GLOBAL HEALTHCARE PRIVATE EQUITY AND CORPORATE M&A REPORT 2016

Special section: A record year for corporate deal making

In collaboration with the Healthcare Private Equity Association

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Uncertain times reinforce core principles

Dear colleagues,

Healthcare investors will remember 2015 for the juxtaposition of a very strong year, marked by record corporate M&A and strong PE investments and exits, against early signs of dislocation late in the year.

For the second year in a row, corporate M&A deal value was more than double the previous decade's annual average. In light of this record level, this year's report includes expanded analysis of corporate M&A activity, including macro trends and healthcare-specific trends, such as the pursuit of category leadership. We also explore the implications of this activity for corporate and PE buyers.

Within the healthcare PE landscape, we saw many of the same trends as in prior years, including strong competition across the board, particularly for gem assets, which generated many busy processes and a lot of activity. As a result, prices remained near record highs in most markets. Although demand outpaced available assets, many PE investors put meaningful capital to work: Nearly twice as many deals valued over $1 billion were announced in 2015 as in 2014.

As the year drew to a close, however, volatility in capital markets amplified concerns of a global recession. Initial public offering (IPO) activity fell, and both corporate and PE buyers found it increasingly difficult to finance deals, as banks tightened lending parameters. Transactions were completed, but 2016 opened with big questions about how these macro conditions would affect M&A activity.

Difficult straits to navigate, to be sure. But long-term macro fundamentals will continue to favor healthcare as aging populations and chronic disease fuel demand in developed markets, as cost pressures continue across the world and as people in developing economies seek new or expanded access to healthcare. A meaningful shift in deal-making conditions could open opportunities for healthcare investors who are prepared: Asset values may come down; assets that had been destined for an IPO might welcome a PE suitor; and corporate buyers with less valuable equity currency might increasingly seek partnerships with PE funds bringing capital and expertise.

Whether going it alone or in partnership, no matter how the macro environment evolves, a few principles apply for healthcare investing:

- **Category leadership is a winning strategy.** Category leaders and assets with a path to leadership become even more valuable in a downturn. As customers look to trim costs in their supply chains, category leaders stand a better chance of maintaining or enhancing their positions as preferred vendors. And category leaders typically have the resources to invest to grow when competitors falter.

- **Activism pays off.** Portfolio activism typically produces better returns, and this is especially true in more difficult times. Identifying the best ways to grow the topline and improve margins, and actively partnering with portfolio company leaders to take action, will enable earnings growth and multiple expansion. An often-overlooked method is simplification to unlock growth, or taking out complexity and focusing the business on the geographies, customer segments and product lines that produce profitable growth.

- **Creative deal makers can edge out the competition.** Competition for assets will continue to stay healthy as corporate acquirers remain focused on inorganic growth opportunities and as PE funds shift capital to recession-resistant industries like healthcare. Therefore, creativity will be key to winning the best assets. Many investors will incorporate the value of add-on acquisitions in their deal math, and more will turn to splits to create value in businesses that operate in disparate categories. Partnerships between corporate and PE buyers will likely heat up, and many funds will make deal partnering a core capability to help them win assets and secure a priority path to exit.

Healthcare remains a staple of PE investors' portfolios, and we expect the sector to grow in importance in times of macroeconomic turbulence. The stars of the next act will be investors who excel on several dimensions: They will find the best assets, size up and address vulnerabilities in their current portfolios, and find creative ways to get favorable deals and complete exits.

We hope you enjoy Bain's latest *Global Healthcare Private Equity Report*, and we look forward to continuing our dialogue with you in the year ahead.

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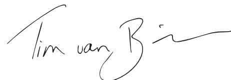

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Corporate M&A trends

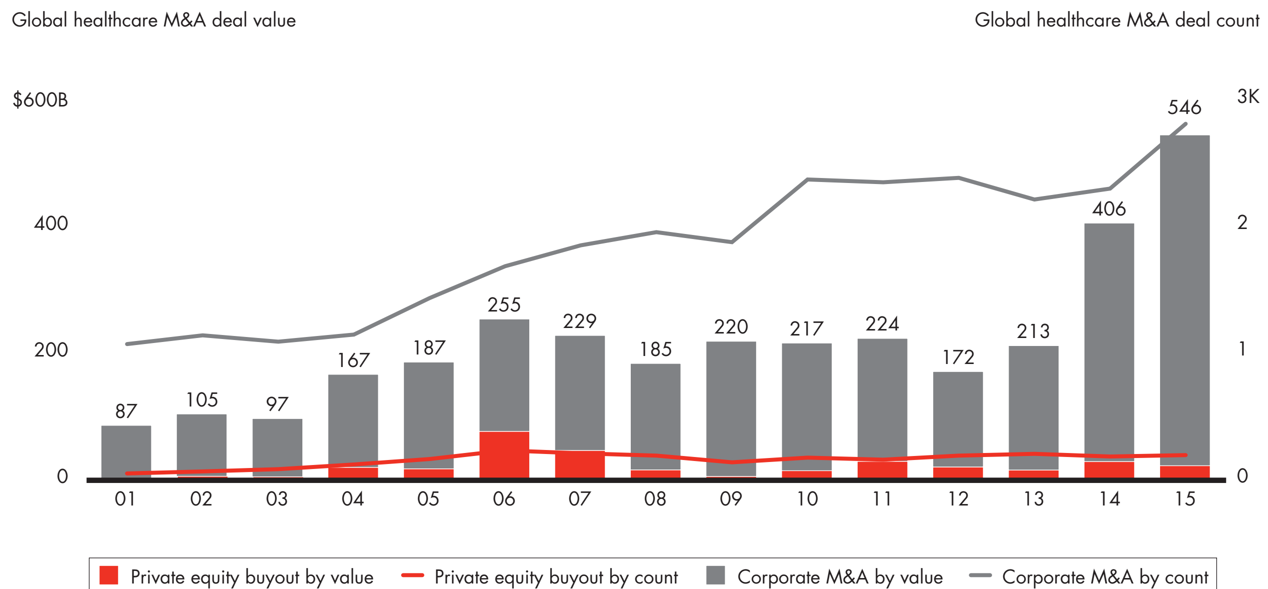
Section highlights

- A new record was set in healthcare M&A in 2015: The year's total deal value was more than 2.5 times higher than the average annual deal value of the previous decade
- Several macro trends spurred corporate M&A, and the pursuit of category leadership fueled many deals
- As recession risk looms, five key actions will increase the odds of successful deal making

Following a second record-breaking year for healthcare M&A, led by corporate buyers, this special section examines the factors fueling corporate M&A and the implications of this activity for both corporate and PE buyers.

Healthcare M&A reached $546 billion in announced deal value in 2015—a 2.5 times increase over the previous decade's average annual value (*see Figure 1*). Corporate buyers, which make up the largest share of healthcare M&A by far, likewise set a new record: $523 billion. Megamergers fueled much of the increase in value. Five deals over $20 billion were announced during the year (excluding the Pfizer-Allergan deal, which was called off in

Figure 1: Corporate megamergers accounted for most of the increase in healthcare M&A



Note: Excludes spin-offs, add-ons, loan-to-own transactions and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values
Source: Dealogic; AVCJ; Bain analysis

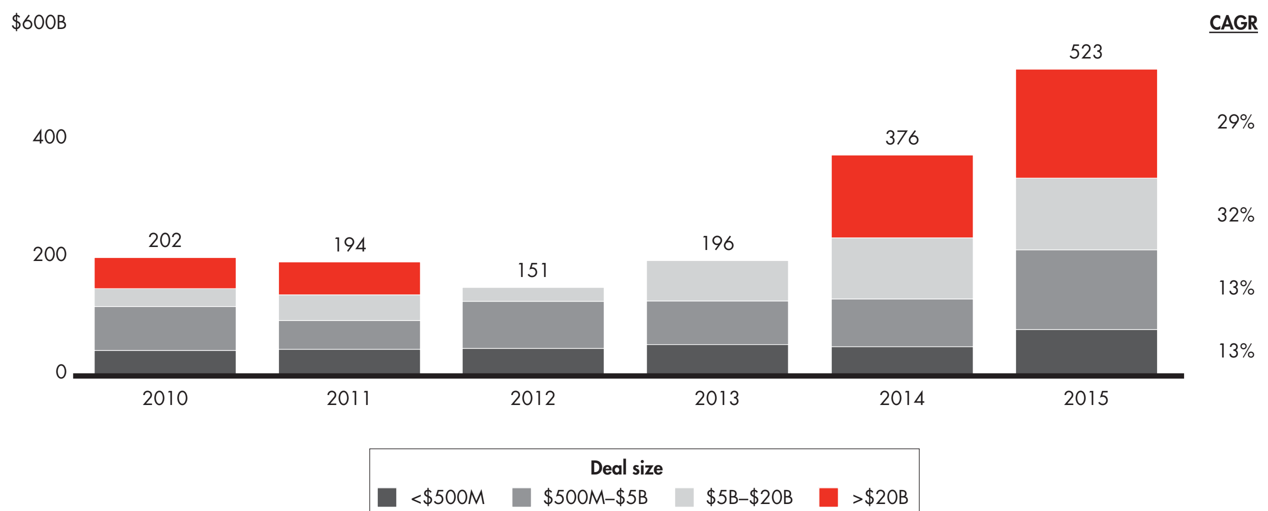
April 2016 and is excluded from this report's analysis), which represented a third of healthcare M&A deal value. But even without these megamergers, corporate M&A in healthcare would have been well in excess of the average annual deal value of the previous decade, as corporate buyers pursued deals of all sizes *(see Figure 2)*.

Other industries joined healthcare in setting records, and global M&A deal value reached a new high of approximately $5 trillion in 2015.[1] Yet healthcare activity stood out, with growth in healthcare deals significantly outpacing growth in overall M&A deals over the past three years *(see Figure 3)*. From 2012 to 2015, overall M&A grew at a compound annual growth rate (CAGR) of 24% while healthcare M&A grew more than twice as fast, at a 50% CAGR.

What is driving all of this M&A activity? The macro environment has favored M&A for several years. Tepid economic growth has made organic growth more challenging, spurring many firms to turn to inorganic methods to fuel meaningful topline improvements. The wide availability of inexpensive debt and strong equity values (albeit with more volatility beginning in the second half of 2015, as discussed later in this report) made M&A an attractive option. And in some cases, financial benefits like tax inversions also drove M&A activity.

Beyond these macro conditions, several industry-specific trends further fueled the healthcare M&A boom. First, demand for healthcare is surging given the rise of chronic and lifestyle diseases, aging populations in many developed markets and a growing middle class in many developing regions. As a result, there will be continued pressure globally to contain healthcare costs, which have consistently outrun GDP growth. Innovation is bringing new drugs, devices, technology and analytics to market. And new government regulations aim to improve quality and

Figure 2: Corporate buyers have been active for all deal sizes



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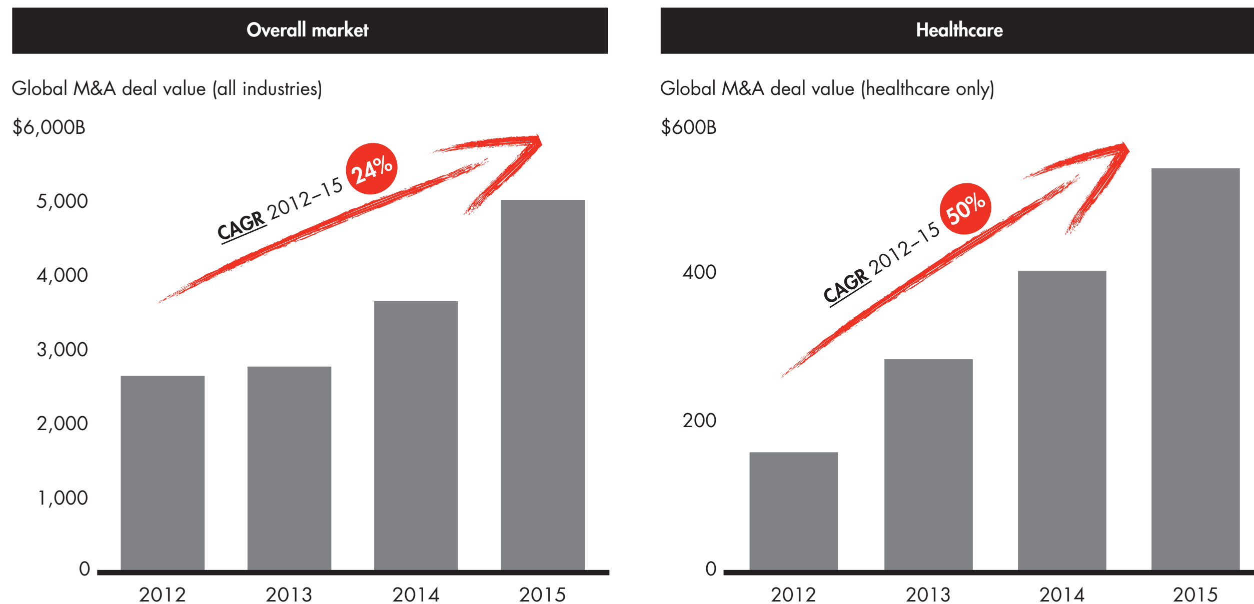
Source: Dealogic; AVCJ; Bain analysis

Figure 3: Healthcare M&A growth has outpaced the overall market since 2012



Note: Excludes spin-offs, add-ons, loan-to-own transactions and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values
Source: Dealogic; AVCJ; Bain analysis

increase access to healthcare. Taken together, these trends are shifting the way that healthcare is delivered across the globe, triggering consolidation along the value chain as firms position themselves to emerge as winners.

Corporate buyers pursued many of the recent healthcare deals to advance their category leadership strategies, aiming to build or bolster leadership positions across their portfolios. This approach follows a clear downstream customer trend, in which desire for vendor consolidation and more sophisticated procurement practices clearly favor the category leaders. Consider drugmaker Shire, which recently made three acquisitions to build its leadership position in rare diseases. Shire acquired NPS Pharmaceuticals for $5.2 billion (announced and closed in 2015), Dyax for $5.9 billion (announced in 2015 and closed in 2016) and Baxalta for $32 billion (announced in 2016). In the global dental market, Dentsply, a leader in dental consumables, announced in 2015 that it would acquire high-tech dental equipment manufacturer Sirona for $5.5 billion.

The value of these mergers will come from building scale in specific customer-defined categories rather than building scale broadly across the biopharma and medtech markets. Category leaders have deeper relationships with their customers, key opinion leaders and even regulators, which gives them better insight into the dynamics and evolution of the category. As a result, category leaders can better direct their R&D efforts and product portfolios to meet market needs, and they often attract the best talent and assets available. Shire's acquisitions, for example, do not simply broaden its portfolio of drugs; they also deepen the company's expertise in the rare disease market, including important capabilities like navigating the orphan drug approval process and managing targeted population clinical trials. And the combined Dentsply Sirona will have a more comprehensive product offering for its dental customers, as well as the right expertise to lead the charge as the equipment and consumables markets become more connected.

In the US payer sector, megamergers that were announced in 2015—for example, Anthem's $54 billion acquisition of Cigna and Aetna's $37 billion acquisition of Humana—were partly influenced by category leadership and the desire to move into new customer segments. Generally, in the payer and provider sectors, the category is relevant at the local level given patients' desire to have care delivered close to their homes. Providers' continued consolidation and expansion across the value chain—adding physician practices, insurance capabilities and new sites of care through M&A and partnerships—has catalyzed consolidation among payers. These payer deals also enable acquirers to better access higher-growth segments within the broader sector.

Another factor spurring healthcare M&A activity in recent years has been the financial benefit of tax inversions. Biopharma and medtech tend to be high-margin, global businesses, so a lower corporate tax rate can significantly benefit earnings. However, regulations are changing to curb the financial benefits of tax inversions, and some of these deals have been unwound because the strategic benefits alone are insufficient to offset the complexity that would come with the deal.

Implications for corporate buyers

Looking ahead, it is not clear how long the M&A bonanza will last, especially in light of the capital market volatility and strong possibility of a recession in the next few years. But M&A will continue to be an important avenue for growth in healthcare, regardless of the economic cycle, and a downturn typically turns up attractive buying opportunities. All companies, then, can benefit by focusing on five fundamentals:

1. **Craft a clear strategy for leadership.** In a downturn, category leadership helps to maintain preferred vendor relationships with customers and provides resources to invest when competitors falter. Define the categories in which you want to play and articulate which moves—organic and inorganic—are required to win.

2. **Link deal diligence to your strategy.** Good targets that don't support the strategy distract management and waste time and resources. Have a clear thesis for how any acquisition will support your strategy, and validate it with due diligence. Start planning for integration early in order to anticipate likely challenges that could derail the strategic value of the deal.

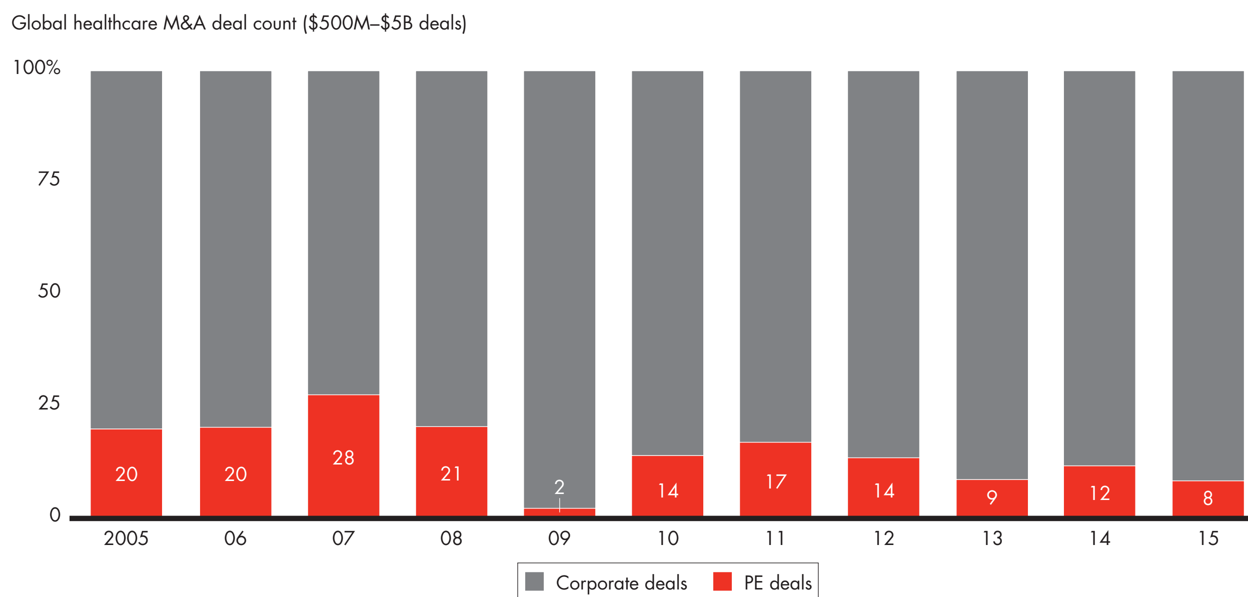
3. **Build a repeatable M&A capability.** Bain research shows that organizations with an institutional M&A capability have greater deal success. Build a team that can identify the right deals; tailor the integration to focus on the most critical sources of value; and learn from any missteps along the way.

4. **Simplify your organization for growth.** Mergers can create a unique "unfreezing" period to reduce complexity throughout the organization, as employees already expect change. Identify products, geographies and capabilities that deliver profitable growth, and pare back or even carve out the rest.[2]

5. **Be creative in deal making.** Creative deal structures like asset swaps and partnerships with PE firms are on the rise for a reason: They match up assets with the right expertise. Don't be afraid to bring in deal partners or use creative structures to get access to the assets that help you execute your strategy and to divest assets that don't fit in your strategy.

Companies that excel in these activities raise the odds of over-delivering results from their M&A endeavors.

Figure 4: Corporate buyers have been very active in PE's sweet-spot deal size



Notes: Excludes spin-offs, add-ons, loan-to-own transactions and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values
Sources: Dealogic; AVCJ; Bain analysis

Implications for private equity buyers

Corporate buyers have been active across all healthcare deal sizes, not just in megadeals too large for PE funds. In particular, corporate buyers have been active in the $500 million to $5 billion size range—the "sweet spot" for large PE funds. Over the past decade, the share of deals in this range won by PE funds has fallen from about 20% to about 10% *(see Figure 4)*.

As discussed later in this report, corporate activity does not have to be only bad news for PE funds. Corporate buyers will likely remain active in the PE sweet spot, and while their presence will continue to pose challenges to winning certain deals, they will also continue to be an important exit channel. Moreover, PE funds have many opportunities to partner with corporate buyers to get deals done, bringing complementary skills to their targets. PE funds will also find plenty of areas that do not attract much corporate interest to hunt for deals, such as complex carve-outs, segments like outsourced services where there may not be a logical original equipment manufacturer (OEM) owner and subscale assets that need pre-consolidation to be attractive to corporate buyers.

1 See the Bain Brief "Maximizing Your Merger's Potential" for more about overall M&A activity, including a discussion of three approaches to achieving a merger's full potential.

2 See the Bain Brief "Simplify to Grow in Healthcare" for more on this topic.

Note: Dealogic is the primary source for the M&A data in this report, supplemented with data from AVCJ and other public and private data sources. The dataset is based on deal announcement date and includes deals that are completed or pending, with data subject to change. Deal values do not account for deals with undisclosed values. Data excludes spin-offs, add-ons, loan-to-own transactions, acquisitions of bankrupt assets and private investments in public equity (PIPEs). The healthcare dataset includes healthcare-related deals that may be classified in other sectors by Dealogic. This methodology differs from that used in Bain's *Global Private Equity Report 2016*, *Asia-Pacific Private Equity Report 2016* and certain other Bain publications.

Private equity 2015 in review

Section highlights

- For healthcare PE investors, 2015 was a strong year for buyouts and exits, but headwinds emerged in the second half of the year
- Investment in the provider and related services sector surged, totaling over half of global deal value for the year
- Asia-Pacific had a record-breaking year for deal value, led by activity in India and China
- Investors stuck with strategies that had served them well previously, including pursuing category-leading assets and seeking partnerships with corporate buyers

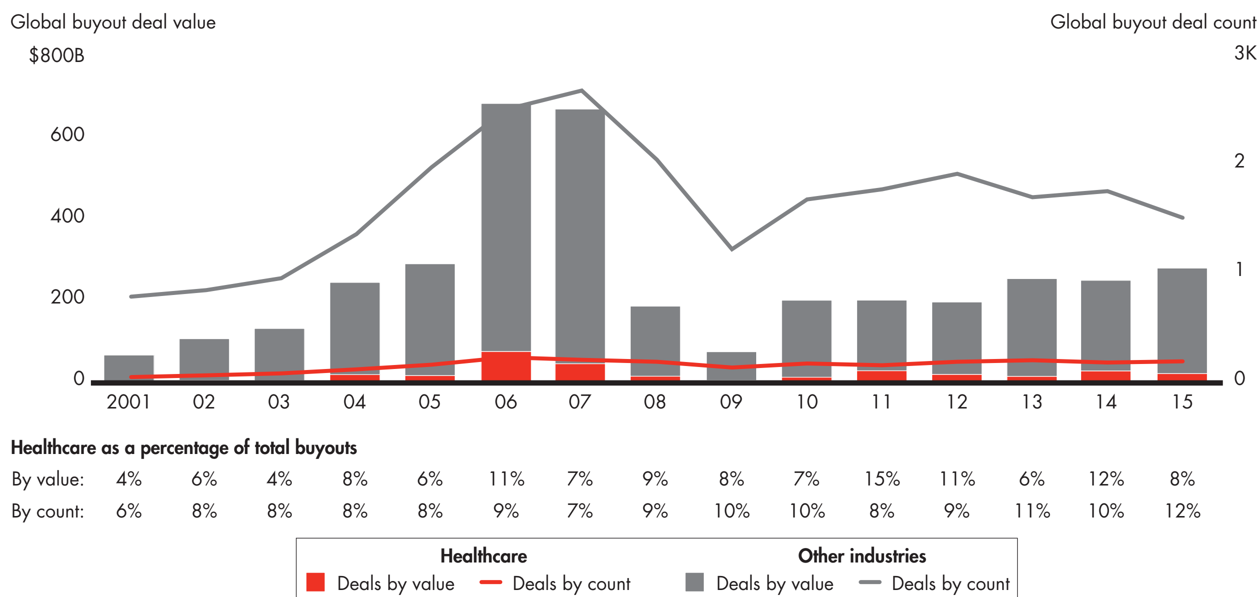
The year 2015 started strong, buoyed by the macro trends that have made healthcare a hot industry for investment among PE firms for many years. Healthcare makes up a large portion of GDP in many countries, and underlying demand remains strong through economic cycles. PE investors can create value in segments where they see high levels of fragmentation, a need for new business models to slow cost inflation or opportunities to streamline operations.

As a result, several trends from previous years continued to play out last year. Competition for assets was fierce among PE firms and corporate buyers, valuations stayed high and, with a shortage of assets in many regions, investors got creative in getting deals done. At the same time, PE firms took advantage of favorable exit conditions, making it another record year for exits. As the year progressed, volatility in capital markets and concerns about recessions in many regions made it more challenging to do deals. Most investors ended the year focused on shoring up their portfolios for a potentially challenging 2016.[3]

PE funds turned in a solid year overall. Total deal volume rose by 6%, from 188 deals in 2014 to 199 deals in 2015 *(see Figure 5)*. Although total deal value decreased by about 20%, from $29.6 billion in 2014 to $23.1 billion in 2015, funds clearly put meaningful blocks of capital to work, as the number of deals worth $1 billion or more grew from five in 2014 to eight in 2015. Funds also kept busy adding on to assets acquired in previous years and locking in returns: The number of exits rose 8% over 2014, to 145, with strong sponsor-to-sponsor and sponsor-to-corporate sales offsetting a drop in the number of assets exited via IPO.

By sector, provider and related services investments led the year, generating over half of the year's deal value and five of the top ten deals *(see Figure 6)*. Popular segments included healthcare-related information technology (HCIT), retail health and European laboratories, for which a new wave of consolidation has begun. Investment in the bio-pharma and related services segment also stood out, with outsourced services and generics investments leading. After a big year in 2014 due to several large carve-outs, investment in the medtech and related services sector fell; however, investor interest in segments such as diagnostics and outsourced services remained strong. Likewise, PE investment in the payer and related services sector decreased after a strong 2014, as consolidation among big payers created uncertainty about how the customer landscape for services firms would evolve.

Figure 5: Healthcare remains an important sector for PE investors



Healthcare as a percentage of total buyouts

	2001	02	03	04	05	06	07	08	09	10	11	12	13	14	15
By value:	4%	6%	4%	8%	6%	11%	7%	9%	8%	7%	15%	11%	6%	12%	8%
By count:	6%	8%	8%	8%	8%	9%	7%	9%	10%	10%	8%	9%	11%	10%	12%

Healthcare: Deals by value; Deals by count
Other industries: Deals by value; Deals by count

Notes: Excludes add-ons, loan-to-own transactions and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values
Sources: Dealogic; AVCJ; Bain analysis

Figure 6: Provider and related services deals made up half of the top 10 healthcare buyouts in 2015

Target	Acquirer(s)	Sector	Country	Deal size
WuXi PharmaTech	Consortium including Hillhouse Capital Group, Temasek Life Sciences and others*	Biopharma and related services	China	$3.3B
MedAssets	Pamplona Capital Management	Provider and related services	US	$2.8B
Air Medical Group	KKR	Provider and related services	US	$2.0B
Alvogen	CVC Capital Partners; Temasek Holdings; Vatera Healthcare Partners	Biopharma and related services	Europe/US	~$2.0B
synlab	Cinven	Provider and related services	Germany	~$1.9B
Labco	Cinven	Provider and related services	France	$1.3B
Concentra	Select Medical Holdings; Welsh, Carson, Anderson & Stowe; Cressey & Company	Provider and related services	US	$1.1B
Sterigenics International	Warburg Pincus	Medtech and related services	US	>$1.0B
LGC	KKR	Biopharma and related services**	UK	~$0.9B
Cooper (Coopération Pharmaceutique Française)	Charterhouse Capital Partners	Biopharma and related services	France	$0.8B
			Total* **	**~$17.0B**

*Other investors include Ally Bridge Group, Boyu Capital, G&C Partnership, Legend Capital, Ping An Insurance, SPDB International, Sequoia Capital, Yinfu Capital and Yunfeng Capital
**LGC also has operations in the provider and related services sector
*** The total may not equal the sum of the deal sizes due to rounding
Sources: Dealogic, AVCJ, Bain analysis

By region, Asia-Pacific turned in another record-breaking year for deal value, with strong activity in the provider and biopharma sectors. Activity in China and India again outpaced activity in the region's developed markets. In Europe, demand for healthcare assets continued to outpace supply, especially due to strong corporate M&A activity. Still, a number of funds were able to secure sizable assets. Similarly, in North America, investors lost a number of attractive assets to corporate buyers, but many funds won scale assets and a few partnered with corporate buyers.

In other respects, PE investors deployed many of the same investment strategies as in prior years. They pursued both healthcare-light and healthcare-heavy assets, and there was continued growth in healthcare-heavy deals as more investors became comfortable with reimbursement risk. They sought category leaders wherever possible and were willing to pay a premium for these prize assets. This strategy has become popular as a number of recent exits proved that very attractive returns are possible even after paying a premium.

Buy-and-build was another dominant theme, as investors bought platform assets and built leadership positions by merging assets. PE investors also scoured the landscape for segments that were more insulated from corporate competition, in some cases moving down-market to secure earlier-stage assets.

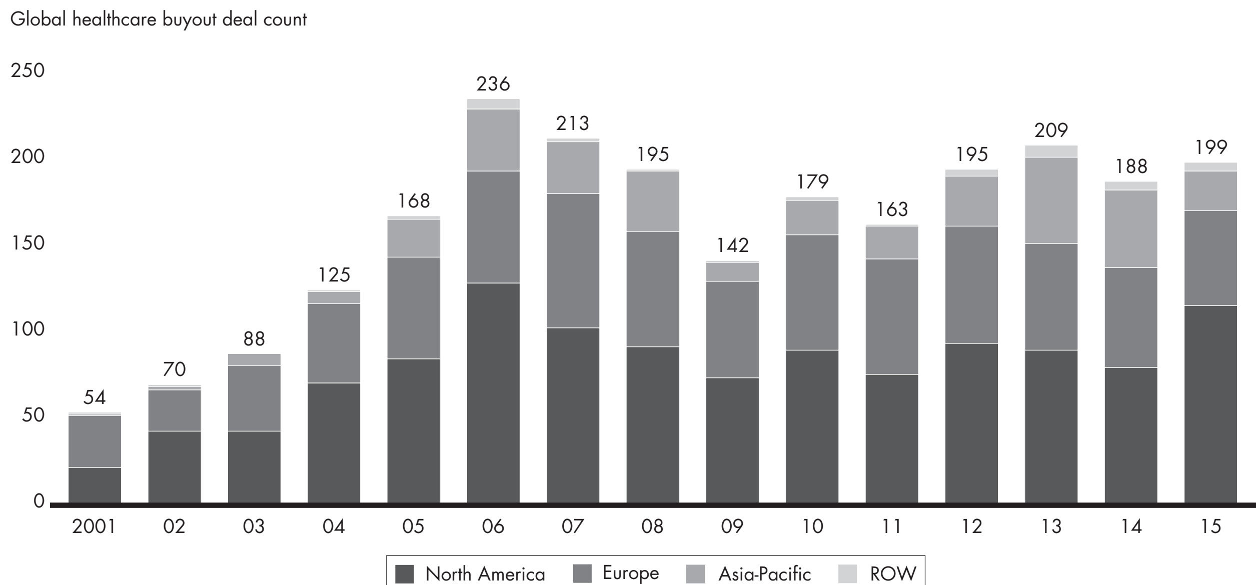
3 For further discussion about how these conditions affect investors across sectors, see Bain's *Global Private Equity Report 2016*.

Geographic trends

Overview

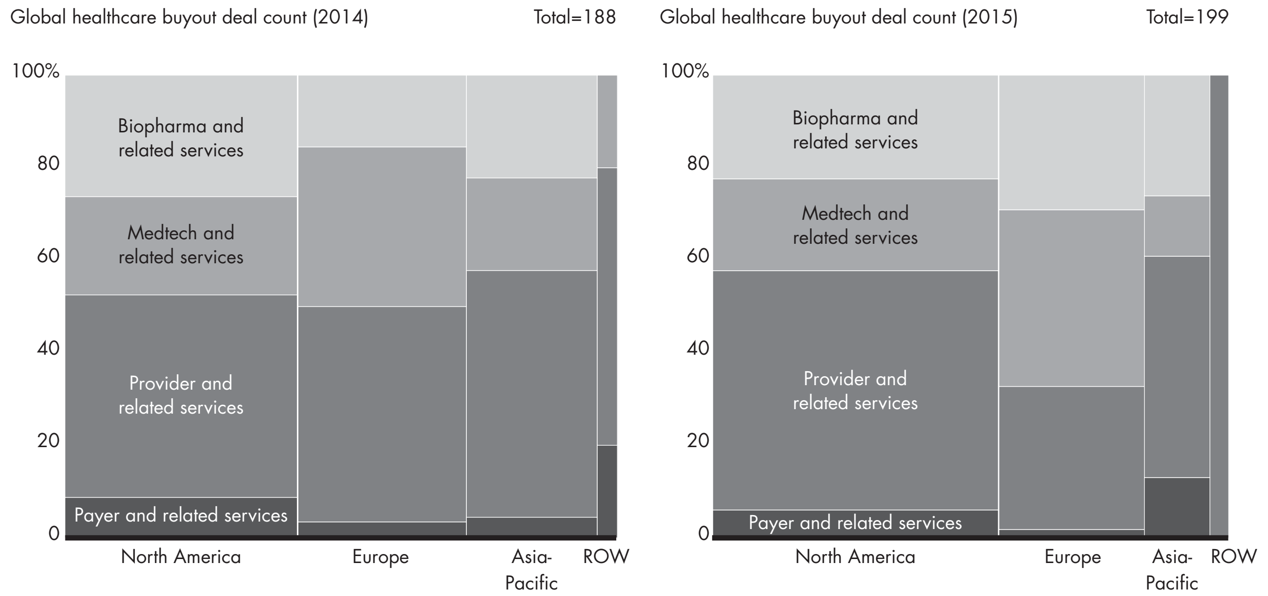
North America and Europe continue to attract the bulk of healthcare PE investments *(see Figure 7)*. In 2015, however, deal value in both regions declined, as the largest deals were smaller than in 2014. Meanwhile, deal value in the Asia-Pacific region grew by about 40% in 2015, as deal size increased, setting another record high for healthcare PE activity. For the second year in a row, India and China saw the majority of investments in Asia-Pacific, while the region's developed markets saw only a few midsize deals. Activity in other regions stemmed largely from investments in the provider sector in Brazil, the Middle East and Africa. By deal count, the provider sector continues to be the most active worldwide *(see Figure 8)*.

Figure 7: Healthcare deal count increased slightly over 2014



Notes: Excludes add-ons, loan-to-own transactions and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; geography based on the location of targets; ROW stands for rest of the world and includes Central and South America, Africa and the Middle East
Sources: Dealogic; AVCJ; Bain analysis

Figure 8: In most regions, the most active sector by deal count was provider and related services



Notes: Excludes add-ons, loan-to-own transactions and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; geography based on the location of targets; ROW stands for rest of the world and includes Central and South America, Africa and the Middle East
Sources: Dealogic; AVCJ; Bain analysis

North America

Section highlights

- Despite an overall decline in deal value, more funds were able to put capital to work in platform assets
- Pressure to contain costs and improve healthcare quality influenced corporate and PE activity
- PE investors employed a variety of strategies to get deals done, including partnering with corporate buyers
- Many historically popular segments stayed active, including retail healthcare providers, HCIT and outsourced services for biopharma and medtech

North America continues to lead healthcare PE investments in deal value and the number of deals. In 2015, there were 116 deals totaling $9.4 billion. US-based assets represent the vast majority of this activity. Although deal value declined by nearly 40% from 2014, more funds put meaningful amounts of capital to work: There were four deals worth more than $1 billion compared with only two such deals in 2014.

The twin pressures to contain costs and improve quality continue to influence both corporate and PE activity in US healthcare. Providers faced reimbursement cuts as well as uncertainty about where future cuts would hit. Both payers and providers continued to test new payment models and new ways of delivering care through lower-cost care sites. Corporate M&A hit an all-time high as many firms sought to build scale in existing businesses or expand into new parts of the value chain, or both. Competition for assets was brisk and valuations high, although volatility in debt and equity markets and concerns about a potential recession weighed on investors' minds.

PE investors employed a variety of strategies to put capital to work in this environment. Investors flocked to healthcare-light assets, where there is less exposure to reimbursement risk. Some investors chose to take on healthcare-heavy assets, expecting that the value of new care models and improved operational efficiency would offset reimbursement risk. And rather than compete with corporate buyers to win assets, a number of PE investors found creative ways to partner with them to get deals done.

Investors focused on many of the same subsectors as in prior years, including retail healthcare providers, revenue cycle management solutions, data and analytics solutions, and outsourced services for biopharma and medtech firms. Investors found a number of platform assets in these segments. In many cases, they paid a premium for category leaders that showed strong future growth potential, even in scenarios of a potential downturn.

Although more investors got deals done in 2015, the competition for assets, especially large-scale assets, was fierce. Most large-scale assets drew interest from multiple bidders, including corporate and PE buyers. In some cases, creative partnerships between corporate and PE buyers were key to winning assets. Corporate buyers also supported an especially strong year for PE exits.

Europe

Section highlights

- Competition for healthcare assets was strong, but a few funds were able to secure platform assets
- European governments focused on containing costs, shifting care to the most efficient setting and streamlining hospital infrastructure
- Consolidation plays fueled PE investment, and some funds overcapitalized acquisition vehicles to support future add-ons
- The provider sector continued to be a safe haven for investors while comfort with investing in the biopharma sector grew for another year

The value of healthcare PE investments in Europe declined by about 15% from 2014, to $8 billion, spanning 55 deals, about the same as in 2014. Although it was a challenging year for funds looking to put meaningful amounts of capital to work, the region turned in five of the year's top ten healthcare buyouts.

PE funds looked at a number of large-scale assets but lost many of them to corporate buyers with deeper pockets. On the bright side, this corporate activity boded well for exits: 2015 turned out to be a seller's market, with many funds securing solid exits, especially to corporate buyers. The lack of scale assets, combined with a strong exit environment, left many funds with excess capital to put to work. As a result, some funds stepped up their search for assets in the US and other countries.

Europe's macro environment continued to experience slow growth and austerity measures to promote economic recovery, especially in southern Europe. Large stimulus injections by the European Central Bank over the year made capital and leverage available for investors. Healthcare reforms among the European Union states focused on three themes: optimizing hospitals, strengthening primary care and rationalizing pharmaceutical spending.

The most popular sectors for investors in Europe turned out to be provider and biopharma and related services—areas that help address better primary care and overall pharmaceutical spending. The European provider landscape remains fragmented, although the degree of consolidation varies by segment. PE investors continued to focus their energies on fragmented segments in which they could deploy buy-and-build strategies, building scale to improve operational efficiencies and consolidating assets to sufficient size to attract corporate interest. In fact, several acquisition vehicles were overcapitalized to support future add-ons.

Cinven's pair of top 10 deals in 2015 kicked off a long-awaited consolidation in medical testing laboratories at the hands of PE funds. (We discuss this in more detail in the provider and related services section on page 18.) Much of the remaining activity in the provider sector occurred in segments with significant opportunity for local consolidation, including eye and dental clinics, home care and hospitals, with activity

continuing to expand from Western Europe into Central and Eastern Europe. Meanwhile, other provider segments, including pharmaceutical compounding, HCIT and staffing services, still await major consolidation. At the opposite end of the spectrum, in segments where PE has already spurred a meaningful amount of consolidation, such as nursing homes, firms were able to exit to corporate buyers. In the biopharma sector, assets that manufacture generic, specialty generic and over-the-counter drugs were popular, as were firms that provide outsourced services to the biopharma sector.

Asia-Pacific

Section highlights

- Healthcare deal value in the Asia-Pacific region reached a new record
- Significant take-private activity of US-listed Chinese assets occurred as investors look to explore potential listings in China in the future
- In India, investor interest expanded from the historically popular provider sector to the biopharma sector
- Deal activity in the developed markets of Australia, Japan and Korea continued to be opportunistic, with a few midsize deals

Healthcare PE investments in the Asia-Pacific region reached another record high in 2015: Buyout deal value rose to $4.9 billion and beat records set in 2013 and 2014. Private investments in public equities (PIPEs) also surged, bringing nearly $1 billion of additional capital into the region—almost double the total of $575 million in 2014. And for the second year in a row, China and India represented the majority of deal value over developed markets like Japan, Australia and Korea, demonstrating the changing pattern of capital flows across the region. But the number of buyout deals fell from 45 in 2014 to 23 in 2015, largely due to a shift in mix toward PIPEs rather than a change in investors' appetites, as evidenced by the large amount of capital deployed in the region and growth in the average deal size.

In China, three trends affected investment activity. First, the take-privates of US-listed Chinese companies increased, in part because of a perceived valuation mismatch for these assets between US and Chinese capital markets. Second, the slowdown in the Chinese economy contributed to substantial stock market volatility later in the year, causing a decline in PE activity in some cases, as investors held off making investments. This dynamic, however, was offset to some extent by investors who saw healthcare assets as a less cyclical alternative to other industries. In addition, some assets that had been poised for IPO instead came to PE investors. Finally, China's 13th Five-Year Plan, approved in 2015, reinforced the government's commitment to healthcare by calling for building domestic medtech capabilities, expanding access to healthcare providers, and using digital health to lessen the cost of healthcare and improve access to it.

Taken together, these trends fueled substantial Chinese deal activity in several assets: provider, HCIT, biopharma and biopharma services. They attracted corporate interest, raising the level of competition for assets; however, they also fueled more partnerships between corporate and PE buyers. For example, the three "Internet champions" of China—Baidu, Alibaba and Tencent—are investing in a mix of online and offline healthcare assets, sometimes partnering with PE firms. Medtech was notably quiet, but activity will likely pick up in the coming years as more assets reach threshold scale.

Turning to India, a number of factors fueled healthcare PE activity. As the country's middle class expands, supply has not kept pace with growth in demand for healthcare. Also, many segments remain highly fragmented, and the private sector has an established role in the industry. PE investors continued to be quite

active in India's provider sector, despite increased competition from corporate buyers. At the same time, activity in the biopharma sector picked up in 2015, not only for investments targeting global demand for pharmaceuticals, but also for investments focused on the expected growth of local demand for pharmaceuticals.

Southeast Asia, meanwhile, had strong PE interest in the provider sector, which materialized into some deal activity. However, investors continue to struggle with the small number of sufficiently large targets and high valuation expectations given the constraints on infrastructure.

Deal activity in the developed markets of Asia-Pacific continued to be opportunistic, with a few midsize deals in the provider and biopharma sectors. Interestingly, some emerging-market corporate buyers acquired assets in the region's developed markets, which heightened competition for assets in the sweet spot for PE buyers. For example, China's Luye Medical Group acquired Australian hospital operator Healthe Care Australia, in part from a desire to build expertise in hospital operations that could be brought back to China.

Sector trends

Provider and related services

Section highlights

- The provider segment was the most active healthcare sector of the year, with five of the top ten deals
- Consolidation plays fueled activity worldwide, and funds focused on category-leading assets
- Retail health in North America began a new phase of ownership
- Pan-European consolidation of laboratories and related products and services moved to the forefront
- Chinese government support heightened investors' interest in providers based in China

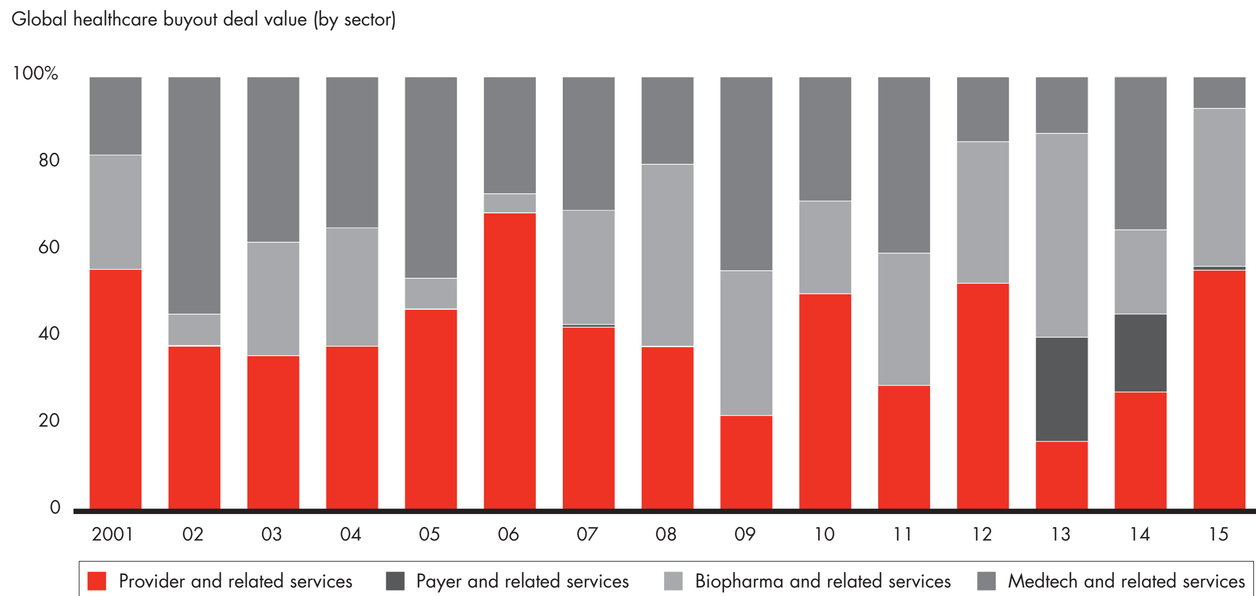
The provider and related services sector turned in a very strong year—in fact, it was the most active sector in healthcare for PE investors *(see Figure 9)*. Total deal value rose from $8.1 billion in 2014 to $12.7 billion in 2015 while deal count rose slightly, to 93 deals. Whereas only one deal in the sector exceeded $1 billion in 2014, five such deals were announced in 2015. The provider sector represented half the value of all healthcare buyouts and five of the top ten deals of the year. And while much of the value came from assets in developed markets, interest and activity in emerging markets continue to grow.

Several macro trends spurred PE interest in the sector. For one thing, the ability to diagnose, monitor and treat chronic diseases continues to grow, leading to more effective treatments and shorter recovery times, as well as investment opportunities for PE investors. In addition, significant fragmentation in many of the sector's segments opens the door for consolidation and buy-and-build strategies. And some assets offer opportunities for PE funds to deploy their expertise around operational efficiency.

As in other sectors, heavy competition for assets and high prices constrained deal activity. Although many sizable deals were announced, investor demand still outpaced the number of scale assets that became available. Healthcare-light segments, those that are relatively insulated from changes in reimbursement rates, were especially competitive among PE firms; these segments draw broad interest because they don't require the same level of specialization as healthcare-heavy segments, which carry greater reimbursement risk.

Persistent investors addressed these challenges in a few ways. Some focused on fragmented segments with the opportunity for consolidation. Many investors targeted category-leading assets, paying the premium such assets command because of their growth potential, their solid position even in a downturn and their demonstrated path to attractive exit. Other investors looked for assets in less traveled developing markets, hoping to capitalize on expected growth in those markets. And some PE investors devised creative partnerships with corporate or other buyers.

Figure 9: Deal value in the provider and related services sector increased considerably over prior years



Notes: Excludes add-ons, loan-to-own transactions and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values
Sources: Dealogic; AVCJ; Bain analysis

Two of the largest deals in the sector arose through such partnerships. In one deal, Welsh, Carson, Anderson & Stowe (WCAS) and Cressey & Company partnered with outpatient rehabilitation and specialty hospital operator Select Medical Holdings, a former portfolio company of WCAS, to buy occupational health provider Concentra from Humana in a joint venture. The deal strengthens Select Medical's position in workers' compensation care, and it could signal an acceleration of consolidation in this segment.

In the other deal, discussed in more detail in the section about HCIT on page 27, Pamplona Capital Management acquired MedAssets for about $2.8 billion, in part supported by an agreement to carve out the group purchasing organization (GPO) portion of the business to corporate buyer Vizient (formerly known as VHA-UHC Alliance). And in another notable example that was still under review at year-end, several PE-corporate partnerships were competing in very public bids to take clinic operator iKang Healthcare Group private.

Beyond these global trends, a number of local trends influenced PE activity in the provider and related services sector.

North America

Activity in North America concentrated mainly in the US, which accounted for most of the global increase in deal value in the provider sector, doubling investment levels over 2014. PE funds pursued assets across the spectrum of reimbursement risk.

In the US healthcare-light space, the dental and veterinary retail health segments remained especially popular, continuing a trend of several years. After a first wave of buy-and-build activity that started about five years ago, a number of PE-backed platform assets came to market in 2015, with American Securities, Harvest Partners, Berkshire Partners and Teacher's Private Capital, among others, winning deals. While business models differ both within and across retail health specialties, the drivers of equity growth have been consistent: consolidation of existing units and new builds. Both approaches require a strong business development function as well as a repeatable model to identify prime locations, attract and retain talented clinicians, improve unit-level performance and improve efficiency via shared services. Even after years of increasing consolidation, retail health remains fragmented, as evidenced by the early 2016 merger of North East Dental Management and Dental Care Alliance, the dental support organization platform that Harvest Partners acquired in 2015.

HCIT was a popular space for investment in the US, especially in areas like revenue cycle management and alternate site IT, where opportunities abound to improve revenue capture and increase efficiency for providers. These segments and similar segments still in their growth phase will continue to attract high interest, as discussed in the HCIT section on page 27.

Some investors in North America were willing to assume the reimbursement risk that characterizes healthcare-heavy segments like behavioral health, hospitals and patient transportation. For example, in the year's largest buyout in the provider segment, KKR acquired air ambulance company Air Medical Group Holdings from Bain Capital for a reported $2 billion. KKR is no stranger to reimbursement risk, having previously invested in healthcare-heavy assets such as hospital chain HCA. Hospitals also attracted PE interest; for example, Apollo Global made its first foray into hospitals with the acquisition of the eight-hospital system RegionalCare from Warburg Pincus.

Other healthcare-heavy segments attracted a lot of PE interest but little activity. Consider physician assets, including independent physician associations (IPAs) and physician practice management companies (PPMs), both of which have long been in high demand among PE funds. Many of the attractive physician assets in 2015 were scooped up by large physician group corporates, such as Team Health, Sheridan-AmSurg and DaVita Healthcare Partners. As a result, a large portion of the PE focus has shifted to physician assets in specialties in earlier stages of consolidation, such as dermatology.

Europe

In Europe, investors also pursued both healthcare-heavy and healthcare-light segments with an eye toward consolidation. Laboratory and related products and services came to the forefront of this movement. In two of the world's largest healthcare buyouts of the year, Cinven struck deals that will allow it to create a pan-European clinical lab chain with operations in 35 countries. First, Cinven acquired France-based Labco for about $1.3 billion after Labco scrapped plans for an IPO due to market volatility. Immediately afterward, Cinven acquired Germany-based synlab for approximately $1.9 billion from BC Partners. With a number of other assets potentially available throughout the region, PE-led consolidation in this space will likely continue for some time. Not surprising, there is also growing PE-led consolidation up the value chain among suppliers to laboratory chains. For example, KKR acquired life sciences firm LGC, which supplies testing products to laboratories, as well as pharmaceutical firms and other companies, and even operates some labs.

Investors also made moves in fragmented segments such as senior assisted living facilities, hospitals, home care, eye care and clinics via new investments and add-ons for portfolio assets. For example, PAI Partners acquired Spanish senior living operator Geriatros from Magnum Industrial Partners, and Montagu acquired ARTEMIS Laserklinik, a German laser eye surgery clinic, for an undisclosed sum. Investors' interest extended to Central and Eastern Europe, with investments in clinics and dental chains. HCIT assets also grew in popularity as PE investors aim to ride a wave of consolidation in that segment.

Asia-Pacific

As in prior years, the provider sector in the Asia-Pacific region was the most active in terms of the number of deals. There were a few deals in developed markets, including Australia, South Korea and Japan, but most activity occurred in the developing markets of China and India. China's regulatory emphasis on access to healthcare through its Five-Year Plan heightened interest in the provider sector. That constitutes a significant shift from prior years, when PE funds largely focused on the biopharma sector. The related emphasis on digital health spurred activity in that segment, drawing both corporate and PE activity, as discussed in the HCIT section on page 27.

Corporate and PE buyers also continued to pursue clinics and hospitals. In a deal also fueled by the take-private trend, US-listed and China-based healthcare clinic chain iKang Healthcare Group received multiple take-private bids from consortiums that included PE and corporate partners.[4]

Interestingly, domestic corporate buyers also looked at assets outside of China, because those assets presented an opportunity to earn solid returns while providing potential to bring learnings from these platforms to China. As mentioned earlier, Luye Medical bought Healthe Care Australia from Archer Capital for approximately $700 million.

In India, the sizable unmet demand for healthcare, coupled with a series of successful PE exits, continues to draw investor interest in the provider sector, largely in the form of minority investments. Tertiary care, specialty care and labs were especially popular. For example, TPG invested $146 million for a minority stake in Manipal Health, which operates multispecialty and teaching hospitals in India. Similarly, The Carlyle Group made a minority investment in Metropolis Healthcare, a pathology lab chain with operations in India and several other countries in Asia-Pacific, the Middle East and Africa.

India also continues to draw interest from foreign investors, as evidenced by the majority stake investment in specialty hospital Continental Hospitals by IHH Healthcare, a Malaysian-based multinational hospital chain that is backed by Malaysian sovereign wealth fund Khazanah. And in a deal that also highlights the strong exit environment in India, when Advent International announced plans to exit its stake investment in multispecialty hospital chain CARE Hospitals, a number of PE and corporate buyers reportedly competed for the investment, with Abraaj Group emerging as the winner in early 2016. Notably, Abraaj Group was an active healthcare buyer in North Africa as well, investing in a number of brownfield hospitals and other provider assets through its North Africa Fund.

In Southeast Asia, investors continued to struggle to find the right growth model for assets—scale or scope—that would justify the high valuation expectations and overcome the constrained infrastructure that has dampened activity. In 2015, two notable deals came to fruition. Navis Capital acquired a stake in cosmetic clinic chain Nitipon International Group in Thailand, and Navegar, a fund backed by several European asset managers, invested in Philippines-based health maintenance solution provider Intellicare.

Payer and related services

Section highlights

- Buyout deal value dropped significantly from 2014, with no megadeals in 2015 and corporate competition for assets in the sweet spot for PE investors
- Record-breaking merger activity among corporate acquirers also created uncertainty for PE investors around many segments that serve payers as customers
- The deal activity that did materialize was scattered across segments, including workers' compensation and care management

Disclosed PE deal value in the payer sector diminished in 2015, reaching only $0.2 billion, down from $5.3 billion in 2014. The number of deals decreased slightly, to 11. The decrease in deal value is not surprising for a few reasons. First, most of the value in 2014 came from a single megadeal: the $4.4 billion acquisition of MultiPlan led by Starr Investment Holdings and Partners Group. Second, the unprecedented level of corporate mergers—led by Anthem-Cigna and Aetna-Humana—created uncertainty about which parts of the payer value chain would be outsourced in the future given the changed customer landscape. That makes it hard to value assets in the outsourced payer services market before mergers between their customers are approved and closed.

A few early-stage segments like exchange services continue to draw interest from PE investors, but many of the assets are already corporate-owned. Several other segments faced competition from corporate buyers, which made moves to solidify existing competitive positions and expand into other areas of the value chain. For example, in the pharmacy benefits management (PBM) segment, corporate buyers acquired several assets in the sweet spot for PE investors, such as Helios, which was acquired by UnitedHealth Group's OptumRx business, and Envision Rx, which was acquired by Rite Aid. The bright side of the corporate competition was that it set the stage for some strong exits; both of the assets mentioned above, for example, were PE-owned prior to their corporate acquisitions.

Of the deal activity that did materialize, workers' compensation continued to be a popular segment. Spreemo, which runs a website connecting large companies and healthcare providers to manage radiology-related workers' compensation cases, received a significant stake investment from Pamplona. Similarly, Riverside acquired IPAR Rehabilitation, an Australian company that provides occupational rehabilitation case management services.

Care management tools focused on payers also drew interest from PE funds. McKesson divested its Care Management business to Comvest Partners and Mosaic Health Solutions. The company, renamed AxisPoint Health, provides case management and nurse advisory services and a software platform used by payers to manage utilization, disease and case management services. In another example, Advance Health received $40 million of growth equity in a round led by Summit Partners. Advance Health provides in-home health risk assessments and chronic care management services to health plans.

Biopharma and related services

Section highlights

- Deal value and volume both rose in 2015, with strong activity in traditionally popular segments
- The specialty generics segment continued to grow in popularity and resulted in one of the largest deals of the year
- India and China showed a surge in interest and activity

PE investment in the biopharma and related services sector showed significant growth in 2015, totaling $8.5 billion across 48 deals, compared with $5.7 billion across 40 deals in 2014. Most of this activity occurred in traditionally popular segments for PE investors, including outsourced services, animal health and vitamins, minerals and supplements. Specialty generics is also emerging as a popular segment. In addition, investors were more willing to look at product assets with pipeline risk, but the uncertainty of the drug development process in terms of success and timeline for approval continues to be a barrier for PE investment. However, new models are emerging that allow PE investors to be more involved in this area.

As in prior years, outsourced services continued to attract much of the interest from investors. The largest buyout announced during the year, one of several Chinese take-private deals, was WuXi PharmaTech, China's largest contract research organization (CRO).[5] The existing management partnered with a consortium of investors on the $3.3 billion acquisition. In another large healthcare buyout, KKR acquired life sciences company LGC, which provides contract analytical research and testing services to biopharma companies, among other products and services. Another notable deal was the acquisition of Aptalis' Pharmatech unit (renamed Adare Pharmaceuticals), which specializes in oral drug delivery platforms, by TPG from Actavis. This deal illustrates how assets can emerge from the high levels of corporate M&A. TPG had previously owned Aptalis, selling it to Forest Labs in 2014. After Forest Labs' acquisition by Actavis, Actavis carved out the Pharmatech unit and sold it back to TPG in part to maintain focus on integrating the manufacturing network it acquired from Allergan.

On the product side, the segments that drew the most interest are more insulated from R&D pipeline risk. Investors are increasingly focused on the specialty generics niche because products can be differentiated, allowing firms to build value through category leadership strategies that capitalize on a deep understanding of customers' priorities. In one of the largest deals of the year, a group including CVC Capital Partners and Temasek acquired a controlling stake in specialty generics firm Alvogen for roughly $2 billion. Pamplona, which had bought a majority stake in Alvogen in 2014, retained a stake in the firm. In another notable product deal during the year, Charterhouse Capital Partners beat out other potential buyers for the French firm Cooper, which makes over-the-counter (OTC) and supplement products, among other businesses.

Corporate buyers were very active in product deals of a size range that also attracted potential PE buyers. For example, the business units that Sanofi and Boehringer Ingelheim agreed to swap—Sanofi's animal health unit for much of Boehringer Ingelheim's consumer healthcare business—were the types of assets that typi-

cally attract PE investors. Cinven sold specialty generics firm Amdipharm Mercury to Concordia Healthcare for approximately $3.5 billion, right in the sweet spot for larger PE funds. And Perrigo Company acquired German dietary supplement maker Naturwohl Pharma, another company sized for PE interest.

A new surge of investor and corporate interest in biopharma emerged in India during 2015, targeting both domestic pharmaceutical companies as well as global manufacturers. Capital International paid more than $200 million for an 11% stake in Mankind Pharma, which manufactures products for the local market. With multiple bidders, the deal reportedly earned seller ChrysCapital a sizable return. In other notable Indian deals, Temasek made an approximately $150 million investment in Glenmark Pharmaceuticals, which manufactures generic and new molecule drugs for the global market. Temasek made another bet on this market, along with GIC and other investors, by acquiring a stake via PIPE in Sun Pharmaceuticals. That followed Sun Pharma's merger with Ranbaxy Laboratories earlier in the year.

Although early-stage biopharma assets with pipeline risk continue to be challenging for PE investors to underwrite, new models are emerging that may promote more activity in the future. Some models focus on identifying underfunded or low-priority assets for Big Pharma that could yield a high return with some investment. For example, Gurnet Point Capital, a Bertarelli family fund, is structured as a hybrid between venture capital and private equity, and plans to invest in both early-stage and development-stage assets. Its lead investment, Boston Pharmaceuticals, launched in late 2015 and takes an opportunistic approach across therapeutic areas, looking for early-stage and other development assets that could create value with additional funds and resources. Other models that may successfully promote activity include specialty finance vehicles for biopharma assets, which provide external funding for biopharma development projects, pool multiple projects to offer more predictability to investors and tranche their capital, allowing PE investors to invest in specific tranches that best align with their risk appetite.

Medtech and related services

Section highlights

- Investor interest remains strong, but deal value fell in 2015, with only one deal exceeding $1 billion
- Popular investment strategies included category leadership and buy-and-build plays
- Popular segments included outsourced services and diagnostics
- The expected rise in medtech investments in China has not yet materialized

Investors continued their enthusiasm for deal making in the medtech sector in 2015, but total deal value declined from the previous year due to a drop in the number of large-scale deals. There was only one buyout over $1 billion in 2015, whereas there were three such deals in the previous year—Ortho-Clinical Diagnostics, Siemens Audiology Solutions (now called Sivantos Group) and Sebia. As a result, although the count of 47 announced deals was essentially flat from 2014, deal value dropped 84%, to $1.7 billion.

As in prior years, corporate M&A activity in the medtech sector was robust, especially in product segments. Corporate buyers bought assets such as Welch Allyn and Cordis, both of which fall in the sweet-spot size range of interest to large PE funds. It is not surprising that corporate buyers won many product assets, because they can typically afford to pay higher prices due to synergies with their existing businesses. On the bright side for PE investors, these corporate investors also serve as a source of assets as well as buyers at exit.

Category leadership strategies fueled much of the M&A activity in the sector for both corporate and PE buyers. With corporate buyers positioned to win many of the leading assets in product categories, PE funds made category leadership plays in other ways: buying category leaders in services segments that often don't make sense for corporate OEMs to own, such as outsourced services; carving out mature product assets (for example, in diabetes diagnostics) from corporate OEMs that need to focus on building or maintaining category leadership positions elsewhere; and using buy-and-build efforts to assemble category-leading assets.

Consider the largest PE deal of the year in the medtech sector: Warburg Pincus took a majority stake investment in Sterigenics, a category leader in contract sterilization services for medtech OEMs. In contract sterilization, there is a clear benefit to category leadership as OEMs look to simplify their own supply chains and consolidate their outsourced-services vendors. Leaders such as Sterigenics have already emerged in developed markets, so the key to building and defending leadership will be growing along with the customer, especially as OEMs expand into new geographies.

In a carve-out example from 2014, KKR took an 80% stake in Panasonic's healthcare unit, which made diabetes diagnostics devices. This mature product segment attracts PE interest because, despite slow growth rates today, it benefits from positive structural trends, including the increased use of diagnostics to reduce overall cost of care and expected volume growth as healthcare expenditures in emerging markets grow. In a 2015 buy-and-build move, the company acquired Bayer's Diabetes Care unit. BDC was already marketing and selling Panasonic Healthcare's products, so the acquisition brings the manufacturing and sales capabilities together into one firm with global scale.

Most of these trends have persisted over several years, but one development has been slower to materialize: the expected uptick in medtech investment by PE funds in China, which stalled in part because of the economic slowdown and stock market volatility, and because investors need time to navigate the fragmented base of sub-scale targets. However, investors remain enthusiastic about potential opportunities in China, especially since the latest Five-Year Plan reinforces support for this sector, including a recent emphasis for providers to buy local, which should increase demand for medtech products.

While many medtech investors look to emerging markets as a source of growth, experienced investors recognize that these markets have different dynamics than mature markets and in many cases require a tailored local go-to-market model to drive leadership. This can make geographic expansion expensive ahead of growth in healthcare spending, so focusing on a few key markets is critical. For example, one PE-backed medtech firm found that fewer than one-third of its markets accounted for 95% of its profits, leading the firm to reconsider where to deploy a direct sales model and how many countries to serve overall. Corporate acquirers and PE firms thus will have to make tough strategic choices about where and how to expand medtech assets as they look to build global category leadership and drive profitable growth.

Healthcare-related information technology

Section highlights

- Investor interest was strong due to the healthcare-light nature of the segment, the track record of strong exits and favorable government policies
- Interest was partially offset by heavy corporate competition and high valuations
- Many deals focused on "alternate site IT" assets, which help simplify and streamline operations in alternate sites of care, such as assisted living facilities and home health agencies

PE investors continued to show great interest in healthcare-related information technology (HCIT) assets in 2015, buoyed by the healthcare-light nature of the segment, a growing pool of successful exits and favorable government policies.In the US, which leads HCIT investment activity, healthcare has lagged other industries in IT investment for many years, but government stimulus around adoption of HCIT over the past decade has ignited investors' attention. In China, the emphasis on digital technologies in the most recent Five-Year Plan has fueled similar investment activity. Moreover, many companies in the healthcare value chain have recognized the business case for stepping up their HCIT investment, creating a pool of customers for these assets. HCIT activity during the year was solid across the provider value chain from hospitals to alternate site providers to payers, with select activity in solutions oriented toward biopharma and medtech firms.[6]

In the US, PE deal activity was partially tempered by high valuations, another busy year for venture capital (VC) investors and keen interest from corporate acquirers, which scooped up multiple assets that could have been attractive to PE firms. For example, Cerner bought Siemens Health Services for $1.3 billion, and Cardinal Health bought a majority stake in naviHealth for $290 million. As a result, PE funds have been scouring the field to find investment opportunities in areas that are too small to capture significant corporate interest but too large for VC investors.

Fortunately, corporates and PE firms do not always compete as foes. Consider the largest HCIT deal of the year: Pamplona Capital Management and Vizient (formerly known as VHA-UHC Alliance) partnered to acquire MedAssets for almost $2.8 billion and split it into two components. The revenue cycle management (RCM) business will be combined with Pamplona's existing Precyse asset, making MedAssets one of the leading integrated platforms, with end-to-end RCM software and outsourcing service capabilities. Pamplona can then consolidate and tuck other deals into MedAssets. Meanwhile, the GPO and consulting business was carved out and sold to Vizient, which already is one of the largest GPOs in the healthcare market.

The appeal of RCM goes well beyond this megadeal. Other deals in this space included Francisco Partners' investment in eSolutions, an RCM provider serving both acute and post-acute providers. In addition, Quick Med Claims, which focuses on RCM for emergency medical services and medical transportation, received a growth capital investment from Leeds Novamark Capital, BB&T Capital Partners and Wasena Capital Management.

These deals also illustrate PE investors' focus on "alternate site IT." Like hospitals, alternate sites of care—such as behavioral health, home health and senior housing—are seeking to improve revenue capture and reduce costs.

In response, they are increasingly adopting IT solutions to help simplify and streamline their operations. It's an especially attractive space for PE investors due to the overall level of fragmentation, the availability of some platform assets and relatively lighter competition from corporate buyers, many of which have focused more on the hospital and physician segments. PE interest has been further bolstered by successful exits in the space. For example, JMI Equity-backed PointClickCare, an electronic health records (EHR) provider for skilled nursing and senior living facilities, filed for an IPO during 2015. And the sale of VC-backed Brightree—which provides billing and other solutions to home and durable medical equipment (HME/DME), home health and hospice providers—to corporate buyer ResMed was announced in early 2016, after a late-2015 process.

As in prior years, the data and analytics segment continued to be popular, fueled by demand from both payers and providers to deploy analytics in their quest for more efficient care. Thoma Bravo secured an analytics platform asset via its majority stake investment in MedeAnalytics, a provider of cloud-based revenue cycle and clinical analytics for providers and payers. Competition for assets in this segment was high due to strong PE and corporate interest, as evidenced by IBM's acquisition of Explorys and Phytel in 2015 and Truven Health in early 2016.

We also saw PE-backed portfolio companies building up their positions. Blackstone and Hellman & Friedman–backed Change Healthcare (formerly Emdeon) bought Altegra Health for about $910 million. Change Healthcare focuses on RCM and claims processing and has built a platform rolling up assets in related businesses. Altegra focuses on payment and reimbursement solutions for payers. In another example, OMERS-backed MatrixCare acquired AOD Software, creating a platform that serves many post-acute and long-term care segments, from skilled nursing to continuing care retirement communities. The acquisition positions the firm to better serve consolidated long-term post-acute care operators and care conveners.

HCIT interest extended overseas and into the biopharma services segment as well. For example, European investor Vitruvian Partners took a majority stake in CRF Health, which enables patients in clinical trials to report outcomes via electronic clinical outcome assessments, with the goals of improving their engagement and protocol compliance.

Turning to China, government stimulus prompted both corporate and PE interest in HCIT assets. As noted in the Asia-Pacific section of this report, the three big Internet champions—Baidu, Alibaba and Tencent—are investing in a mix of online and offline healthcare assets, sometimes in partnership with PE firms. For example, Tencent led a $100 million investment round for mobile hospital appointment scheduling platform Guahao.com in 2014 and participated in a nearly $400 million investment round in 2015, led by Hillhouse Capital and Goldman Sachs. In another example, Yunfeng Capital, which is backed by Jack Ma, and China Life Insurance invested approximately $1.6 billion via PIPE into Chinese drugmaker Guangzhou Baiyunshan Pharmaceutical to fuel its online expansion. The deal follows expected regulatory changes allowing the sale of prescription drugs online. In a similar vein, Alibaba Group is actively consolidating its pharmacy-focused e-commerce assets under one umbrella in preparation for the expected opening of the online drug market to prescription sales, which should spur further corporate and PE activity.

4 This deal does not appear in 2015 data from Dealogic because none of the bids had been accepted by year-end.

5 Many contract research organizations serve biopharma and medtech companies; however, in our data analysis, we counted CROs as serving just the biopharma sector unless otherwise noted.

6 In this report, HCIT deals are included in the data for the relevant sector (provider, payer, biopharma or medtech).

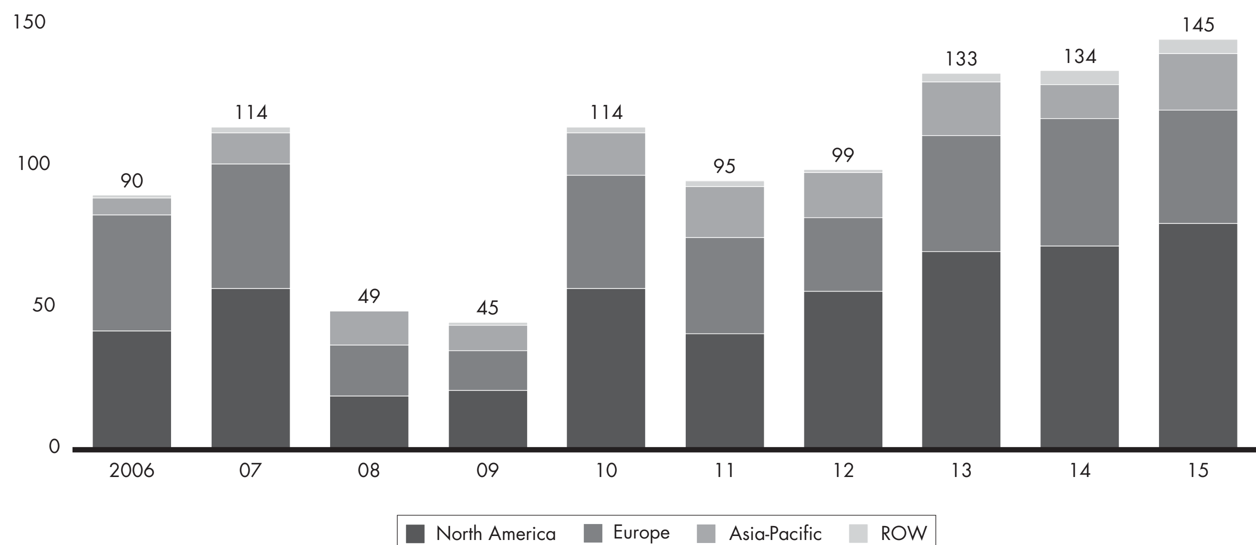
Exit activity

Section highlights

- The number of exits surged due to growth in sponsor-to-corporate and sponsor-to-sponsor sales
- IPO activity tapered off with stock market volatility that began midyear
- Paying a premium for prize assets and positioning them for sale to corporate buyers paid off in many cases

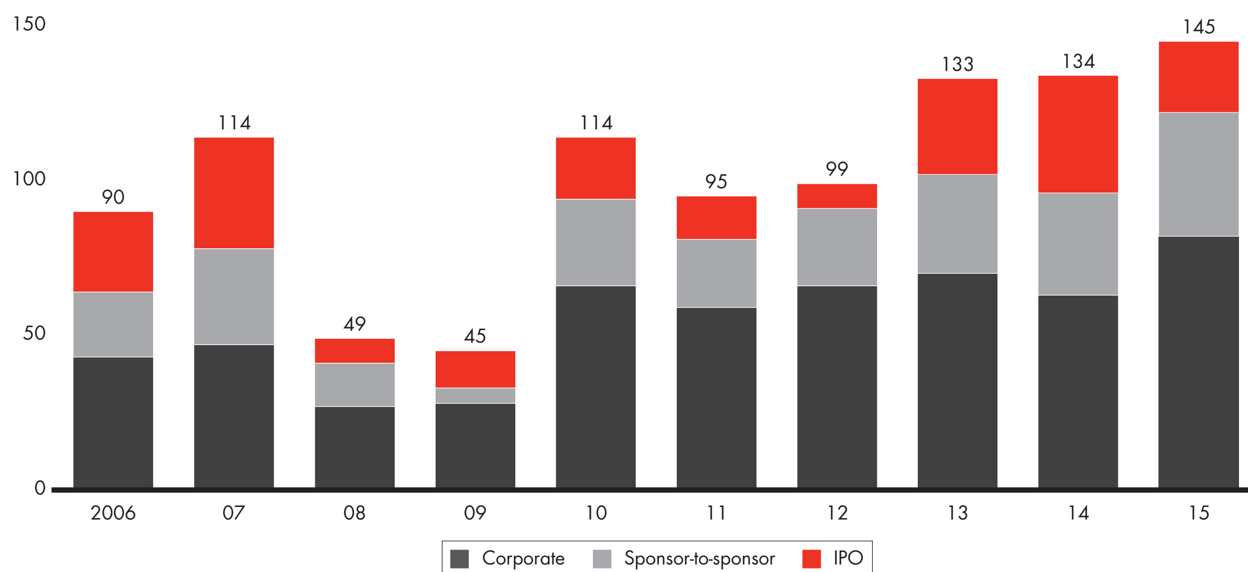
Exit conditions for healthcare PE investors remained quite strong in 2015 as the number of exits rose to 145 from the 134 in the prior year (see Figure 10). Sponsor-to-corporate activity surged to 82 deals, up from 63 in 2014, while sponsor-to-sponsor activity came in at 40 deals, slightly higher than the prior year's 33 deals. IPO activity, meanwhile, dropped to 23 from 38 in 2014, in part due to stock market volatility in the second half of the year (see Figure 11). The growth in exit activity is not surprising, given that hungry corporate buyers continued to drive up valuations. In addition, as volatility in the debt and equity markets emerged and raised questions about how attractive funding may be in the future, some investors may have been prompted to accelerate exit plans.

Figure 10: Exit activity increased in 2015



Notes: Excludes bankruptcies; ROW stands for rest of the world and includes Central and South America, Africa and the Middle East
Source: Dealogic

Figure 11: Exits to sponsors and corporate buyers rose while IPO exits dropped



Note: Excludes bankruptcies
Source: Dealogic

The flurry of sponsor-to-corporate exits shows that the investment strategy of paying a premium for prize assets, then positioning them for sale to corporate acquirers, paid off in many cases. For example, TPG sold Par Pharmaceuticals to Endo International for approximately $8 billion—reportedly more than six times the return on its investment. For Endo, the acquisition will grow its generics business into a top-five competitor. In another deal, Clayton, Dubilier & Rice (CD&R) sold PharMEDium Healthcare Holdings to Amerisource-Bergen for almost $2.6 billion less than two years after acquiring the firm, discontinuing plans for an IPO. CD&R navigated the asset through challenging regulatory pressures for the fragmented compounding segment, establishing the asset as the type of clear leader that corporate buyers seek.

Some investors got creative in structuring exits to corporate buyers. For example, consider the WCAS-led partial exit of United Surgical Partners International (USPI) to Tenet. Through a joint venture structure, WCAS and USPI's other investors retained a 49.9% stake, with a path to exit to Tenet over the next five years. WCAS entered into a similar arrangement via its previously discussed partnership with Select Medical to acquire Concentra.

A number of notable sponsor-to-sponsor exits occurred during the year. KKR's acquisition of Air Medical Group Holdings was an exit for Bain Capital and Brockway Moran & Partners. And Cinven's pair of laboratory clinic deals were also sponsor exits: Cinven acquired synlab for $1.9 billion from BC Partners, and Cinven acquired Labco for $1.3 billion from 3i and others, following Labco's scrapped IPO.

While the market turmoil in the second half of the year dampened exits, IPO activity was strong in the first part of the year. For example, Vestar-backed health research firm Press Ganey raised funds via IPO. The success

of IPOs also proved that there was a robust exit channel for newer investment segments. The IPO of Evolent, backed by TPG Growth, the Advisory Board Company and UPMC Health Plan, established an exit channel for assets focused on value-based care and care coordination. Similarly, the IPO of venture capital–backed Teladoc established an exit channel for telehealth assets, and the IPO of PointClickCare, which was filed in 2015, will build an exit channel for alternate site IT assets. The IPO trend was not confined to developed markets. For example, the IPO of Integrated Diagnostics Holdings, an Egyptian laboratory clinic chain backed by Abraaj Group and others, was the first primary listing of an Egyptian healthcare business on the London Stock Exchange.

2016 and beyond

Healthcare has been, and will continue to be, an important part of private equity portfolios. However, macroeconomic signs point strongly to a global slowdown or a recession in the near future, very likely during the hold period for recent and upcoming investments. Experienced healthcare PE investors are weighing recession scenarios in their deal-making calculus as well as assessing their existing portfolios for vulnerabilities and for levers they can pull to improve growth and margin trajectories.

The good news for healthcare investors is that many of their favorite investment strategies will still be effective in a downturn. As previously discussed, as procurement departments cut costs by shrinking the number of suppliers to manage, category leaders will likely remain on the short list. Leaders also are more likely to have the financial strength to make investments through a downturn, potentially even bolstering their leadership by consolidating weaker players. Buy-and-build strategies can also pay off in a downturn, as falling prices may unlock opportunities for add-ons. And corporate appetite for partnerships will likely grow, especially where debt markets falter. Complex carve-outs may even accelerate as corporate buyers look to streamline operations and free up cash.

For PE funds in the healthcare hunt, a number of sectors have captured keen interest to date in 2016, including

- HCIT, especially the segments of coding, data and analytics, revenue cycle management, alternate site IT and digital health in China;
- providers, especially in fragmented segments and developing markets;
- physician practice management, including behavioral health;
- retail health, including ophthalmology, dermatology, dental and veterinary clinics;
- outsourced services, including manufacturing, product development and other services that benefit from the desire of many biopharma and medtech companies to outsource more noncore activities;
- specialty generics and OTC products, including vitamins and supplements; and
- alternate asset classes, such as distressed debt, especially for specialized investors that can identify inefficiencies between an asset's fundamentals and market pricing.

Looking ahead, healthcare investors should be prepared for even more competition for assets. Corporate interest is unlikely to abate. In addition, investors looking for recession-resistant assets will come to healthcare because underlying demand typically remains strong in downturns. Sophisticated healthcare investors will recognize that the impact of a downturn will vary significantly across segments. Segments that offer cost savings to the value chain may flourish. At the same time, changes in consumer demand may hurt segments with high cash-pay components. And in the US, healthcare segments that are dependent on elective medical procedures may find they have more exposure to consumer demand than in previous downturns given the growth of high-deductible health plans. Analyzing vulnerabilities like these against the growth prospects and price of assets will be critical for healthcare investment decisions.

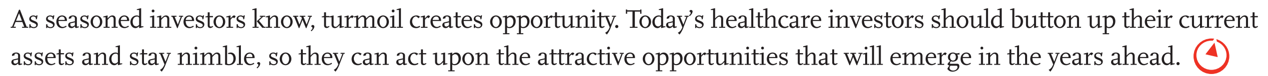
As investors consider new investments and shore up their existing portfolios to prepare for the downturn, they should keep a few key questions in mind.

- **What is the strategy for the downturn?** Management teams need to be ready for a world where healthcare consumption becomes even more price sensitive, with a strategy to turn that shift to their advantage. Furthermore, they should have a clear plan for investment through a downturn, since exit values will hinge on future growth potential even in a slow- or no-growth market.

- **Where is there room for margin improvement?** After a number of years of generating returns from multiple expansion, a downturn will keep multiples more measured and make margin improvement a critical driver of value. Management teams should make deliberate choices around where to play (which customer segments, which geographies) and how to win (which go-to-market model, which capabilities to excel at vs. what can be good enough). They should eliminate activities that divert focus and resources away from the company's core drivers of value.

- **What is the path to exit?** For some funds, it may be prudent to sell now to lock in solid returns and free up capital to invest if valuations decline. In other cases, locking in exits with corporate partners may be an attractive option. And in many cases, a buy-and-hold strategy combined with strong portfolio activism may be the best path to superior returns.

As seasoned investors know, turmoil creates opportunity. Today's healthcare investors should button up their current assets and stay nimble, so they can act upon the attractive opportunities that will emerge in the years ahead.



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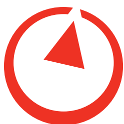

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