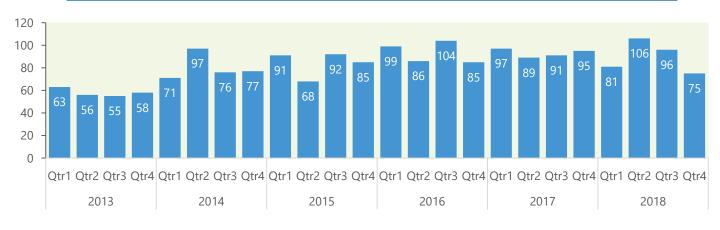
Health IT M&A (Including Buyout)

Median M&A Multiples 2010 - 2018



It is important to note that transaction multiples are based on trailing-twelve-month financial information, assume the achievement of all contingent consideration, such as earnouts, and most EBITDA multiples do not include any adjustments for unusual items. It is also important to note that less than one-third of transactions contain a disclosed multiple, therefore the multiple data represents only a portion of the overall transaction activity.

HIT M&A Deals by Quarter

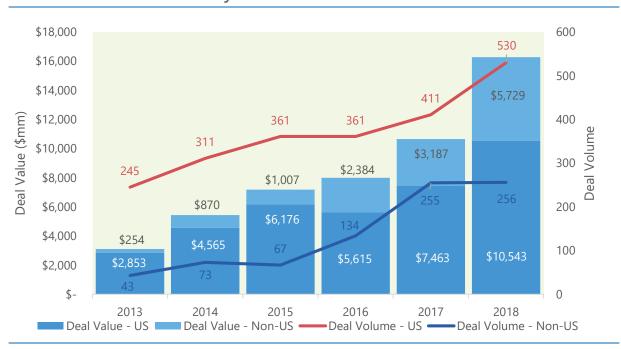




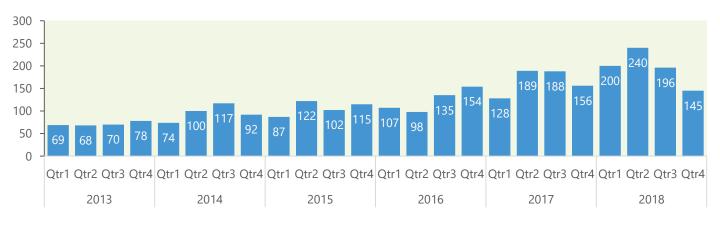
5 Health IT Capital Raises (Non-Buyout)

The chart below summarizes quarterly private-equity and venture capital activity in Health IT and related services since 2013, according to the Healthcare Growth Partners database. The data below and in this section do not include buyout private equity activity. In 2018, Healthcare Growth Partners monitored 786 capital raise transactions, far surpassing the 666 investment transactions in 2017.

HIT Investment Activity



HIT Investment Deals by Quarter



Refer to Appendix C for a list of notable non-buyout capital raises in 2018.



HGP tracks a basket of stock indices within health IT and closely related sectors. It is important to consider sectors outside of pure "HIT" because the universe of health IT and related services encompasses many companies that share similar characteristics to other healthcare sectors. What classifies a company in the universe of health IT and related services, and ideally creates a valuation premium, is a strong information technology and data component that creates scalability and competitive strength. This is particularly relevant to services organizations that use technology and data analytics to streamline their operations. With this in mind, HGP considered six sectors when evaluating the performance of publicly traded companies – details of the components of these sectors can be found on page 32.

2018 was a volatile year for the market, with the S&P 500 setting an all-time record in September and then ending the year down 6.2%. Strikingly, the HGP HIT Index, which gained 25.7% in 2017, ended the year at 14.0%. Historically the leader amongst HGP's Healthcare Indices, this year it was outperformed by the Payers Index which gained 17.4%. The PBM Index, which has been in the crosshairs of both regulatory and competitive moves, was the largest decliner falling 14.2% over the period. Other than PBM & HIT & Payer Services, all of the HGP Healthcare Indices outpaced the S&P 500. The chart and the table on the following page summarize the performance of the HGP health IT and services indices in 2018.

HIT & Related Index Performance 2018

Jan. 30 - Amazon, Berkshire, JPM Partnership announced

Feb. 15 - Roche announces \$2.1B Flatiron acquisition

July 16 – CMS proposes new rule to boost telehealth payments

Nov. 12 – athenahealth enters definitive agreement to be acquired by Veritas

Mar. 8 – Cigna announces Express Scripts acquisition

May 14 - Trump targets Medicare, PBMs in plan to lower drug prices

Aug. 21 – Anthem partners with Walmart to expand access to OTC drugs

Nov. 28 - CVS closes acquisition of Aetna

Jun. 8 – Trump Administration says it won't defend key provisions of the ACA

Jun. 28 - Amazon buys PillPack, online pharmacy, for nearly \$1B

Oct. 15 – CMS proposes to require drug manufacturers to disclose prices in ads

Dec. 14 - Federal court rules Obamacare unconstitutional



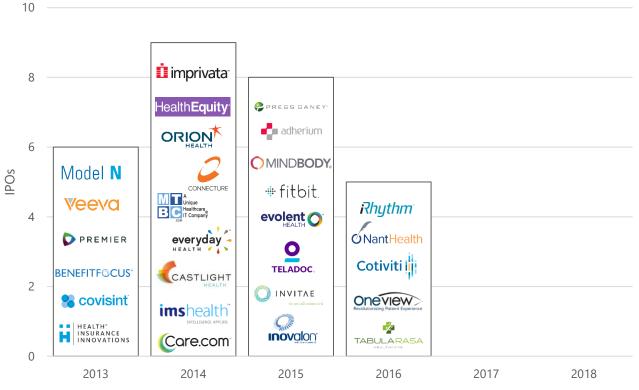


2	2018 Index Pe	rformance	
S&P 500	-6.2%	Payers	17.4%
NASDAQ	-3.9%	PBM	-14.2%
CRO	5.7%	Healthcare Services	4.6%
HIT	14.0%	HIT & Payer Services	-6.7%

HIT Index Performance Detail –2018								
Company	Share Price % Change	EV/ Rev	EV/ EBITDA	Company	Share Price % Change	EV/ Rev	EV/ EBITDA	
Allscripts	-33.7%	1.9X	9.7X	iRhythm Technologies	24.0%	11.3X	NMF	
Athenahealth*	0.05%	4.0X	14.4X	Medidata Solutions	6.4%	6.3X	26.3X	
Benefitfocus	69.3%	6.0X	NMF	MINDBODY	19.5%	6.8X	NMF	
Care.com	7.0%	2.8X	17.2X	Model N	-16.0%	2.7X	NMF	
Castlight Health	-42.1%	1.5X	NMF	NantHealth	-82.2%	2.8X	NMF	
Cerner	-22.2%	3.1X	10.8X	NextGen	11.6%	1.9X	12.7X	
Computer Programs & Systems	-16.5%	1.7X	10.8X	NRC Health	2.3%	8.1X	22.8X	
Connecture*	115.6%	NA	NA	Omnicell	26.3%	3.2X	20.4X	
Cotiviti*	38.9%	NA	NA	Oneview Healthcare	-73.3%	2.1X	NMF	
ehealth	121.2%	3.2X	27.6X	Orion Health Group	21.6%	1.3X	NMF	
Evolent Health	62.2%	2.5X	NMF	Premier	28.0%	3.6X	11.2X	
Fitbit	-13.0%	0.4X	NMF	Roper Technologies	2.9%	6.3X	18.1X	
Health Insurance Innovations	7.1%	1.5X	7.6X	Simulations Plus	23.6%	11.7X	NA	
HealthEquity	27.8%	14.9X	NMF	Streamline Health Solutions	-52.1%	1.1X	16.4X	
HealthStream	4.3%	2.6X	14.8X	Tabula Rasa Healthcare	127.3%	6.5X	NMF	
Hms Holdings	66.0%	4.1X	16.1X	Teladoc	42.2%	8.2X	NMF	
Inovalon Holdings	-5.5%	5.6X	18.9X	Veeva Systems	61.6%	17.5X	NMF	
Invitae	21.8%	5.3X	NMF	Vocera Communications	30.2%	6.1X	NMF	
IQVIA	18.7%	3.2X	15.0X					



The Health IT IPO market has all but dried up in the last two years. Following nine IPOs in 2014 (Care.com, IMS, Castlight, Everyday Health, Medical Transcription Billing, Imprivata, HealthEquity, Connecture, Orion), eight IPOs in 2015 (Inovalon, Press Ganey, Teladoc, Evolent, Invitae, Fitbit, Mindbody, Adherium) and five IPOs in 2016 (Tabula Rosa, Oneview, Cotiviti, NantHealth, iRhythm), not a single health IT IPO issued in 2017 and 2018. While the US market has not seen any IPOs since 2016, there were 7 non-US based IPOs in 2018 (Renalytix, 111 Group, MaxQ AI, Voluntis, Qualitas, Ping An Good Doctor, Huami).



Valuation multiples across the healthcare sector remain strong. The HIT and CRO sectors receive the most significant valuation premiums over the rest of the market.

	Revenue Multiples		EBITDA Multiples	
Sector	2018E	2019E	2018E	2019E
Health IT	4.9x	4.2x	15.6x	14.3x
CRO	2.7x	2.5x	15.0x	13.5x
Payers	0.7x	0.6x	11.6x	8.3x
PBM	0.6x	0.5x	8.6x	8.0x
Healthcare Services	1.4x	1.3x	8.9x	8.9x
HIT & Payer Services	1.0x	1.0x	10.0x	8.9x



As discussed previously, HGP tracks six indices across the health IT and services sectors. The components of each index are listed below. Each index is based on an equal-weighted portfolio.

Sector Components

Health IT (HIT)

Allscripts - NAS:MDRX

Athenahealth - NAS:ATHN [Private as of 11/30/18]

Benefitfocus - NAS:BNFT Care.com - NYS:CRCM Castlight Health - NYS:CSLT Cerner - NAS:CERN

Computer Programs & Systems - NAS:CPSI Connecture - PINX:CNXR [Private as of 4/26/18]

Cotiviti - NYS:COTV [Acquired 8/27/18]

ehealth - NAS:EHTH Evolent Health - NYS:EVH

Fitbit - NYS:FIT

Health Insurance Innovations - NAS:HIIO

HealthEquity - NAS:HQY HealthStream - NAS:HSTM Hms Holdings - NAS:HMSY Inovalon Holdings - NAS:INOV

Invitae - NYS:NVTA IQVIA - NYS:IQV

iRhythm Technologies - NAS:IRTC Medidata Solutions - NAS:MDSO

MINDBODY - NAS:MB Model N - NYS:MODN NantHealth - NAS:NH NextGen - NAS:NXGN NRC Health - NAS:NRC Omnicell - NAS:OMCL

Oneview Healthcare - ASX:ONE Orion Health Group - NZE:OHE

Premier - NAS:PINC

Roper Technologies - NYS:ROP Simulations Plus - NAS:SLP

Streamline Health Solutions - NAS:STRM Tabula Rasa Healthcare - NAS:TRHC

Teladoc - NYS:TDOC Veeva Systems - NYS:VEEV

Vocera Communications - NYS:VCRA

Payers - Constituents

Aetna - NYS:AET [Acquired 11/28/18]

Anthem - NYS:ANTM Centene - NYS:CNC Ciana - NYS:CI Humana - NYS:HUM

Molina Healthcare - NYS:MOH UnitedHealth Group - NYS:UNH

WellCare - NYS:WCG

HIT & Payer Services

DXC Technology - NYS:DXC Conduent - NYS:CNDT

Huron Consulting Group - NAS:HURN

CBIZ - NYS:CBZ

DST Systems - NYS:DST [Acquired 4/16/18]

Kforce - NAS:KFRC

Navigant Consulting - NYS:NCI

Accenture - NYS:ACN

CACI International - NYS:CACI

Corvel - NAS:CRVL Tivity Health - NAS:TVTY Magellan Health - NAS:MGLN WageWorks - NYS:WAGE

PBMs - Constituents

BioScrip - NAS:BIOS CVS Health - NYS:CVS

Express Scripts Holding - NAS:ESRX [Acquired 12/20/18]

Rite Aid - NYS:RAD

Walgreens Boots Alliance - NAS:WBA

Healthcare Services - Constituents

Amedisys - NAS:AMED

Brookdale Senior Living - NYS:BKD

Civitas Solutions - NYS:CIVI

Community Health Systems - NYS:CYH Encompass Health Corp - NYS:EHC

Envision Healthcare - NYS:EVHC [Private as of 10/11/18]

HCA Management Services - NYS:HCA

Kindred Healthcare - NYS:KND [Acquired 7/2/18] Laboratory Corporation of America Holdings - NYS:LH LifePoint Health - NAS:LPNT [Acquired 11/16/18]

Mednax - NYS:MD

Quest Diagnostics - NYS:DGX Select Medical Holdings - NYS:SEM Tenet Healthcare - NYS:THC Universal Health Services - NYS:UHS

CROs - Constituents

Charles River Laboratories International - NYS:CRL

Icon - NAS:ICLR IQVIA - NYS:IQV

PRA Health Sciences - NAS:PRAH Syneos Health - NAS:SYNH



7

Macroeconomics

2018 Macroeconomic and Market Summary

2018 for the stock markets will be remembered for its extreme volatility. The stock market experienced its most volatile year in 2018 since the financial crisis of 2008, setting record highs in September and ending with a turbulent crash in December which saw the worst yearly losses since 2008. This volatility is largely attributed to President Trump's trade war, signs of global economic slowdown, political dysfunction, inflation fears, and concern around rising interest rates. The year ended with the government shutdown signaling a continuation of 2018's volatility as we enter the new year.

The S&P 500 closed at an all-time record of 2,930 on September 20, and ended the year down 6.2%. The index moved up or down more than 1% nine times in December alone and 64 times during the year, compared to eight times in all of 2017. Similarly, the NASDAQ ended the year down 3.9% and the Dow Jones ended down 5.6%. Similar (and even worse) swings were felt around the world and few asset classes were spared the volatility. Oil prices experienced short-lived highs in October, only to tumble in the 4th quarter. As expected, the Federal Reserve raised interest rates in December. However, the hike was coupled with an indication of only two more increases in 2019 (lower than the expected three), and slightly lowered economic growth forecasts, spooking investors and sending stocks sliding in response.



For Q4 2018, out of 106 S&P 500 companies, 72 have issued negative EPS guidance, and 34 have issued positive EPS guidance, according to the data provider FactSet. Companies issuing negative guidance account for 68% which, while still below the 5-year average of 72%, demonstrates a growing negative sentiment compared to the 57% for 1H.

The US IPO market hit a 4-year high with 190 IPOs and \$47 billion in proceeds, 32% more than 2017. Biotech companies drove the surge, with Chinese issuers flocking to US markets. The year featured ten billion-dollar IPOs and notable players included AXA Equitable, Spotify, ADT, Dropbox, and Eventbrite. Additionally, 38 tech companies were valued at \$1 billion or more at the time of their IPOs, the most to do so since the height of the dot-com boom. Companies to watch for in 2019 include Uber, Lyft, and Pinterest.

2018 ended up being a banner year for the Venture Capital industry, with \$120.9 billion deployed across 8,948 US venture deals, surpassing the previous record of \$100 billion in 2000. Not as impressive, global M&A deal value amounted to \$3.88 trillion, less than 5% higher than 2017. This slowdown from the impressive rate in 1H is attributed to the escalating trade dispute and increased market volatility.





Health IT Headlines

Overview

Notable headlines from 2018 are outlined in the following pages on a quarterly basis. The headlines in 2018 illustrate the significant influence that policy and regulatory intervention has on the incentives that dictate health IT investment and innovation trends, the increasing vertical integration across healthcare, and the expanding presence of non-traditional companies in the health IT market.

Q1 Headlines

CMS unveils new voluntary bundled payment program

The Bundled Payments for Care Improvement (BPCI) Advanced model is the first advanced payment model launched by the Centers for Medicare & Medicaid Services under the Trump administration, and includes 32 clinical care episodes for participating providers to choose from, according to an announcement from CMS. Twenty-nine of the care episodes included in the model are inpatient, while the remaining three are outpatient, according to CMS. Care episodes in the model include major joint replacement, spinal fusion and both inpatient and outpatient percutaneous coronary intervention.

MedPAC Sinks MIPS, Recommends Alternative Program

The Medicare Payment Advisory Commission (MedPAC) voted 14-2 to in favor of killing the Merit-based Incentive Payment System (MIPS) and replacing it with an alternative model of reimbursement. While the numbers appear to signal a strong consensus for the proposed recommendations, a handful of members who voted to nix the program expressed hesitation.

Trump signs stopgap funding bill with CHIP funding, tax delays

A short-term spending bill funding the federal government through Feb. 8 was signed into law by President Donald Trump on January 22nd, ending a three-day shutdown. The measure, approved by the Senate and House earlier Monday, will also extend funding for the Children's Health Insurance Program for six years, suspend the medical device and health insurance taxes through 2019, and delay the tax on high-cost health plans through 2021.

Rising medical care, drug costs drive growth in health care spending

A report from the Health Care Cost Institute found health care spending for people with employer-sponsored health insurance rose 4.6% from 2015 to 2016, even though utilization has remained steady or fallen. Spending on brand-name prescription medications increased 110% between 2012 and 2016, but utilization fell 38%, while the average price for surgical admissions rose 30% even as utilization dropped 16%, the report shows.

Partnership aims to disrupt health care

Amazon, Berkshire Hathaway and JPMorgan Chase & Co. are partnering on a new venture designed to cut spending on health care while improving services for their US workforces. The independent venture will initially focus on technology designed to simplify and improve the transparency and quality of health care, the companies said.

Roche to acquire Flatiron Health for \$2.1 billion

Flatiron's conceit has been that large amounts of data could be used to speed up and, in some cases, replace the arduous process of conducting clinical trials where patients are randomly assigned to one treatment or another, allowing them to be compared. The data space has heated up as the Food and Drug Administration, spurred by pressure from Congress, has expressed interest in using such "real-world data" in the drug approval process. The FDA itself has been one of Flatiron's collaborators.





Health IT Headlines

Q1 Headlines, cont'd

Medtronic Moves to a New Health-Care Model: Pay Only if It Works

Medtronic, the world's largest medical-device maker, specializing in such products as implantable cardiac devices and insulin pumps, is increasingly signing supply contracts with customers that adjust prices based on how well the products work in patients, rather than simply having the customer pay a fixed per-unit cost regardless of a device's performance in individual patients.

Fed initiative to put patients in control of their health data

The Centers for Medicare and Medicaid Services announced on March 6 at the HIMSS18 conference in Las Vegas the launch of the MyHealthEData initiative, which CMS Administrator Seema Verma claimed is the first time any administration has set in motion a coordinated initiative to truly make patients the focus of the healthcare system by using the federal government's full authority to ensure providers and insurers give patients control of their medical records.

Cigna Is Buying Express Scripts in a \$54 Billion Health Industry Deal

Cigna agreed to buy Express Scripts Holding for \$54 billion in cash and stock, another move toward consolidation between U.S. health insurers and the companies that oversee patients' drug benefits. The acquisition is a shakeup for the industry that runs prescription drug programs for insurers and employers, negotiating prices with drugmakers and sometimes delivering treatments directly to patients. Express Scripts, which manages plans covering more than 100 million people, and its rivals are becoming more aggressive with tactics to control costs, increasingly denying coverage of some drugs or requiring high co-payments for expensive treatments.

Walmart talking with Humana on closer ties; acquisition possible: sources

Should the talks lead to a tieup, it would be the latest deal to bring together a retail chain and a health insurer in the last few months, following CVS Health Corp's \$69 billion deal to acquire Aetna Inc and Cigna Corp's \$54 billion deal to buy Express Scripts Holding Co. Walmart approached Humana earlier this month and the deliberations are preliminary, two of the sources said. While the conversations have focused on new partnerships, an acquisition of Humana by Walmart is also something being discussed, the sources added.

Q2 Headlines

Trump administration eases ACA essential health benefit requirements

The Centers for Medicare and Medicaid Services (CMS) released proposed payment policies for fiscal year 2018 that aim to "reduce burdens for hospitals so they can focus on providing high quality care for patients," CMS Administrator Seema Verma said. The proposed rule would result in 2.9% higher inpatient operating prospective payments, reduce payments to long-term hospitals by nearly 3.75%, and relax clinical quality measure reporting standards for hospitals with an electronic health record system.

CMS proposes new payment model for skilled nursing facilities

The CMS has proposed a value-based payment model for skilled nursing facilities that would increase Medicare payments to participating providers, link reimbursement to health outcomes, ease regulatory burdens and develop new transparency requirements. The agency also proposed updates to rates and payment policies for inpatient rehabilitation facilities, inpatient psychiatric facilities and hospice care.



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Health IT Headlines

Q2 Headlines, cont'd

Trump targets Medicare, PBMs in plan to lower drug prices

The Medicare program could soon see major policy changes by the Trump administration in its quest for lower drug prices, and not everyone is happy. The administration's long-promised blueprint to lower drug prices was not short on proposals to the federal program. Among the many provisions listed include value-based arrangements for drug pricing, more transparency on prescription drug prices, and possible changes for pharmacy benefit managers. HHS Secretary Alex Azar said the administration is looking at allowing private payers to negotiate reimbursement for Medicare Part B drugs used in hospitals and doctor's offices. "More broadly, the president has called for me to merge Medicare Part B drug payments into Part D, where negotiation has been so successful," he said.

Trump administration says it won't defend key provisions of ACA

Legislation that repealed the penalty associated with the requirement that most Americans enroll in health coverage has made the mandate unconstitutional, the Justice Department wrote in a brief filed at a Texas court June 7th. The tax law passed last year also nullifies the Affordable Care Act's provisions that prevent coverage denials for people with pre-existing conditions and block insurers from charging people in the same community different rates depending on their health status, age, gender and other factors.

White House announces plan to reorganize HHS, other federal agencies

The White House Office of Management and Budget has proposed integrating the Supplemental Nutrition Assistance Program into HHS and renaming the agency the Department of Health and Public Welfare as part of a sweeping plan to reorganize the federal government unveiled June 21. The proposal, which faces tough odds of obtaining approval in Congress, also calls for the creation of the Council on Public Assistance, which would supervise food stamps, Medicaid and other programs and have the authority to impose uniform work provisions in those programs.

Amazon buys PillPack, an online pharmacy, for just under \$1B

A week after appointing a CEO for its healthcare joint venture with Berkshire Hathaway and JPMorgan, Amazon announced an acquisition that underscores how it also hopes to have a more direct — and more commercial — role in the world of healthcare in the coming years. The company has purchased PillPack, an online pharmacy the lets users buy medications in pre-made doses. The Boston-based startup PillPack primarily caters to customers who take multiple medications. PillPack streamlines delivery of prescription and over-the-counter medications by pre-sorting them into handy dose packets sent directly to customers' doors nationwide in monthly supplies. The company boasts that it works with doctors and insurance companies to manage refills and cost coverage on customer's behalf. To do so, it holds pharmacy licenses in all 50 states, developed proprietary pharmaceutical software, and is an in-network pharmacy with most pharmacy benefit managers, including Medicare Part D plans—features that were likely eye-catchers for Amazon. News of the deal rattled drug retailers, who have long feared Amazon's entry into their realm. Shares of Walgreens, CVS, and Rite Aid plunged the day of the announcement, collectively losing \$12.8 billion, according to CNBC.





8 Health IT Headlines

Q3 Headlines

CMS suspends \$10.4B in risk adjustment payments to insurers

CMS announced it was freezing billions in risk adjustment payments to insurers on the ACA marketplace, citing a New Mexico court ruling from March. AHIP said the decision would create more market uncertainty and increase premiums.

Healthcare issues to place Kavanaugh nomination in path of political buzzsaw

With the announcement by President Trump that he's nominating Brett Kavanaugh for a position on the Supreme Court, the partisan battle will be fierce in the weeks ahead. Key healthcare issues to be debated include abortion, the Affordable Care Act, and cases involving the federal government's role in influencing medical care and technology.

ResMed, Verily to Form Joint Venture to Help Reach Millions of Untreated Sleep Apnea Sufferers

Combining ResMed's expertise in sleep apnea and Verily's advanced health data analytics technologies, the U.S.based joint venture will study the health and financial impacts of undiagnosed and untreated sleep apnea, and develop software solutions that enable healthcare providers to more efficiently identify, diagnose, treat and manage individuals with sleep apnea and other breathing related sleep disorders.

CMS proposes new rule to boost telehealth payments

In a move that Centers for Medicare and Medicaid Services Administrator Seema Verma described as among "the most significant reductions in provider burden undertaken by any administration," CMS proposed a new rule intended to make big strides in telehealth, documentation requirements and interoperability. On the telemedicine side, the proposal would mean CMS will begin paying physicians for "brief check-ins" via telemedicine as well as remote evaluation of images and videos taken by patients. The proposal isn't carte blanche for telemedicine reimbursement, but it is fairly open-ended. Notably, it would allow providers to bill for a telemedicine check-up that neither stems from nor is followed up by an in-person visit.

CMS to let MA plans negotiate lower prices for Part B drugs

The CMS announced August 7 that it will be allowing Medicare Advantage plans to negotiate lower prices for doctor-administered drugs covered under Part B as part of the Trump administration's broader effort to cut prescription drug costs. Effective next year, MA plans will be permitted to use a cost-saving tool called step therapy, which gives payers the option to offer patients the most-preferred and often least expensive therapy first, before moving them to a more expensive drug if the initial treatment is not effective.

CMS proposes major changes to Medicare's ACO program

The CMS has proposed overhauling Medicare's Accountable Care Organization program, with proposed changes that include limiting from six years to two years the amount of time an ACO can remain in an upside-risk arrangement, authorizing termination of ACOs with multiple years of weak financial performance and allowing certain ACOs under performance-based risk to offer incentives to patients for taking steps to improve their health. The CMS expects the proposal, estimated to save Medicare \$2.2 billion over 10 years, to result in the dropping out of about 107 ACOs.

Amazon, Google, IBM, Microsoft, Oracle and Salesforce pledge to remove interoperability barriers

A broad coalition of technology giants took the stage in an unscheduled session on August 13th at the Blue Button 2.0 Developer Conference in the White House. Specifically, Amazon, Google, IBM, Microsoft, Oracle and Salesforce came together to pledge to remove interoperability barriers. While the companies did not delve into further details, Microsoft Corporate Vice President Peter Lee said his company is committed to removing all barriers to the interoperability of health data.





8 Health IT Headlines

Q3 Headlines, cont'd

Senators confront Azar on drug pricing comments after PBMs refute his testimony

In a letter to Department of Health and Human Services Secretary Alex Azar, Sens. Elizabeth Warren, D-Mass., and Tina Smith, D-Minn., questioned the accuracy of Azar's testimony in which he said PBMs threatened to take drugs off their formulary if manufacturers lowered the price. Warren and Smith subsequently wrote to nine PBMs and drug distributors requesting they respond to Azar's "extremely disturbing allegations." All nine companies denied Azar's claims.

Anthem partners with Walmart to expand access to over-the-counter drugs

The new partnership significantly expands access to OTC drugs and supplies by allowing members to make purchases at any of Walmart's 4,700 locations. "The program with Walmart will allow consumers to pick the shopping method that best fits their lifestyle and the initiative is expected to significantly reduce the out-of-pocket cost burden for those enrolled in Anthem's affiliated MA health plan," Anthem spokesperson Hieu Nguyen said in an email. Walmart says 90% of Americans live within 10 miles of a Walmart. The partnership will also give members access to free two-day shipping on orders \$35 or more.

Cigna, Express Scripts shareholders approve \$67B deal

Cigna's purchase of Express Scripts cleared a key hurdle, gaining approval from shareholders in both companies after a public spat with activist investor Carl Icahn. The deal now faces clearance by federal antitrust regulators.

Genevieve Morris resignation could signal trouble with VA EHR plans

The Department of Veterans Affairs has lost a key IT architect who had been working to ensure that the VA's planned rollout of a \$10bn Cerner electronic health record system comes off without a hitch. The abrupt resignation raises questions as to how that rollout is progressing.

Federal court nixes CMS overpayment rule, handing a big win to Medicare Advantage insurers

Medicare Advantage insurers scored a significant legal victory on Friday when a D.C. federal court struck down a 2014 rule requiring payers to report and return overpayments. The judgment could have significant implications for fraud cases involving Medicare Advantage diagnosis codes.

Cerner President Zane Burke to step down this fall

Cerner President Zane Burke, who first joined the company in 1996 and held several executive roles there before being named president, will step down on Nov. 2. John Peterzalek, Cerner's executive vice president of worldwide client relationships, will take on Burke's responsibilities, with the title of Chief Client Officer, the company said.

Apple Watch Series 4 will have FDA-cleared ECG, fall detection

Apple Chief Operating Officer Jeff Williams announced at Apple's special event in Cupertino that the company has received FDA clearance for both an atrial fibrillation-detecting algorithm and an ECG that will be built into the company's Series 4 Apple Watch, due to start shipping September 21. Williams announced several other new health features as well, most notably fall detection, which takes advantage of the device's new accelerometer and gyroscope.

Elliott Management puts brakes on athenahealth acquisition, causing shares to tumble

The ongoing saga of athenahealth and Elliott Management continues. Shares of the cloud-based health IT company fell sharply Tuesday morning on news that the hedge fund - which has recently been seen as the most likely candidate to acquire the company after a long and contentious courtship - has reportedly recoiled from the \$160 share price.





8 Health IT Headlines

Q4 Headlines, cont'd

CMS proposes to require drug manufacturers to disclose prices in ads

The Centers for Medicare & Medicaid Service issued a proposed rule aimed at increasing drug price transparency and reducing the price of prescription drugs and biological products to consumers by requiring drug manufacturers to include list prices in all direct-to-consumer television advertisements of prescription drugs and biological products for which Medicare or Medicaid reimbursement is available. The specific drugs that would require list price disclosure are those that are used for a 30-day regimen or for a typical course of treatment.

Healthcare.gov system breach may have exposed info of 75K people

The CMS said it has detected a breach in a government computer system used by agents and brokers to assist consumers with health plan enrollment through the Affordable Care Act exchange, and it potentially exposed the personal information of roughly 75,000 individuals. The agency said the system has been disabled to implement new security measures and could be restored within seven days.

athenahealth Enters Definitive Agreement to be Acquired by Veritas Capital For \$135 Per Share in Cash athenahealth, Inc. (NASDAQ: ATHN), a leading provider of network-enabled services for hospital and ambulatory customers nationwide, Veritas Capital ("Veritas") and Evergreen Coast Capital ("Evergreen"), announced that they have entered into a definitive agreement under which an affiliate of Veritas and Evergreen will acquire athenahealth for approximately \$5.7 billion in cash.

CVS closes \$69B acquisition of Aetna in a 'transformative moment' for the industry

Aetna is now officially part of CVS Health. The two companies closed the \$69 billion deal on Wednesday, finishing off a vertical merger that makes one of the largest healthcare giants even larger.

"Today marks the start of a new day in healthcare and a transformative moment for our company and our industry," CVS Health President and CEO Larry Merlo said in a statement. "By delivering the combined capabilities of our two leading organizations, we will transform the consumer health experience and build healthier communities through a new innovative healthcare model that is local, easier to use, less expensive and puts consumers at the center of their care."

U.S. healthcare spending growth slows for second year in a row

Healthcare spending growth in the United States slowed for the second year in a row in 2017, mainly due to slower spending growth for hospital care, physician and clinical services as well as retail prescription drugs, according to a report from the U.S. Centers for Medicare and Medicaid Services. National health spending grew at a rate of 3.9 percent to \$3.5 trillion, compared with 4.8% in 2016 and 5.8% in 2015. The low rate of spending growth in 2017 was similar to the average annual growth rate of 3.9 percent seen between 2008 and 2013.

Federal court rules Obamacare unconstitutional — but the law stands for now

A federal judge in Texas rules that the Affordable Care Act is unconstitutional because Congress eliminated the penalty for people who don't sign up for health insurance. He sided with the White House-supported lawsuit brought by 20 Republican state attorneys general, which argued that if the penalty is unconstitutional, then so is the entire ACA. The Trump administration filed a brief asking the court to overturn the ACA's ban on preexisting conditions, opening the door for insurers to once again price coverage based on medical history. The White House also opted not to defend the ACA in court, an unusual move for the executive branch that traditionally defends existing laws. The ruling did not include an injunction, however, so nothing will change until higher courts review the ruling.



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About Healthcare Growth Partners

Healthcare Growth Partners (HGP) is an exceptionally experienced Investment Banking & Strategic Advisory firm exclusively focused on the transformational Health IT market. We unlock value for our clients through our Sell-Side Advisory, Buy-Side Advisory, Capital Advisory, and Pre-Transaction Growth Strategy services, functioning as the exclusive investment banking advisor to over 100 health IT transactions representing over \$2 billion in value since 2007.

Our passion for healthcare inspires us to not only create value for our clients, but to also generate broad, overarching improvements to the functionality and sustainability of health. With our focus, we deliver knowledgeable, honest and customized guidance to select clients looking to execute high value health IT, health information services, and digital health transactions.

Contact Information

Christopher McCord Managing Director chris@hgp.com

2001 Kirby Drive, Suite 814 Houston, TX 77019 (713) 955-7935 www.hgp.com

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Sources of Information:

Pitchbook, CMS, Company press releases, Company SEC filings, Health Data Management, Healthcare Growth Partners database, HealthLeaders Media, HIStalk, Mercom Capital Group, Modern Healthcare, The New York Times, Mergermarket, FierceHealthcare, StartUp Health, Rock Health, Dealogic, and The Wall Street Journal.

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10 HGP Transaction Experience











































































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Strategic M&A Highlights

Quarter	Acquiror	Seller	Seller Description	Deal Size (\$mm)
Q1	Allscripts Healthcare Solutions	Practice Fusion	Developer of a cloud-based electronic health record (EHR) platform designed to connect doctors, patients and data to drive better health and save lives.	\$100
Q1	Elsevier	Via Oncology	Developer of a healthcare software offering evidence-based, point-of-care decision-making tools for oncology practices.	na
Q1	AXA Group	Maestro Healthcare Technology	Developer of an online employee health and benefits platform designed to simplify and personalize how people shop, enroll and live with their benefits.	\$155
Q1	Grifols	MedKeeper	Developer of mobile and web based software applications designed to improve efficiency and compliance in hospital pharmacy operations.	\$200
Q1	StateServ Medical	Network Medical (dba HospiceLink)	Provider of medical cost and benefit management software intended to make better business and provide better care.	na
Q1	Press Ganey Associates	Patient Experience Business of HealthStream	Provider of patient experience services that ensure that the feedback or complaints of every patient reaches the respective healthcare entity.	\$65.5
Q1	WebPT	BMS Practice Solutions	Provider of a physical therapy software designed to manage billing, collection and reimbursement services for rehabilitation providers	na
Q1	Roche Holding AG	Flatiron Health	Developer of a database platform designed to organize the oncology information and make it useful for patients, physicians, life sciences and researchers.	\$2,100
Q1	Hyland Software	Allscripts OneContent	Provider of clinical and financial services supporting the full scope of care delivery processes.	\$235
Q1	R1	Intermedix	Provider of revenue cycle management, practice management and data analytics services to the healthcare industry.	\$460
Q1	Inovalon Holdings	ABILITY Network	Provider of technology platform that provides core connectivity, administrative, clinical, and quality analysis, management, and performance improvement capabilities.	\$1,200
Q1	Cognizant Technology Solutions	Bolder Healthcare Solutions	Provider of healthcare revenue cycle management services.	\$485
Q2	Netsmart Technologies	Change Healthcare (Home Care and Hospice Solutions)	Provider of post-acute care services. The company integrates, shares and analyzes clinical and financial data available, using a suite of software applications, enabling home health and hospice agencies to share clinical, financial and administrative data at nominal costs.	\$167.5
Q2	AMN Healthcare Services	MedPartners	Provider of staffing services in the health information management (HIM) sector including case management and quality care services, clinical documentation improvement, coding compliance, and audit services.	\$195
Q2	Health Catalyst	Medicity	Developer of a data exchange platform that provides clinical data exchange, health information exchange, business intelligence and patient engagement services.	na
Q2	Allscripts Healthcare Solutions	HealthGrid	Provider of a mobile patient engagement platform that offers pre-care notifications, point-of-care registration and post-care follow-up.	\$110
Q2	МТВС	Orion HealthCorp	Provider of revenue cycle management services intended to maximize revenue while reducing operating expenses and creating an efficient workflow.	\$12.6
Q2	IQVIA	Advanced Health Media	Provider of regulatory compliance management systems and logistics services for the pharmaceutical industry.	\$127.5
Q2	ResMed	HEALTHCAREfirst	Provider of health management software services that support managing operations such as electronic medical records, billing and coding, and revenue cycle management operations.	na
Q2	Sun Life Financial	Maxwell Health	Provider of an employee benefits management platform designed to simplify benefits and human resources.	na



Strategic M&A Highlights

Quarter	Acquiror	Seller	Seller Description	Deal Size (\$mm)
Q2	WebMD Health Corp.	Jobson Healthcare Information	Provider of marketing services, information databases, publications, medical education programs, events, and websites for the healthcare sector.	na
Q2	Alight Solutions	Compass Professional Health Services	Provider of a professional healthcare service platform intended to empower employees to make smarter healthcare decisions.	na
Q2	Medidata Solutions	Shyft Analytics	Provider of an analytics cloud platform that offers analytical insights in order to provide new ways to commercialize drugs and measure patient outcomes.	\$195
Q2	Quest Analytics	BetterDoctor	Provider of doctor searching platform that helps to validate and deliver accurate provider data of health plans, health systems, etc.	na
Q2	Verscend Technologies, Inc.	Cotiviti	Provider of payment accuracy and analytics-driven services that helps payers, other risk-bearing healthcare organizations and retailers achieve their business objectives.	\$4,930
Q2	Amazon	PillPack	Provider of online pharmacy services designed to offer medications in personalized packets.	\$1,000
Q2	Exlservice Holdings	SCIO Health Analytics	Provider of health analytic services that offer business services and insights in the areas of payment integrity, risk and care management, value based benefit design, consumer engagement and consumer segmentation.	\$236.5
Q3	Datix	RL Solutions	Developer of a patient safety software.	na
Q3	Bracket	CRF Health	Developer of electronic clinical outcome assessments (eCOA) platform for home and site-based phase I-IV clinical trials	\$1,000
Q3	Global Payments	AdvancedMD	Provider of cloud-based practice management, electronic health records and revenue cycle management services for the independent physician practice market.	\$700
Q3	Best Buy	GreatCall	Provider of mobile based applications and devices for aging consumers.	\$800
Q3	N. Harris Computer Corporation	latric Systems	Provider of report writing services, EMPI services, HIE services, interface engine services, regulatory services, migration services, program and project management services, helping hospitals enhance their IT investments.	na
Q3	RevSpring	APEX Revenue Technologies	Provider of a complete suite of billing cycle services to enable customers to improve efficiency, reduce costs an increase in cash flow.	na
Q3	Evolent Health	New Century Health	Provider of specialty benefit management services focused primarily on oncology and cardiology.	\$217
Q3	Mitchell International	Genex Services	Provider of cost containment and integrated care management services using intelligent systems and 360-degree data analysis	na
Q3	TriMedx	TMX Healthcare Technologies (Aramark divestiture)	Provider of healthcare technology services. The company offers repair and maintenance services along with the outsourcing of clinical engineering services to clinical equipment and healthcare facilities.	\$300
Q3	Relias Learning	OnCourse Learning - Healthcare Business	OnCourse Learning's Healthcare division delivers licensure, regulatory and compliance education solutions throughout the Acute and Post-Acute healthcare industries.	na
Q4	Oracle	goBalto	Developer of a cloud-based software designed to accelerate the speed of clinical research.	na
Q4	Cedar Gate Technologies	Global Healthcare Alliance	Provider of advisory services for prospective bundled payment arrangements, opportunity assessment, alternative payment models, strategic consultation, operational support, and value-based healthcare optimization systems.	\$70
Q4	DXC Technology	Molina Medicaid Solutions	Provider of health care tool management services that include providing design, development, implementation and business process outsourcing services to state governments for the software tool used to manage procedures and computer processing operations.	\$220



Strategic M&A Highlights, cont'd

Quarter	Acquiror	Seller	Seller Description	Deal Size (\$mm)
Q4	Scribeamerica	PhysAssist Scribes	Provider of scribe services. The company provides clerical assistant staffing and medical record services for hospitals in United States.	\$160
Q4	OpenText	Liaison Technologies	Provider of cloud-based data platform as a service intended to combine integration and data management under one platform.	\$310
Q4	ResMed	MatrixCare	Developer of a cloud-based long-term post-acute care software intended to leverage technology to improve quality of life for seniors.	\$750
Q4	Premier	Stanson Health	Developer of a clinical decision support platform designed to reduce low-value and unnecessary care.	\$66.5
Q4	Medtronic	Nutrino	Developer of a virtual nutritionist application designed to offer personalized meal recommendations based on a user's profile, goals, habits, and taste.	\$100
Q4	Virgin Pulse	SimplyWell	Provider of workplace wellness programs intended to improve the health of populations through educating, engaging and empowering individuals to live healthier lives.	na
Q4	ResMed	Propeller Health	Operator of a digital health company intended to improve the management of chronic respiratory disease.	\$225
Q4	Meditech	Centennial Computer Corporation	Provider of EMR technology.	na
Q4	Tivity Health	Nutrisystem	Provider of weight-management products and services including pre-packaged food and diet counseling.	\$1,300
Q4	Change Healthcare	PokitDok	Provider of API platform that enables third-party developers to process eligibility checks, claims, scheduling, payments, and other transactions.	na
Q4	Grand Canyon Education	Orbis Education	Provider of collaborative nursing educational services intended to alleviate nursing workforce shortages through programs focused on academic quality and student preparedness.	\$362.5
Q4	3M	M*Modal Technology Business	Developer of a cloud-based speech recognition solution that transforms voice into text data to capture the complete patient story and codify the doctor's narrative	\$1,000



Financial Sponsor Buyout Highlights

Quarter	Acquiror	Seller	Seller Description	Deal Size (\$mm)
Q1	Undisclosed	Caring.com	Provider of online services which include elder care information and resources including personalized guidance, articles, and other tools.	na
Q1	NovaQuest Capital Management, RTI International	Clinical Ink	Developer of an eSource technology designed to revolutionize clinical research by eliminating paper source documents.	na
Q1	Francisco Partners Management	Connecture	Provider of a Web-based sales, service and process automation platform designed to streamline health insurance distribution.	\$111.9
Q1	Pamplona Capital Management	GetWellNetwork	Provider of patient engagement solutions that help healthcare providers engage, educate and empower patients.	na
Q1	HGCapital	MediFox	Developer of enterprise system software for outpatient and inpatient care providers and therapy practices in Germany. Services include resource and route planning, care and support documentation, management information systems, billing, factoring and administration services.	na
Q1	Clayton, Dubilier & Rice	NaviHealth	Provider of post-acute care management services including benchmarking and analytics, and clinical design and support by utilizing evidence-based protocols and technology-enabled services.	\$650
Q1	HGCapital	Orion Health Group	Developer of healthcare information technology engaged in sales, development, implementation, hosting and support of healthcare software services	\$255
Q1	K1 Capital	PerfectServe	Provider of a clinical communication platform designed to connect staff with physicians	na
Q1	Marlin Equity Partners	Virgin Pulse, RedBrick Health	Developer of employee health engagement platform and employee-centric tools. Provider of technology-enabled enterprise services designed to assist customers in adopting healthier behaviors and making smarter healthcare decisions.	\$156
Q1	Accel-KKR	I-Med S.A.	Operator of a digital health platform that integrates different constituents that participate in the Chilean healthcare market and generates an agile, simple and patient-centered healthcare for the customers	\$82.5
Q1	VSS	Caravan Health	Provider of care advisory services for Medicare ACO's.	na
Q1	Clearlake Capital Group	ProVation Medical	Provider of procedure documentation and clinical decision support solutions for hospitals and ambulatory surgery centers.	\$180
Q1	Renovus Capital Partners	Continuing Education Alliance, and Practicing Clinicians Exchange	Provider of an online healthcare educational platform designed to meet the needs of clinicians. The company offers cardiovascular, respiratory, neurology and urology courses.	na
Q1	Stone Point Capital	Genex Services	Provider of cost containment and integrated care management services using intelligent systems and 360-degree data analysis.	na
Q1	Water Street Healthcare Partners, JLL Partners	Dohmen Life Science Services	Provider of medical communication services including outsourced services and capabilities in the areas of a patient support, supply chain, compliance, finance, and technology to biopharmaceutical companies.	\$537.4
Q1	Parthenon Capital Partners	RedCard Systems	Provider of claims communications, payments and enrollment services.	na
Q1	Parthenon Capital Partners	Trinity Partners	Provider of life sciences consulting services intended to provide strategic insights and analysis for precise decision making.	na
Q1	Rothschild & Co, TA Associates	Datix	Developer of a cloud based patient safety software.	na
Q2	LLR Partners	Medbridge Education	Provider of an education platform that offers evidence-based clinical and professional education and home rehabilitation programming.	na



Financial Sponsor Buyout Highlights

Quarter	Acquiror	Seller	Seller Description	Deal Size (\$mm)
Q2	Great Hill Partners	Vatica Health	Developer of a cloud-based proprietary software that connects healthcare stakeholders to optimize quality and manage risk, leveraging proprietary technology to seamlessly integrate office workflow.	na
Q2	Main Capital Partners	RVC Medical IT	Operator of a healthcare information technology company with a focus on picture archiving and communication system (PACS) and Vendor Neutral Archive (VNA) services.	na
Q2	Water Street Healthcare Partners, JLL Partners	Triplefin	Provider of a customizable program which, driven by its digital platform, incorporates a modular design which patients and pharmacies to improve outcomes and to remove brand challenges with access, acquisition and adherence.	na
Q2	Waud Capital Partners	Pharmacy Partners Holdings	Provider of pharmacy services including patient care, customer service and management services to infusion clinics and physician practices.	na
Q2	Vista Equity Partners	Allocate Software	Developer of workforce management software intended to help healthcare institutions manage their staff safely and efficiently so that they can deliver exceptional care to all their patients.	\$33.9
Q2	Stone Point Capital	Mitchell International	Developer of collision and medical claims software.	na
Q2	Tianjin Dazhen Asset Management, East Ocean Ventures	RADLogics	Developer of a vendor-and modality-agnostic software analytics platform designed to increase radiologist's productivity and accuracy.	na
Q2	Montagu Private Equity	Maincare Solutions	Developer of administrative software and technology services that provide medical imaging, billing, business intelligence and human resources services, and assisting academic hospitals with electronic patient records and information.	na
Q2	Aquiline Capital Partners	Aspirion Health Resources	Provider of a claim management system designed to offer assistance to hospitals and hospital systems on accident cases.	na
Q2	New Capital Partners	Collect Rx	Provider of revenue-cycle-management services intended to reduce large balance collection from patients.	na
Q2	Nautic Partners	PPS Analytics	Developer of electronic medical record (EMR) systems designed to transform data into meaningful and actionable insights.	na
Q2	Norwest Venture Partners	Target PharmaSolutions	Performs clinical information research for diseases caused by Hepatitis C, providing an opportunity to evaluate the impact of changing management paradigms to the level of the individual patient.	na
Q2	Mainsail Partners	FairWarning	Developer of software that provides data protection and governance for core applications, including electronic health records (EHRs), salesforce, & office 365.	\$60
Q2	GPB Capital Holdings	Health Prime International	Provider of platform-agnostic revenue cycle management, electronic health record, transcription, and practice management services.	\$48
Q2	Veritas Capital	GE Healthcare (Information Technology Division)	The division's services include enterprise financial management, ambulatory care management and workforce management.	\$1,050
Q2	Pamlico Capital	Connexin (dba Office Practicum)	Developer of an EHR software developed to connect the community of pediatricians with their patients to foster best practices and healthier lives.	na
Q2	Altaris Capital Partners	Clearwater Compliance	Provider of hospital and health system compliance and cyber risk management services.	na
Q2	Insight Venture Partners		Provider of EHR/PM software and developer of a specialized software focused on Applied Behavioral Analysis (ABA) enabling autistic patients to treat aliments through speech therapies, occupational therapies and PK-12 education.	na
Q2	General Atlantic	Landmark Health	Provider of home-based medical care services intended to deliver comprehensive care to patients wherever and whenever they need it.	na



Financial Sponsor Buyout Highlights

Quarter	Acquiror	Seller	Seller Description	Deal Size (\$mm)
Q3	The TWC Group, Cerberus Capital Management	Patriot National	Provider of comprehensive technology and outsourcing services intended to help insurance companies and employers mitigate risk, comply with complex regulations and save time and money.	na
Q3	WindRose Health Investors (fka MTS Health Investors)	basys	Provider of benefits administration software suites, web-based portals and hosting services that deliver cost-effective and reliable health and pension benefits processing, fund office administration, and reporting services.	na
Q3	Lightyear Capital, Oak HC/FT Partners	TheraNest (Therapy Brands)	Developer of mental and behavioral health practice management software.	na
Q3	Granite Bridge Partners	The Wellness Network	Owner and operator of health education including the Patient Channel, Newborn Channel, Your NICU Baby, HeartCare Channel and MedSerenity Channel.	na
Q3	Vista Equity Partners	Alegeus Technologies	Developer and operator of a consumer healthcare funding platform.	na
Q3	Monroe Capital, Level Capital Partners	S&S HealthCare Strategies	Provider of health plan administration and claims processing services for a variety of self-insured benefit plans, third party administrators, state and federal exchanges, employer groups, insurance companies, and Medicare plans.	na
Q3	Main Capital Partners	Vanad Enovation	Provider of healthcare integration and robotic process automation solutions and services intended to assist clients with their information exchange and integration needs.	na
Q3	Madison Capital Funding	Chemical Computing Group	Developer of molecular modeling software intended to discover, implement, and validate the new scientific methodology.	\$92.5
Q3	Paradigm Outcomes	Adva-Net	Provider of addiction recovery, comprehensive pain and post-acute care management services.	na
Q3	Ancor Capital Partners	STATinMED	Provider of advanced outcomes research, consulting and statistical analysis for pharmaceutical, biotechnology and health information companies.	na
Q3	Stella Point Capital	Vereco	Manages all aspects of hospitals' print ecosystems, including clinical and administrative print activity, equipment infrastructure and leasing.	na
Q3	The Carlyle Group	Sedgwick Claims	Provider of claims processing and productivity management technology services.	\$6,700
Q3	OMERS Private Equity	Paradigm Management Services	Provider of complex and catastrophic medical case management services.	na
Q3	HealthEdge Investment Partners, Brook Venture Partners, Eagle Private Capital	itrac	Provider of technology-enabled practice optimization applications to dental practices including website design and hosting, direct mail campaigns, pay-per-click advertising, reputation management, call tracking and analytics, and continuing education	na
Q4	Pine Tree Equity	RevMD	Provider of revenue cycle management services including revenue cycle outsourcing, early-out self-pay collections and insurance collections.	na
Q4	Clanwilliam Group	Obsidian Healthcare Group	Operator of two healthcare companies allowing it to deliver both collaboratively sponsored medical communications activities and medical education programs across the globe.	na
Q4	Harbour Point Holdings	Insight Telepsychiatry	Provider of telepsychiatry services including assessment, screening, diagnosis, consultations and medication management	na
Q4	TPG Capital	Q-Centrix	Developer of data management applications for hospital and healthcare providers, intended to improve their safety and quality.	na
Q4	ChrysCapital	Gebbs Healthcare Solutions	Developer of revenue cycle management software designed for specific medical billing, health information management and coding needs.	\$140
Q4	GHO Capital	Validant	Provider of compliance and regulatory affairs consulting services.	na





Financial Sponsor Buyout Highlights, cont'd

Quarter	Acquiror	Seller	Seller Description	Deal Size (\$mm)
Q4	Clearlake Capital Group	Symplr	Provider of SaaS web-based vendor credentialing services.	\$550
Q4	GI Partners, TA Associates Management GI Partners, TA Nets Techno		Developer of technology that helps in the integration of patient information and medical records, population health, billing, analytics, and management process services.	\$575
Q4	Vista Equity Partners	Mindbody	Developer of business management software for yoga and Pilates studios, fitness facilities, spas, salons and other retail clients.	\$1,900



Quarter	Investor	Target	Target Description	Raise (\$mm)
Q1	MidCap Financial, Claremont Creek Ventures, Foresite Capital Management, Microsoft, TPG Biotech, WuXi NextCODE, GV	DNAnexus	Developer of a cloud computing platform to manage DNA sequence data.	\$58
Q1	Temasek Holdings, EDB Investments, Arboretum Ventures, 5AM Venture Management, Jazz Venture Partners, Bridge Builders Collaborative	Pear Therapeutics	Develops and offers digital therapies and drug/software combinations to behavioral health disorders.	\$50
Q1	Westview Capital Partners	Jopari Solutions	Provides integrated payment and compliance solutions to worker's compensation, auto, and health insurance industry payers.	na
Q1	GV, Oak HC/FT Partners, F-Prime Capital Partners, Deerfield Management Company, Polaris Partners	Quartet Health	Offers a platform to better connect the patients of primary care physicians with mental health care	\$40
Q1	Bristol-Myers Squibb, New Enterprise Associates, Inova Strategic Investments, Co-win Healthcare Fund, Helsinn Investment Fund, Windham Venture Partners, Maryland Venture Fund	Personal Genome Diagnostics	Engages in the patient-specific analyses of cancer genome using digital characterization and monitoring technologies.	\$75
Q1	Allianz X	American Well Corporation	Operates as a telehealth services company. Operates an online marketplace that offers software, services, and access to clinical services.	\$59.2
Q1	Susquehanna Growth Equity	eVive Health	The company engages in operating a platform which uses predictive analytics to accurately identify which benefits an employee needs and by merging employee data with relevant external data.	\$43
Q1	Five Arrows Principal Investments	CBA Informatique	Provides software and education for French nurses.	\$61.2
Q1	StartUp Health, Wanxiang Healthcare Investments, Prolog Ventures, Digitalis Ventures, 7wire Ventures, Al Life Sciences Investments	CareDox	Operates a care coordination platform for parents and schools to manage and share medical information.	\$16
Q1	Mainsail Partners	Bio-Optronics	Develops, deploys, and operates software products and custom information technology solutions to help healthcare professionals in managing and optimizing workflow.	\$30
Q1	SoftBank Capital, SBI Investment Co.	Ping An Healthcare Management	Provides support to China's public medical insurance services and guidance on medical fees with its health data system.	\$1,000
Q1	Elevate Ventures, Mosaic Health Solutions, HealthQuest Capital, Echo Health Ventures, Cambia Health Solutions, Lewis & Clark Venture Capital	Springbuk	Operates an employer health analytics platform for brokers, vendors/clinics, and employers.	\$20
Q1	Zaffre Investments, Mayfield, Seventure Partners	Zipongo	Provider of a digital nutrition platform designed to improve health outcomes through personalized dietary recommendations.	\$35
Q1	Intermountain Healthcare	R1 RCM	Provides revenue cycle management services for hospitals and healthcare providers.	\$20
Q1	Ping An Ventures, OurCrowd	Tyto Care	Develops a handheld device to perform self- examinations for remote diagnosis.	\$25
Q1	Seventure Partners, Gilde Healthcare Partners, GIMV NV, Lightstone Ventures, Medtronic, New Enterprise Associates	Foundry Innovation & Research 1 (FIRE1)	Developer of novel remote monitoring device designed to improve patient quality of life and patient outcomes.	\$49.6
Q1	NWS Holdings	Medopad	Developer of a remote patient monitoring application, mobile technology and advanced data analytics.	\$28



Quarter	Investor	Target	Target Description	Raise (\$mm)
Q1	Breyer Capital	PAIGE.AI	Engages in clinical diagnosis and treatment oncology through use of artificial intelligence (AI) for treating cancer.	\$25
Q1	Battery Ventures	Curve Dental	Provider of SaaS-based dental practice management software.	na
Q1	Advanced Power Electronics Corporation, SB China Venture Capital	Codoon	Developer of wearable devices, including a wristband, a second generatio bracelet, step counter, Bluetooth body scale, Codoon Candy and Codoon Smile.	\$20
Q1	BlockVC Fund, Blockchain Labo, Blockchaininvest Hedge Fund, Dfund, Preangel, Synco	Medicalchain	A blockchain-enabled telemedicine application developer.	\$20
Q1	Clal Insurance Enterprises Holdings Ltd. (TASE: CLIS), Meitav DASH Investments Ltd (TASE: MTDS)	OrCam	Provider of a portable artificial vision device designed to help the visually impaired understand text and identify objects easily.	\$30.4
Q1	Lemhi Ventures, Ascension Ventures	Bind Benefits	Provider of online platform that focuses on preventive care, primary care, specialty care and chronic care related insurance services and provides information regarding insurance coverage, pricing and treatment options.	\$70
Q1	Sun Life Financial, New Enterprise Associates, Mubadala Investment Company, Maverick Capital, The Founders Fund, GV, Health Velocity Capital, Blue Cross and Blue Shield Association, Sandbox Industries, Noro-Moseley Partners	Collective Health	Provider of self-insurance platform that offers integrated administration of all health plans through a single portal, gives clear guidance, live concierge support and digital tools to find and manage care, enabling users to get connected with medical, pharmacy, dental, and vision plans, all at once.	\$110
Q1	Dragoneer Investment Group	PointClickCare	Leading cloud-based EMR vendor for post-acute care and senior living.	\$146
Q1	Illumina, Kleiner Perkins Caufield & Byers, Mayo Clinic, Sutter Hill Ventures, Warburg Pincus, DFJ Growth	Helix	Provider of a consumer-facing human genome platform created to empower every person to improve their life through DNA.	\$200
Q1	IVP, Redpoint Ventures	Hims	Provider of wellness products for men intended to treat conditions such as baldness, erectile dysfunction, skincare, and nutrition.	\$40
Q1	aMoon Partners, Horizons Ventures Limited	Medial EarlySign	Provider of an advanced Al-based algorithm platform intended to improve patient management and non-communicable disease management.	\$30
Q1	Accomplice, The Durant Company, Mousse Partners, National Football League Players Association, NextView Ventures, Promus Ventures, Thursday Ventures, Two Sigma Ventures, UAE71 Capital	Whoop	A developer of an online health and fitness analytics tool for athletes. The company's performance optimization systems offer a continuous understanding of strain and recovery to balance training, reduce injuries and predict performance.	\$25
Q1	Draper Fisher Jurvetson, Y Combinator, Tencent Holdings, Khosla Ventures, Dolby Family Ventures, Data Collective, Baidu Venture, B Capital Group, Monsanto Growth Ventures	Atomwise	Develops artificial intelligence solutions for drug discovery.	\$45
Q1	Chartered Investment Managers Pte Ltd	ContinUse Biometrics	Provider of a contactless biometric sensor platform intended to continuously monitor physiological state from a distance of up to several hundred meters.	\$20
Q1	Hudson Bay Capital Management	BewellConnect	Developer of connected healthcare devices and remote monitoring software designed to help one take care of themselves and their loved ones.	\$30
Q1	Alphabet, Johnson & Johnson	Verb Surgical	Developer of digital surgery platform includes robotics, visualization, advanced instrumentation, data analytics and connectivity.	\$500



Quarter	Investor	Target	Target Description	Raise (\$mm)
Q1	Rand Capital, F-Prime Capital Partners, Bain Capital	Centivo	Provider of health insurance services designed to help self-insured employers and their employees save money and have a better experience.	\$31
Q1	Venrock, The Founders Fund, Scifi VC, Caffeinated Capital, Ev Williams Obvious Ventures, Creandum, Playground Global	Virta Health	Develops and delivers individualized telemedicine therapies to restore metabolic health in chronic disease patients (mainly those with Type 2 diabetes).	\$45
Q1	Sequoia Capital, Xianghe Capital, Qiming Weichuang Venture Capital, Genesis Capital Advisors, Advantech Capital	Infervision	Develops an artificial intelligence system for analyzing the CT scans and diagnosis of thoracic pulmonary disease.	\$47.4
Q1	Kinship Trust Company, New Enterprise Associates, Revolution Growth, T. Rowe Price	Tempus Labs	Developer of analytics platform that offers genomic sequencing services and analyzes molecular and therapeutic data to empower physicians and researchers to make real-time, data-driven decisions.	\$80
Q1	New Enterprise Associates	Care Zone Inc.	Provider of an online platform that allows patients to keep track of appointments, get reminders for prescription refills, and share access with family members and caregivers.	\$50
Q1	Arboretum Ventures, HealthQuest Capital	Jentryx (dba BioIQ)	Developer of a health measurement platform created to simplify at-home health testing.	\$26.5
Q1	Verily Life Sciences, CapitalG, Eight Partners, Fidelity Investments, The Founders Fund, General Catalyst Partners, Khosla Ventures, Thrive Capital	Oscar Insurance Corporation	Provides health insurance services, a patient communication platform, and a patient portal to manage their health	\$165
Q1	Andreessen Horowitz, McKesson, Madrona Venture Group, Carrick Capital Partners, Cross Creek Advisors	Accolade	On-demand healthcare concierge for employers, health plans, and health systems.	\$50
Q2	Tencent Holdings, Sequoia Capital, Qiming Venture Partners	Miaoshou Doctor	Provider of an online platform intended to offer medicines, health, slimming, and skin care products.	\$79
Q2	New Enterprise Associates, ITOCHU Technology Ventures, Georgian Partners, Flare Capital Partners, Everyday Health, Emergence Capital Partners, Bessemer Venture Partners, Australia Venture Fund, Ziff Davis Publishing Holdings	WellTok	Designs and develops a technology that drives engagement through a combination of social, gaming, and personalization technologies in the healthcare industry.	\$75
Q2	Undisclosed	DXY.cn	Provider of an online healthcare community portal designed to help physicians to connect with other doctors.	\$100
Q2	Portag3 Ventures, Partech Ventures, CNP Assurances, Xavier Niel, Index Ventures	Alan	Provider of an online health insurance platform.	\$28.3
Q2	Flare Capital Partners, Lakestar Advisors, New Enterprise Associates, Oxeon Partners, Amgen Ventures	Aetion	Developer of platform that uses the everyday clinical and financial interactions of the health care system to unlock essential evidence about the effectiveness and value of medical treatments	\$36.4
Q2	Merck & Co., Microsoft, Sapphire Ventures, Zaffre Investments, 7wire Ventures, Investment AB Kinnevik, General Catalyst Partners, DFJ, Kleiner Perkins Caufield & Byers	Livongo Health	Provider of platform that delivers personalized health management for diabetes patients through real-time information, feedback and support at the point of impact, enabling employers, patients and payers to improve the quality of health at a lower cost.	\$105
Q2	Draper Fisher Jurvetson, Section 32, Mayo Clinic, Canaan Partners, Casdin Capital, LifeForce Capital	Vineti Technology	A pioneering cell and gene therapy software and analytics company.	\$33.5
Q2	Woodford Investment Management	BenevolentAI	Provider of artificial intelligence technology intended to transform the process of pharamaceutical research and development.	\$115



Quarter	Investor	Target	Target Description	Raise (\$mm)
Q2	Health Velocity Capital, Blue Cross and Blue Shield Association, Sandbox Industries, Noro- Moseley Partners	Contessa Health	Provider of home recovery care systems and plans intended to bring hospital care to the patient's home.	\$12
Q2	Elephant	RealSelf	Online marketplace for people to learn and share experiences about elective cosmetic procedures.	\$40
Q2	Blue Ivy Ventures, Centene Corp., HLM Venture Partners, Optum Ventures	RubiconMD	Provider of a web-based eConsult platform designed to connect primary care doctors with specialists.	\$13.8
Q2	Yadong Xingchen	Yishengzhan	Operator of an online medical education application. The company's application helps doctors in China to exchange medical information and learning.	\$23.9
Q2	Shasta Ventures, Tenaya Capital, Venrock, Princeville Global, Goldman Sachs	Doctor on Demand	Operates an online platform that enables patients to connect with doctors from computers, smart phones, and tablets.	\$74
Q2	Angel Investors, Roivant Sciences	Datavant	Helps healthcare organizations safely link their data to improve medical research and patient care.	\$40.5
Q2	American Medical Association	Health2047	Develops and provides data liquidity, chronic care, productivity, and payments solutions for physicians, healthcare providers, pharmaceutical providers, and other healthcare enterprises.	\$27.2
Q2	Venrock, Angel Investors, Social Capital, First Round Capital	Suki (fka Robin Al)	Developer of an artificial intelligence-powered voice- enabled digital assistant for doctors that integrates with existing electronic health records and lifts the burden of medical documentation,.	\$15
Q2	Undisclosed	Century Kaige (dba Kaige Health)	Provider of an online platform that focuses on helping medical institutions through expert resources, project resources, and government service resources.	\$31.4
Q2	The Riverside Company	Soothe	Offers on-demand massage services.	\$31
Q2	Crown Ventures, Providence Ventures, Venrock, Casdin Capital, Glynn Capital Management, Tenaya Capital, Greylock Partners	Lyra Health	Provides analytics and screening tools to identify people who can benefit from behavioral health care.	\$45
Q2	Undisclosed	Innovaccer	Developer of a healthcare data platform intended to simplify complex data, streamline the information, and help organizations make powerful decisions.	\$25
Q2	Blueprint Health, Health Enterprise Partners	Intraprise Health	Provider of a comprehensive suite of information security and compliance services and technologies, as well as a multi-channel healthcare community engagement platform.	na
Q2	Pelion Venture Partners, Trilogy Equity Partners, Enfield Ventures, Eclipse Ventures, Broadway Angels	Owlet Baby Care	Maker of a baby monitor that includes heart rate and oxygen level measurements.	\$24
Q2	M Ventures, Temasek Holdings, Jazz Venture Partners, Canepa Advanced Healthcare Fund, Brooklands Capital Strategies, Amgen Ventures	Akili Interactive Labs	Develops platform technology that test and enhance the cognitive abilities through a video game.	\$55
Q2	AIA Company, NWS Holdings	Guahao.com (WeDoctor)	Operates an online platform for hospital appointment registration.	\$500
Q2	The San Francisco 49ers, WndrCo, Angel Investors, Lerer Hippeau Ventures, Blue Pool Capital, Greycroft Partners, Canvas Venture Fund, IVP, Female Founders Fund, Advancit Capital	Thrive Global	Provider of a consumer wellness platform intended to end the stress and burnout epidemic by offering companies and individuals sustainable, science-based services to enhance well-being, performance, purpose and create a healthier relationship with technology.	\$43
Q2	JMI Equity	CipherHealth	Provides software that develops value-based reimbursement models for effective communication with patients.	\$37.6



Q	uarter	Investor	Target	Target Description	Raise (\$mm)
	Q2	Arboretum Ventures, Baird Capital, Deerfield Management Company, Merck & Co., Pfizer Venture Investments, Renaissance Venture Capital Fund	Strata Oncology	Provider of precision oncology testing and patient matching services for drug testing trials intended to expand patient access to tumor sequencing and precision medicine trials.	\$26
	Q2	Norwest Venture Partners, Mayfield Fund, New York Presbyterian Fund, Bessemer Venture Partners	Qventus	Developer pf operations management system that helps doctors and administrators of hospitals to addresses operational challenges across the hospital.	\$30
	Q2	Kleiner Perkins Caufield & Byers	Beam Technologies (Beam Dental)	Develops a toothbrush that is paired with a smartphone application which monitors daily brushing and sends reports to user's dentist.	\$22.5
	Q2	Polaris Partners, .406 Ventures, Flare Capital Partners, F-Prime Capital Partners, GE Ventures, Humana, Khosla Ventures, Temasek Holdings	Iora Health	Operates a healthcare system that offers a team-based approach with a doctor or nurse practitioner, nurse, behavioral health specialist and health coach for each patient.	\$99.7
	Q2	Bascom Ventures, Trans-Pacific Technology Fund, RLJ Equity Partners, Angel Investors, IRA Capital, Inflection Capital, Fidelity Investments	Get Heal, Inc. (dba Heal)	Provider of on-demand doctor house calls.	\$20
	Q2	Thrive Capital, Andreessen Horowitz, Naspers Ventures	Honor	Provider of non-clinical home care for older adults.	\$50
	Q2	Polaris Partners, General Catalyst Partners, 7wire Ventures	OM1	Provider of platform system that gathers, synthesizes, enriches, and leverages clinical data to provide measurements and Al-driven insights and predictions that can improve clinical, financial and operational management.	\$21
	Q2	L Catterton, BrandProject	Vitamin Packs	Provider of a next generation subscription-based platform intended to supply vitamin supplements.	na
	Q2	btov Partners, Global Sources, Polytech Ecosystem Ventures, Zurcher Kantonalbank, SVC, Swisscom, BlueOcean Ventures	AvaWomen	Developer of mobile-enabled fertility tracking app.	\$30
	Q2	Social Capital, McKesson, Safeguard Scientifics, Hikma Ventures, 3M Ventures, SR One, Aptar Pharma	Propeller Health	Digital solution provider that offers sensors, mobile apps, analytics and services to support respiratory health management.	\$20
	Q2	The Kraft Group, Andreessen Horowitz, Polaris Partners	CAMP4 Therapeutics	The company's gene circuitry platform solves the circuitry code, unique to each human gene, facilitating the rapid discovery of new treatments.	\$30
	Q2	Aurum Ventures, Intermountain Healthcare, Dolby Family Ventures, aMoon Partners, OurCrowd, NVIDIA GPU Ventures, Khosla Ventures, Johnson & Johnson Innovation	Zebra Medical Vision	Provides imaging research solutions for clinicians, advanced learning and computer vision diagnostic algorithms for developers.	\$30
	Q2	FirstMark Capital, F-Prime Capital Partners, Goldman Sachs, Volition Capital	TraceLink	Provides pharmaceutical serialization, drug track and trace compliance, and supply network performance solutions.	\$60
	Q2	Norgine Ventures, Surgical Intelligence	caresyntax	Develops a surgical analytics, technology, and services platform for hospitals and ambulatory surgery centers to identify and manage risks.	\$31.9
	Q2	Index Ventures, Creandum, Accel Partners, Project A Ventures	KRY	Provider of an application designed to provide video consultation to doctors.	\$66
Ī	Q2	Angel Investors	Medici	Develops an application that enables users to communicate with a physician, a veterinarian, or therapist by phone.	\$22
	Q2	McKesson, Sealed Air, The Emerson Group, CPG Company RB	Pharmapacks	E-commerce company for health and beauty products.	\$32.5



Quarter	Investor	Target	Target Description	Raise (\$mm)
Q2	SPDB International, Gaocheng Capital, ICBC International	Shanghai Yitu Network Technology	Engaged in the research of computer vision, image and video intelligent understanding, distributed system, and big data application. It plans to invest in the research and development of how to apply artificial intelligence in healthcare and other sectors.	\$200
Q2	Benchmark Capital, F-Prime Capital Partners, Fidelity Investments, Thrive Capital	Benchling	Provider of an electronic lab collaboration platform intended to give scientists and management the software to accelerate the pace of R&D.	\$14.5
Q2	Insight Venture Partners, Millennium Technology Value Partners, 14W	Aaptiv	Provides an on-demand audio fitness Website and a mobile application for audio-based fitness classes with the guidance of a trainer.	\$22
Q2	Insight Venture Partners, Sound Ventures	Calm.com	Provider of a relaxation therapy application designed to reduce anxiety, sleep better and feel happier.	\$27
Q2	Hangzhou Lianchuan Investment Management, SenseTime, Wanxiang Healthcare Investments	Helian Health	The company's services, health applications, and corporate employee health management platform uses artificial intelligence to accurately interpret personal health data and customizes personalized health management programs, differentiated exercise prescriptions and balanced meal plans.	\$75
Q2	Data Collective, Dolby Family Ventures, The Founders Fund, Future Shape, Lux Capital Management	Vium	Provider of a living informatics platform intended to help in pre-clinical drug research.	\$24
Q2	The Founders Fund, Thrive Capital, Lakestar Advisors, Sound Ventures, Angel Investors, Investment AB Kinnevik	Cedar, Inc.	Provider of a patient payment platform intended to offer a smarter way for hospitals, health systems and medical groups to manage the patient payment ecosystem.	\$36
Q2	Tritium Partners	DCS Global	A leading provider of revenue cycle management software.	na
Q2	Bpifrance, Johnson & Johnson, MAIF, Angel Investors	Dreem	Developer of a sleep tracking technology headband designed to enhance sleep.	\$36.7
Q2	Shareholder Value Management, Undisclosed	Nuvo Group	Developer of a pregnancy management platform designed to optimize pregnancy healthcare. The company's wearable devices offer remote monitoring, enabling patients to better connect, monitor, and bond with their child during pregnancy.	\$30
Q2	UnitedHealth Group, Lemhi Ventures	Bind Benefits	Provider of an online platform intended to offer health insurance related information. The company's online platform focuses on preventive care, primary care, specialty care and chronic care related insurance services and provides information regarding insurance coverage, pricing and treatment options.	\$70
Q2	Undisclosed	American Well Corporation	Operates as a telehealth services company. Operates an online marketplace that offers software, services, and access to clinical services.	\$290.6
Q3	Salesforce.com	Virsys12	A technology consulting firm specializing in cloud computing software-as-a-service technologies.	
Q3	Undisclosed, China Investment Corporation	LinkDoc Technology	Developer of a Saas based oncology big data platform designed to provide leading clinical structured data to China's oncology and to help hospitals solve research and clinical problems.	\$151
Q3	Cerner	Essence Group Holdings Corp. (Lumeris)	Provider of an online platform designed to offer population health-management services. Lumeris is a subsidiary of Essence Group Holdings.	\$266



Quarter	Investor	Target	Target Description	Raise (\$mm)
Q3	Morningside Ventures, GGV Capital, Tencent Holdings, Goldman Sachs, Bertelsmann Asia Investments	Кеер арр	Developer of an fitness application designed to offer fitness guidelines to sports loving people.	\$127
Q3	L Catterton, Temasek Holdings	ClassPass	Offers an online subscription service that provides access to fitness classes.	\$85
Q3	Blue Cross and Blue Shield Association, Sandbox Industries, Accel-KKR	Patientco	A cloud-based platform that allows patients understand and pay their healthcare bills.	\$28
Q3	GlaxoSmithKline	23andMe	Offers a personal genome service that enables users to search and explore genes contributing to their personal characteristics.	\$300
Q3	Kalaari Capital, IDG Ventures India, Accel Management, Oaktree Capital Management, Chiratae Ventures	CureFit	Developer of a fitness based online platform created to address preventative healthcare techniques.	\$120
Q3	Sequoia Capital	Medlinker	Develops a mobile social application for doctors.	\$154.87
Q3	Cigna Corp., Health Care Service Corp., Industry Ventures, Novo Holdings, Health Velocity Capital	MDLive	Provider of Virtual Medical Office software platform that makes it possible for patients, medical professionals and plan administrators to collaborate seamlessly and securely via voice, video, email and mobile devices.	\$50
Q3	True Ventures, Kleiner Perkins Caufield & Byers, Technology Crossover Ventures, Fidelity Investments, NBCUniversal Media, Balyasny Asset Management, Wellington Management Company, Felix Capital Partners, Winslow Capital Management, Tiger Global Management	Peloton Interactive	Provides at-home fitness solution for live and on- demand indoor cycling classes.	\$550
Q3	Silver Lake	GoodRx	Operates as a prescription drug price comparison tool that mines data from local and mail-order pharmacies.	na
Q3	CapitalG	Oscar	Provides health insurance services, a patient communication platform, and a patient portal to manage their health.	\$375
Q3	The Carlyle Group	One Medical	Operator of primary-care physician offices that allow patients to book same-day visits online.	\$250
Q3	New Enterprise Associates	Paladina Health	Provider of employer-sponsored healthcare platform intended to provide convenient and unhurried patient-centered care services.	\$165
Q3	New Enterprise Associates, Revolution	Tempus	Develops a software platform that uses data to provide doctors information about treatment options for individual patients, showing how other patients with similar genetic profiles have responded to particular therapies.	\$110
Q3	Oak HC/FT Partners	Cricket Health	Provider of a healthcare platform intended to offer technology-enabled products and services to modernize and transform how kidney care is delivered for people living with chronic kidney disease (CKD) and end stage renal disease.	\$24
Q3	Horizons Ventures	Driver (Drug Discovery)	Provider of an online treatment access platform created to connect people for cancer treatments all over the world.	\$80
Q3	FirstMark Capital, General Catalyst Partners, BoxGroup, Signalfire	Roman Health Medical (dba Roman)	A cloud pharmacy for erectile dysfunction, handling everything from online diagnosis to prescription delivery.	\$88



Quarter	Investor	Target	Target Description	Raise (\$mm)
Q3	Draper Fisher Jurvetson, Oak HC/FT Partners	OODA Health	Developer of a payer administration platform designed to transform the way patients pay for healthcare. The company's platform uses AI and real-time payments via retail-like experience and streamlines the experience for all.	\$40.5
Q3	Oak HC/FT Partners, Sequoia Capital	Maven Clinic	Provides a telemedicine platform for women.	\$27
Q3	Fosun Pharma, Bill & Melinda Gates Foundation, Fidelity Investments	Butterfly Health Network	Developer of a smartphone-connected, full-body ultrasound device named Butterfly iQ.	\$250
Q4	Silversmith Capital Partners	MediQuant	Provider of a clinical platform intended to offer legacy systems and medical necessity compliance related service.	na
Q4	Primus Capital	Hayes Management Consulting	Provider of healthcare consulting services. The company provides consulting services to healthcare organizations including strategic, revenue cycle and clinical IT consulting in United States.	na
Q4	Undisclosed	Aledade	Operator of an Accountable Care Organization (ACO) designed to offer policies and discussions regarding Medicare Shared Savings Plan (MSSP).	\$46.15
Q4	Andreessen Horowitz	Devoted Health	Provides healthcare solutions to provide Medicare advantage plans and navigates health care systems with personal guides in the United States.	\$300
Q4	Link-age Ventures, Clearlake Capital Group, Health Velocity Capital	OnShift	Provides web-based staff scheduling and shift management software for healthcare companies.	na
Q4	Goldman Sachs	98point6	Provider of a healthcare platform intended to receive private, chat-based consultation from board-certified physicians.	\$50
Q4	New Enterprise Associates, Redpoint Ventures, Greycroft Partners, Greenspring Associates, Flare Capital Partners, Cross Creek Advisors, Bessemer Venture Partners, Meritech Capital, Declaration Partners, Town Hall Ventures	Bright Health	The company's health insurance service platform partners with health systems and care partners to provide health plans and a connected healthcare experience to support relationships between consumers and care providers.	\$200
Q4	AXA Venture Partners, Alliance Enteprendre, Partech Partners, Compagnie dAnjou	Happytal	Provider of social initiative revolutionizing services intended to improve the experience of patients in healthcare facilities.	\$23.3
Q4	Olive Tree Capital, Jackson Square Ventures, Zola Global, Greenoaks Capital Partners	Alto Pharmacy	The company's platform offers medication management and scheduled delivery through web portal or mobile application, enabling patients to have an easy and hassle free pharmacy experience.	\$50
Q4	Catalyst Investors, Lead Edge, Bessemer Venture Partners, Pelion Venture Partners, CrossLink Capital	Weave Communications	Provider of CRM and ERP-integrated communications services for dentists and other small businesses	\$37.5
Q4	New Mountain Capital	Remedy Partners	Delivers software and services that enable payers, employers and at-risk providers to organize and finance health care delivery around a patient's episode of care.	na
Q4	DCM, Tiger Global Management, H Capital	Yaoshibang	Developer of a mobile app to purchase medicines from pharmacy directly.	\$133