Modern Healthcare insights

Healthcare M&A Watch™

Q1 2012

Quarterly trending and analysis of U.S. M&A activity

providers | payers | vendors | pharma/life sciences

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1. Executive Summary

The U.S. healthcare industry continues to operate under a challenging environment from increased competition, evolving healthcare reforms, and cost containment requirements. As a result, healthcare providers are looking at M&A to expand their presence to achieve operational excellence and meet a growing consumer demand.

The industry posted strong gains in Q1 2012 in terms of deal volumes—the number of announced deals grew 48.5% year-over-year (y-o-y) to reach 401 total deals. The middle market (defined as the deals with disclosed value between $10 million and $1 billion) remained at the center of the deal activity. However, the industry saw deal size shrink in terms of value amongst almost all segments, resulting from the high uncertainty threatening the global economy, potential effects of healthcare reform, and products approaching patent expiration with associated declined revenues, or patent cliff. Overall, small deals under $50 million constituted nearly 80% of the total M&A announced during the period.

The vendor market continued to dominate the share of total deals announced in the first quarter of 2012, capturing nearly 50.9% share. This segment especially recorded intense activity in the healthcare equipment sub-segment, primarily fuelled by increased M&A in the companies in the later stages of development. At approximately 57.4% share in total deals, strategic buyers maintained their stronghold in the vendor M&A space in Q1 2012.

Impending pharmaceutical patent cliff pushed the total number of deals in the pharmaceutical, life sciences and biotechnology segment to 105 in Q1 2012 from 66 in Q1 2011. Medical drugs made up for the largest share—39% in the segment—followed closely by biotechnology at 37.1% share.

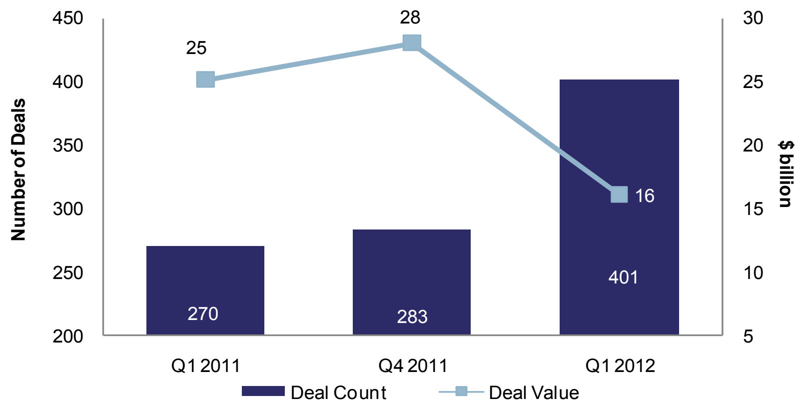
A major emerging trend in the healthcare industry is that provider segment, in recent times, has started opting for other strategic routes such as affiliation rather than M&A to offer better clinical services and avoid any associated risks, including excess debt, inadequate due diligence, and inability to retain employees. However, undercapitalized healthcare providers will continue to look for capital partners, thus increasing the involvement of financial investors in the industry.

2. Overview

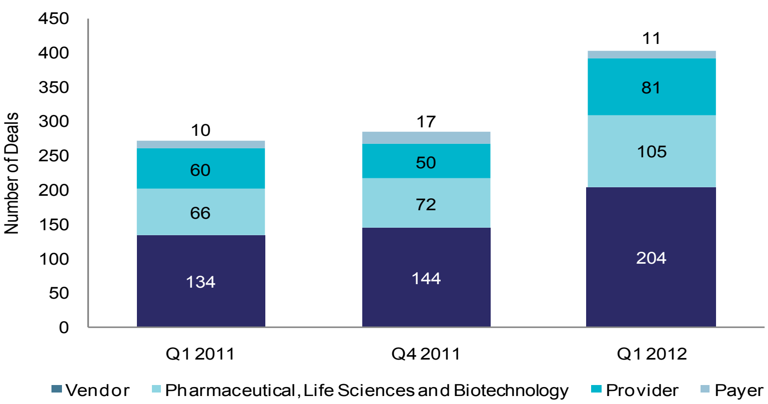
2.1. U.S. Healthcare M&A Activity Heats Up in Q1 2012

The U.S. healthcare M&A market posted a strong rise in the deal volume during Q1 2012. The number of deals during the first quarter reached 401 with total disclosed deal value of $16.1 billion. Deal volume climbed up 48.5% y-o-y; however, in terms of value, there was a strong decline of 36% y-o-y in Q1 2012. Quarter-over-quarter (q-o-q) change in the deal value was 42.6% in Q1 2012. In contrast to Q1 and Q4 2011, where high value deals such as one involving Gilead Sciences-Pharmasset and Danaher-Beckman were announced, Q1 2012 was marred by small- and medium-sized deals.

M&A Deals by Transaction Value[1]

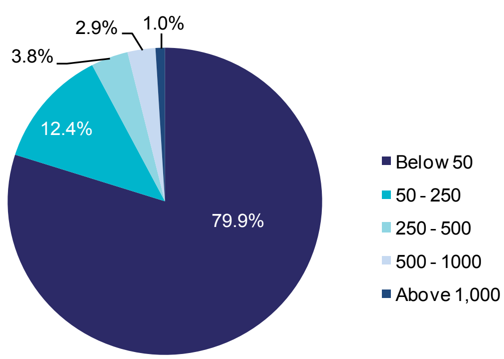


Segment-wise M&A Deals[1]



Of the 209 deals whose deal value was disclosed in Q1 2012, 79.9% of them were below $50 million. Majority of the small size deals were within the vendor and pharmaceutical, life sciences and biotechnology segment. Only two deals above $1 billion were announced in the period, pushing down the total deal value of the period. The majority of deals values were not disclosed within payer segment.

M&A Deals by Transaction Value ($ million), Q1 2012[1]



[1]Deal Value representative of publicly disclosed information. Source for above charts: Bloomberg, Factiva and Press

M&A Deals Split by Transaction Value[1], Q1 2012					
($ million)	Payer	Provider	Vendor	Pharmaceutical, Life Sciences and Biotechnology	Total
Below 50	-	16	90	61	167
50-250	1	5	13	7	26
250-500	-	-	6	2	8
500 -1,000	-	1	2	3	6
Above 1,000	-	-	1	1	2

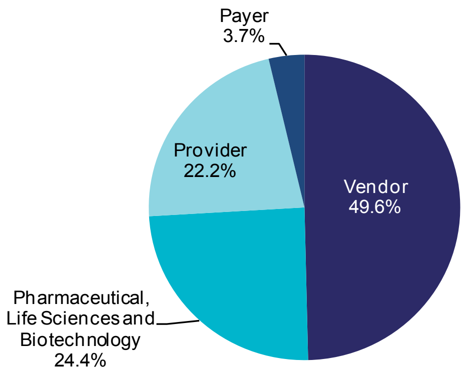
10 Largest M&A Deals Announced[1], Q1 2012					
Announced Date	Acquirer	Acquirer Industry	Target	Target Industry	Deal Value ($ million)
1/7/2012	Bristol-Myers Squibb	Pharmaceutical, Life sciences and Biotechnology	Inhibitex	Pharmaceutical, Life sciences and Biotechnology	2,065
3/12/2012	Asahi Kasei	Vendor	Zoll Medical	Vendor	2,063
2/15/2012	Health Care REIT, Chartwell Seniors Housing Real Estate Investment	Vendor	Retirement Communities Portfolio	Vendor	932
1/30/2012	McKesson	Provider	Drug Trading & Medicine Shoppe Canada	Provider	917
1/26/2012	Amgen	Pharmaceutical, Life sciences and Biotechnology	Micromet	Pharmaceutical, Life sciences and Biotechnology	902
1/9/2012	Linde Healthcare	Vendor	Home Care Business of Air Products and Chemicals	Vendor	611
3/6/2012	AmerisourceBergen	Pharmaceutical, Life sciences and Biotechnology	World Courier Group	Vendor	520
3/26/2012	Bausch & Lomb	Pharmaceutical, Life sciences and Biotechnology	ISTA Pharmaceuticals	Pharmaceutical, Life sciences and Biotechnology	500
1/24/2012	Watson Pharmaceuticals	Pharmaceutical, Life sciences and Biotechnology	Ascent Pharmahealth	Pharmaceutical Life sciences and Biotechnology	393
1/31/2012	AngioDynamics	Vendor	Navilyst Medical	Vendor	372

2.2. Vendors—Most Active Segment

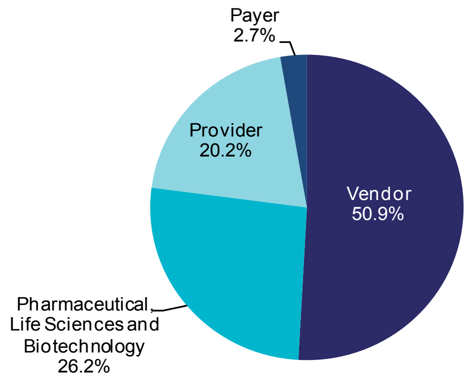
The vendor segment was the most active among all categories within the healthcare sector in Q1 2012. A total of 204 deals were announced during the quarter in the vendor segment, accounting for majority share of 50.9% of the total healthcare deals that took place during Q1 2012, followed by pharmaceuticals, life sciences and biotechnology (26.2%), provider (20.2%), and payer (2.7%) segments.

[1]Deal Value representative of publicly disclosed information. Source for above charts: Bloomberg, Factiva and Press

Segment-wise M&A Deals, Q1 2011



Segment-wise M&A Deals, Q1 2012



Source for above charts: Bloomberg, Factiva and Press

The vendor M&A activity was dominated by transactions in healthcare equipment companies registering 108 deals in all during the quarter. Both healthcare equipment and healthcare information system companies witnessed robust growth in deal activity increasing by 52.1% and 79.2% respectively on y-o-y basis.

2.3. Providers—Growth Continues But New Options Emerging

The provider segment registered double digit growth rates of 35% on y-o-y basis and 62% on q-o-q basis reaching 81 deals in Q1 2012. The provider M&A market is driven on the back of healthcare reform and declining reimbursements. Providers find it economically and clinically beneficial to merge or affiliate with other providers to offset the rising operational costs and provide better population-based care.

2.4. Payers—Deal Value Plummets

The payer market was slow in Q1 2012. A total of 11 deals were announced during the period, with no major high-value deals. Despite rising premiums, increased regulatory control and uncertainty related to the impact of healthcare reform is expected to create more consolidation. Small health insurance service providers might find it difficult to compete, making them attractive buys for bigger players.

2.5. Pharmaceutical, Life Sciences and Biotechnology—Witnessing Maximum Growth

The pharmaceutical, life sciences and biotechnology segment saw a healthy growth in deal making throughout Q1 2012. The segment grew by 59.1% on y-o-y basis and 45.8% on q-o-q basis, reaching 105 deals during Q1 2012 involving large number of small- to medium-sized companies. The deal volume jumped due to drug makers trying to expand their product portfolio and counter the loss in revenue. The biggest challenge for the industry in 2012 will be the expiration of patents for branded drugs that may lead to a gradual shift, reducing prescription drug sales. With interest rates remaining low, cash-rich companies will continue to lookout for new targets.

2.6. Private Equity and Venture Capital Funding Accelerates in Q1 2012

Financial buyer deals had robust growth during Q1 2012 with private equity and venture capital deal count rising to 159 in the first quarter of 2012 at a combined disclosed value of $2 billion. The total private equity and venture capital deals grew by 84.9% on y-o-y basis and 57.4% on q-o-q basis in terms of total deal volume. Bucking the trend, the investors funded late-stage medical device and research and development companies, which would provide them with opportunities for early and easy exits from those investments. Also, the uncertainty over economic environment and Supreme Court's review of the Affordable Care Act made the financial buyers invest in established companies with low-risk return profile.

2.7. Outlook

The positive momentum in the healthcare M&A market is expected to continue in the remaining quarters of 2012 setting the trend for another solid year in healthcare M&A activity. The consolidation activity is expected to remain strong in all the key segments of the healthcare market proving the strong patient demographics and recession-proof nature of the industry. The lucrative vendor segment (especially healthcare equipment) and pharmaceutical, life sciences and biotechnology will continue to dominate the M&A space in the coming quarters.

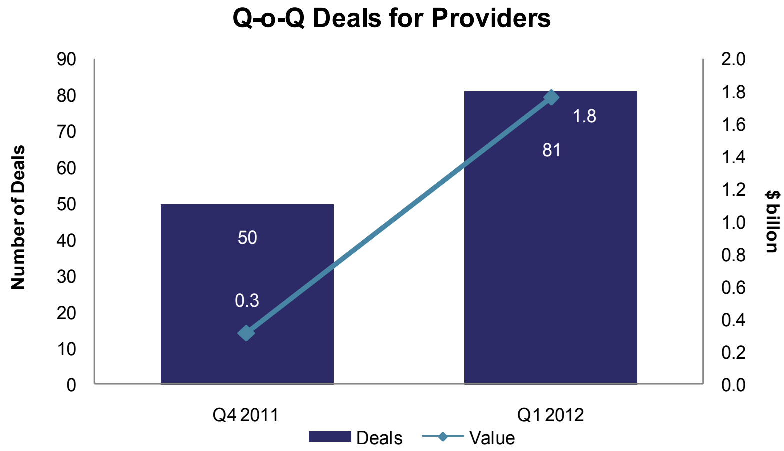
3. Providers

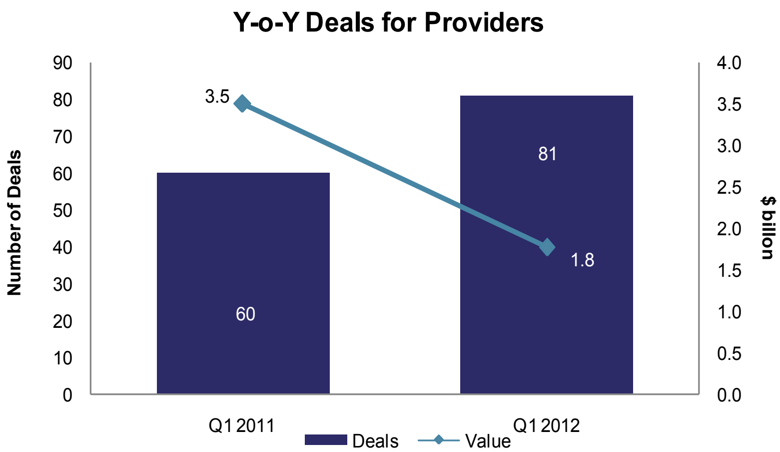
Key Highlights

- *Reported deal size declined substantially in Q1 2012 due to weak global economy and lingering uncertainty over the potential impacts of healthcare reform*
- *Healthcare providers are diversifying consolidation models and opting for strategic partnerships other than mergers and acquisitions*
- *Despite high acquisition cost, hospitals and physician practice-management groups are looking for closer integration and alignment*

3.1. Cost Pressure, Changing Regulations Driving Deal Volume

Changing demographics and income-distribution patterns are shaping the U.S. healthcare provider segment, extensively impacting both sides of the demand-supply equation. Large hospitals are rebuilding or modifying their operating models to compete at all stages of the value chain with regional and niche players. Increasing cost pressure and need-to-save margins are also forcing the players to reanalyze and reposition their operational strategies.





Source for above charts: Bloomberg, Factiva and Press

However, the biggest factor driving M&A in the U.S. healthcare market is regulatory reforms. Recent changes in the U.S. regulatory environment have prompted hospitals to consolidate to gain economies of scale and offset reimbursement cuts.

This has led to aggressive M&A activity in the U.S. healthcare provider segment. Around 81 deals with combined disclosed deal value of approximately $1.8 billion were signed by healthcare providers in Q1 2012. This was up 62% in terms of deal volume over Q4 2011, and 35% over Q1 2011.

3.2. Declining Deal Size

The provider segment is seeing the emergence of smaller deal values. Strong investment existing in the low- to middle-market segments as buyers remained cautious in the wake of fragile global economy and stayed away from tying large capital in high-risk investments. Aggregate disclosed deal value in the segment plunged 49.5% annually in Q1 2012 due to continuing uncertainty over the health of the economy and impacts of healthcare reform. Strict credit standards on commercial and industrial loans are also impacting the deal size. According to a survey by the Federal Reserve on 58 domestic banks and 23 foreign banks (with U.S. operations) in April 2012, domestic banks have somewhat eased their commercial and industrial credit standards in Q1 2012 for both middle-market and small firms. Few U.S. branches of foreign banks have tightened their standards for the third quarter in a row.

Largest 5 M&A Deals Announced, Q1 2012				
Announced Date	Acquirer	Target	Target Industry	Deal Value ($ million)
1/30/2012	McKesson	Drug Trading and Medicine Shoppe Canada	Provider	917
2/2/2012	Walgreen	Transferred Businesses of BioScrip	Provider	170
1/9/2012	CVS Caremark	Medicare Prescription Drug Plan	Payer	160
2/14/2012	Brookdale Senior Living	9 Senior Living Communities	Provider	121
2/17/2012	Formation Capital	9 Illinois Senior Care Facilities	Provider	95

Source: Bloomberg, Factiva, and Press

3.3. Providers Looking beyond M&A

Hospitals, in the last few months, have started looking at diversified consolidation models instead of just M&A—particularly community hospitals. Rather than opting for full-asset acquisitions, these hospitals are looking into joining synergies to create hospital systems, or affiliating with other healthcare providers to provide quality care and infrastructure support for population-based care. Declining reimbursement is another reason hospitals are looking to affiliate. For instance, cardiovascular services saw Medicare reimbursement decline by 35-40% over the period. Medicare also reduced reimbursement to nursing homes by 11% in 2011. Insurance companies are also cutting reimbursements; BCBS has cut reimbursement by 17% across the board.

Though affiliation adds to the operational stress for both hospitals and physicians, it has the potential to balance integration of economic and clinical interests. Affiliation, along with retaining distinct boards and finances, offers the dual benefit of providing clinical services that were not being offered before. To fully capitalize on the benefits of affiliation, healthcare providers should adapt to the new environment while protecting and ensuring the delivery of services in their communities.

3.3.1. Increased Risk of Mergers

Another major reason some healthcare providers may evade the M&A route and affiliate to gain operational efficiency and provide an enhanced clinical service is the increased risk M&A activity can have.

According to PricewaterhouseCoopers, nearly two-thirds of deals are not able to meet the desired results, majorly due to overpaying, excessive debt, inadequate due diligence, inability to retain employees, culture clashes, extended integration, and ineffective communication.

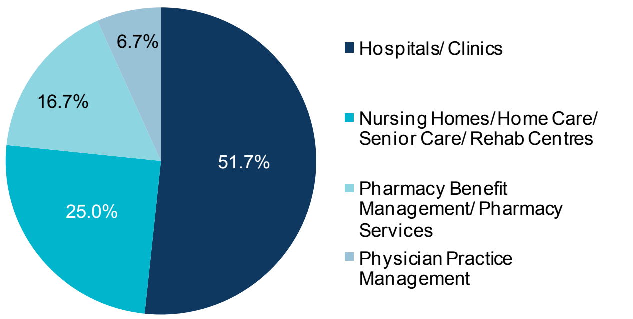
In addition, mergers in the provider segment escalate the cost of medical services. Hospitals that control a local market are typically able to negotiate higher prices from the insurance companies, thus driving up healthcare spending.

However, undercapitalized hospitals and healthcare providers will increasingly look for capital partners (not acquirers) to fund infrastructure construction, mandated information technology upgrades, and pension obligations. This, together with tight lending conditions in the U.S. that has reduced the credit availability for hospitals, will increase the involvement of financial investors in catalyzing the industry consolidation.

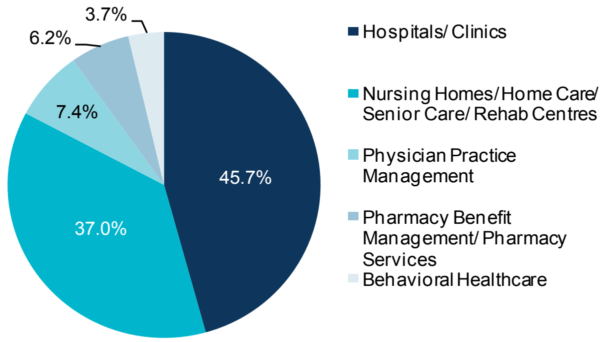
3.4. Physician Practice Management Driving Integration at a Cost

Physician practice groups that play a critical role in healthcare delivery systems remained an attractive acquisition target for investors in Q1 2012. Hospitals, in their quest to expand and strengthen their service portfolios, are looking to employ specialist physicians, proving to be costly. As a result, hospitals are increasingly acquiring and integrating existing physician practices into their systems as the upfront cost in such cases is generally small and includes real estate, equipment, and medical records. However, the overall acquisition cost can be high.

Provider - Sub-segment-wise M&A Deals, Q1 2011



Provider - Sub-segment-wise M&A Deals, Q1 2012



According to PricewaterhouseCoopers, acquisition and ramp-up costs together can value anywhere from $500,000 to $1 million for every new physician employed. Additionally, increased physician-practice-acquisition activity reduces return prospects for hospitals as physicians can negotiate compensation and benefits at higher price than the usual employment model. For instance, Equation Consulting reported that several hospitals annually lose $100,000 to $200,000 on an ongoing basis with every new employed physician. This issue can be addressed by increasing commercial physician-fee schedule rates, though cost reduction through less hospital utilization should be made top agenda for physicians to justify high compensation.

Hospitals can modify their operating models by establishing an entrepreneurial physician practice management group, together with a solid clinical and operational integration and alignment model, as a complementary/alternative strategy to employment in order to cut employment cost.

3.5. Outlook

Strategic partnerships and affiliations will help consolidate the U.S. healthcare system, leading to larger and more integrated patient-oriented systems in order to manage the population health efficiently.

Also, practice groups and hospitals will look for greater integration and alignment to cut dependence on a costly, traditional employment model and preserve income through shared savings from payers. Orthopedic, geriatric, and cardiology practices will garner special interest from hospitals as these specialties will help them serve the aging population and lifestyle-related diseases, and increase focus on primary care and specialist practices.

Source for above charts: Bloomberg, Factiva and Press

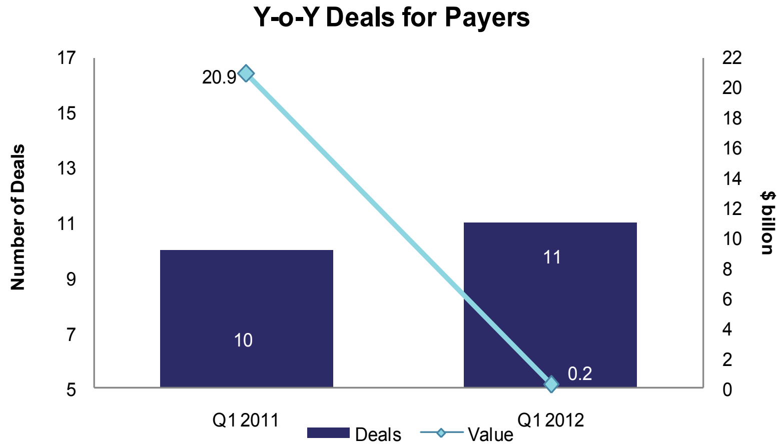
4. Payers

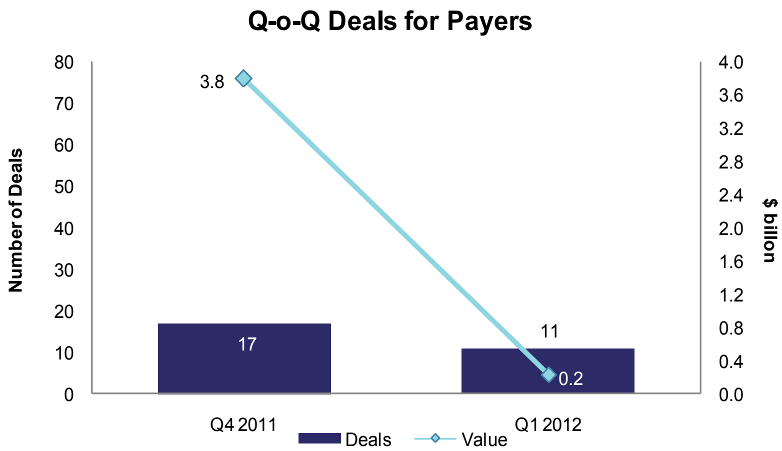
Key Highlights

- *Reported deal value crashed from $20.9 billion in Q1 2011 to just $0.2 billion in the Q1 2012*
- *High uncertainty over global economy and regulatory reforms continue to weigh on the industry*
- *International markets to become more lucrative due to lesser regulations and low penetration*

4.1. Payers Losing Steam

The payer market was sluggish during Q1 2012, as the number of deals slipped from the previous quarter. Although there was an insignificant rise in the number of deals struck annually, the deal value crashed from $20.9 billion recorded in Q1 2011 to a meager $0.2 billion in Q1 2012. Continuing economic weakness and regulatory reforms continue to weigh on the industry. In Q1 2012 there was a fall in the number of cross-segment M&A activity by the payer segment. Among the major health insurance companies in the U.S., UnitedHealth was the most active in deal-related activity. The company was involved in three deals during the quarter.





The payer-provider integration, which was the business-practice highlight of 2011, saw minimal activity during Q1 2012. However, payers scouted for healthcare information technology companies operating within the vendor space. A drop was also observed in the deals involving payers and vendors. In Q1 2012 there were only three deals in the payer-vendor segment as opposed to seven deals during the same period previous year. Industry observers anticipate the need to cut healthcare costs and increase Medicare penetration will offset the decline in M&A activity in the coming quarters.

Source for above charts: Bloomberg, Factiva and Press

Selected M&A Deals Announced, Q1 2012			
Announced Date	**Acquirer**	**Target**	**Target Industry**
1/11/2012	Universal American	APS Healthcare	Vendor
1/31/2012	UnitedHealth	Frontier Medex	Vendor
2/9/2012	Humana	Mid America Medical Associates, Garcia Rosenberg & Associates	Provider
2/28/2012	UnitedHealth	Preferred Care Partners	Payer
2/28/2012	UnitedHealth	Medica Healthcare Plans	Payer

Source: Bloomberg, Factiva, and Press

4.2. Regulatory Uncertainty Remains

Industry players have raised concerns over certain provisions of the Patient Protection and Affordable Care Act and the Dodd-Frank Wall Street Reform Act. Uncertainty regarding some of those provisions might have stalled Q1 deal activity. The industry also remains in flux because the Dodd-Frank Act increases the capital requirements and reporting standards for companies. The sector will continue to be under strict observation by lawmakers due to rising costs.

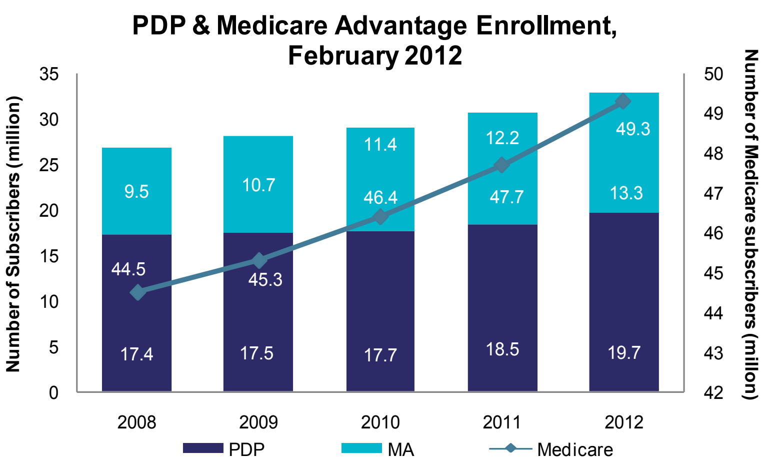
4.3. Payers to Expand Overseas

Most U.S. health insurance providers have limited presence in international markets; however, to capture new markets, companies are pursuing expansion plans of offering health insurance services abroad. The recent announcement by UnitedHealth related to the acquisition of U.K.-based Frontier Medex and an alliance with Al Sagr National Insurance, are examples that insurance companies are looking to expand overseas. Also, increasing regulations in the U.S. market and low health insurance penetration in the developing markets will drive the cross-border M&A activity. In particular, China, Brazil, and India may become attractive destinations for the U.S.-based insurance providers due to their rapidly expanding economies and higher returns. Financial pressure to perform is an indicator that will drive the U.S. insurance companies to seek newer growth markets. Companies such as Cigna and Aetna already have a strong overseas business, which has played a critical role in their growth.

Industry experts believe that the current debt crisis in Europe could spark off distress sales by financial institutions of their holdings across Latin American and Asian markets. This may provide an opportunity for U.S. companies to further invest in these markets and expand their footprint.

4.4. M&A Impacting Prescription Drug Plans

The Prescription Drug Plans (PDP) market, also known as Medicare Part D plans, has been impacted by rapid M&A in the payer market. Strong competition has redistributed the market share among top players. As of February 2012, the five largest plans had 67.7% of the total PDP enrollees. Of the total Medicare beneficiaries, market share of PDP has risen consistently since 2008.



Source: Mark Farrah Associates (MFA)

UnitedHealth is the market leader with more than 4.2 million PDP subscribers and 21.5% of the market share as of February 2012. Overall, there were a total of 19.7 million PDP subscribers reported in the beginning of February 2012, an increase of 1.1% over February 2011.

Largest 5 PDP Organizations with More than One Million Members, February 2012				
Parent	**February 2011**	**February 2012**	**Percent Growth (%)**	**Market Share (February 2012)**
UnitedHealth	4,734,766	4,241,527	-10.4%	21.5%
CVS Caremark	3,417,361	3,624,822	6.1%	18.4%
Humana	2,329,384	2,848,834	22.3%	14.5%
Coventry	1,163,150	2,848,834	23.5%	7.3%
Medco Health	711,420	1,168,672	64.3%	5.9%
Subtotal >1 Million	**12,356,081**	**13,320,634**	**7.8%**	**67.7%**
All Others	6,164,690	6,369,772	3.3%	32.3%
Total	**18,520,771**	**19,690,406**	**6.3%**	**100%**

Source: MFA and CMS

4.5. Outlook

The payer landscape in the U.S. has been undergoing fundamental changes after the introduction of the Patient Protection and Affordable Care Act in 2010. Changing demographics and economic growth of the country will play a critical role in long-term shaping of the industry. With changes being introduced in Medicare reimbursement programs and insurance companies under pressure to reduce their administrative cost to 15-20% of the total expenses, profit margins of major players will be stretched. An insurance companies' level of operations and their ability to offer additional patient volumes to providers, allows them to negotiate discounts with providers for commercial plans, and helps payers thrive in the market.

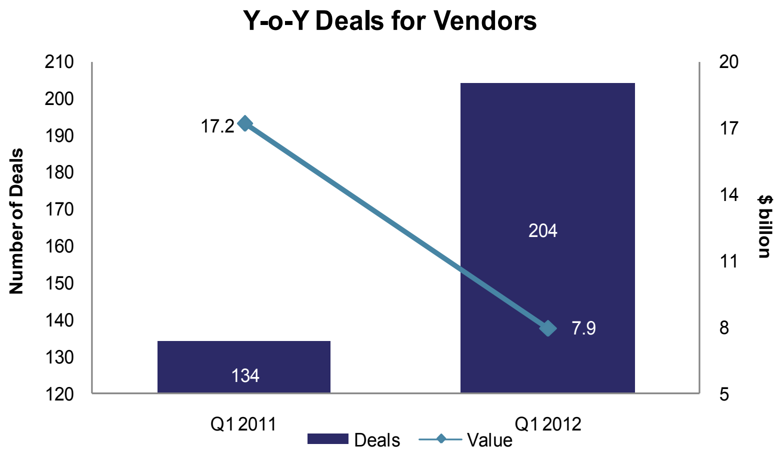
5. Vendors

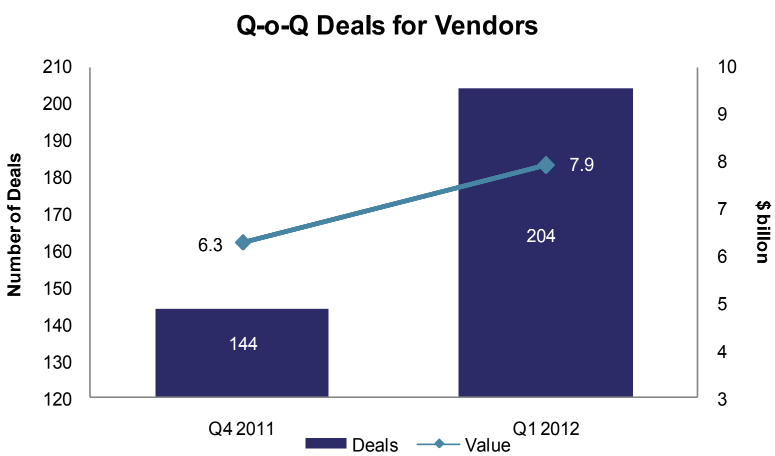
Key Highlights

- *Vendor segment registered the maximum activity compared to other segments with 204 deals during Q1 2012, up by 52.2% on y-o-y basis and 41.7% on q-o-q basis*
- *Vendor M&A was led by 108 deals in the healthcare equipment segment during Q1 2012, comprising 52.9% of total deals in the vendor space*
- *Healthcare information systems witnessed robust y-o-y growth of 79.2% in number of deals during Q1 0212*
- *Private equity and venture capital funding flooded the vendor segment with 87 deals during the quarter amounting to total disclosed value of approximately $1 billion*

5.1. Strong Surge in M&A Activity

For vendors, Q1 2012 had a strong positive trend. The number of M&A deals continued to grow at a healthy pace of 52.2% y-o-y and 41.7% q-o-q to reach 204 in Q1 2012. While the growth was robust in terms of total deal volume, the disclosed deals overall value declined significantly by 54% to reach $7.9 billion in Q1 2012, as compared to corresponding quarter of the previous year. The disclosed deals total value increased by 25.5% compared on q-o-q basis.





During the quarter ending March 2012, the vendor segment (including healthcare equipment manufacturers and distributors, information technology companies, and medical services) occupied the dominant share of the total U.S. healthcare M&A activity, contributing 50.9% in terms of deal volume. The strong underlying fundamentals of the market—aging population, continued focus on legislation—remained largely unchanged from the previous quarters. Strategic as well as financial acquirers continued to execute their growth strategies with acquisitions through diversification or expansion in new and existing markets.

Source for above charts: Bloomberg, Factiva and Press

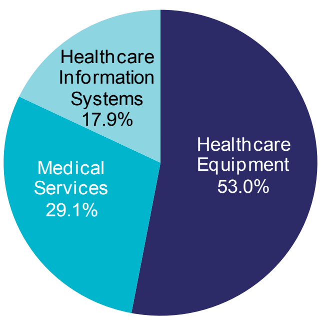
Largest 5 M&A Deals Announced[2], Q1 2012				
Announced Date	Acquirer	Target	Target Industry	Deal Value ($ million)
3/12/2012	Asahi Kasei	Zoll Medical	Vendor	2,063
2/15/2012	Health Care REIT, Chartwell Seniors Housing Real Estate Investment	Retirement Communities Portfolio	Vendor	932
1/9/2012	Linde Healthcare	Home Care Business of Air Products and Chemicals	Vendor	611
1/31/2012	AngioDynamics	Navilyst Medical	Vendor	372
1/9/2012	Sigma-Aldrich	BioReliance Holdings	Vendor	350

5.2. Healthcare Equipment Dominate Vendor M&A

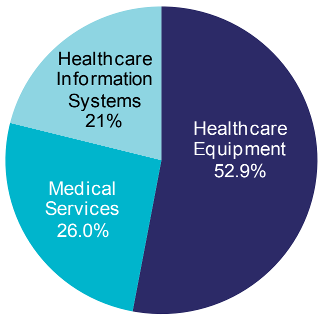
Vendor M&A activity was led by 108 deals in the healthcare equipment segment (including medical devices & products and diagnostics equipment) during Q1 2012.

The category continued to attract the majority of investments accounting for 52.9% of the total M&A activity in the vendor segment in terms of volume—almost flat as compared to 53% share in Q1 2011 and 56.3% share in Q4 2011. The strong growth momentum was driven by increased M&A in these types of companies in the later stage of development, accounting for significant investments from both strategic and financial investors. Further, the middle market was very active with 60.4% of the total disclosed deals in the vendor segment falling under this category.

Vendor - Sub-segment-wise M&A Deals, Q1 2011



Vendor - Sub-segment-wise M&A Deals, Q1 2012



5.3. Healthcare Information System—Rise in Deal Making

Healthcare information systems witnessed a large growth within vendor M&A activity. The segment's contribution to total vendor M&A deals increased from 17.9% in Q1 2011 to 21.1% in Q1 2012. The number of deals increased from 24 in Q1 2011 to 29 in Q4 2011 to 43 in Q1 2012, surging by 79.2% on y-o-y basis and 48.3% on q-o-q basis.

The Health Information Technology for Economic and Clinical Health Act—passed in 2009—kick-started an increased adoption of information technology systems in healthcare. Since then, significant momentum was seen in the health information technology segment as buyers looked to acquire rapidly growing companies, principally software featuring cloud-enabled solutions to accelerate growth and offer a wider suite of products to the healthcare marketplace. The segment has also attracted funding from private equity and venture capital investors; a total of 13 private equity and venture capital deals were announced during Q1 2012, amounting to a total disclosed deal value of $222.3 million.

[2]Top deals based on disclosed deal values. Source for above charts: Bloomberg, Factiva and Press

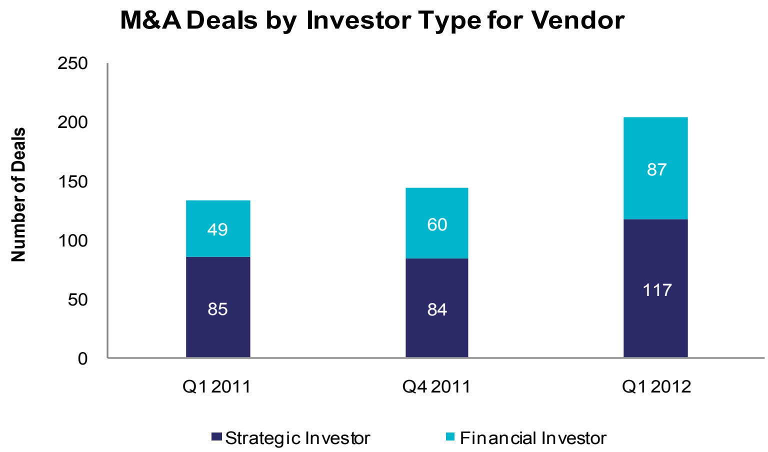
5.4. Healthcare Real Estate Investment Trusts

Sale of assets by healthcare providers is shaping up as a key trend. Many healthcare providers are selling their real estate to increase capital availability to finance facility upgrades and expansions. Particularly, healthcare real estate investment trusts are showing increased interest in taking over hospitals and nursing homes through a sale-leaseback model.

Healthcare REITs find healthcare real estate lucrative because of attractive patient demographics and the sector's recession-proof performance record. The increased interest of healthcare REITs in medical office buildings and senior care and housing is evident from Q1 2012 activity. A total of 12 healthcare REIT M&A deals were executed during Q1 2012 amounting to a total disclosed value of $1.6 billion.

5.5. Vendors Generating Maximum Interest from Financial Investors

The financial investor deals continue to rise in the healthcare vendor sector. Activity from Q1 2012 witnessed 87 deals in all, up by 77.6% from 49 deals in Q1 2011. Of the total private equity and venture capital deals, approximately 54.7% of them fell in vendor activity reflecting the increased interest of financial investors in the medical devices, equipment, information technology companies, and ancillary services companies due to their capacity to generate strong returns. Financial investors' funding followed the path of strategic investors as approximately 66.7% of private equity and venture capital deals fell in healthcare equipment space, followed by medical services (18.4%), and healthcare information systems (14.9%).



Source: Bloomberg, Factiva, and Press

5.6. Outlook

Observers forecast an increase in M&A activity within the vendor segment in general and healthcare equipment in particular, with increased deal flow and attractive prices for sellers from both strategic and financial buyers in 2012. Similar to 2011, strategic buyers will continue to dominate in 2012. Digitization of patient records in order to meet government requirements, lower labor cost and increase efficiency will drive M&A of healthcare information technology companies. M&A activity is also expected to continue to be active in the middle market.

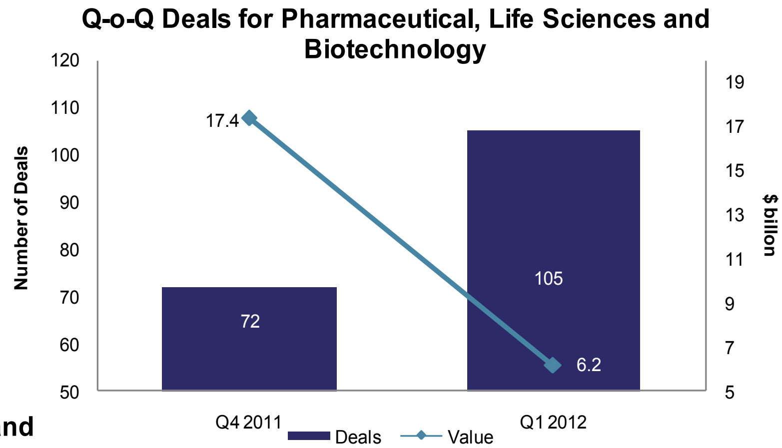
6. Pharmaceutical, Life Sciences and Biotechnology

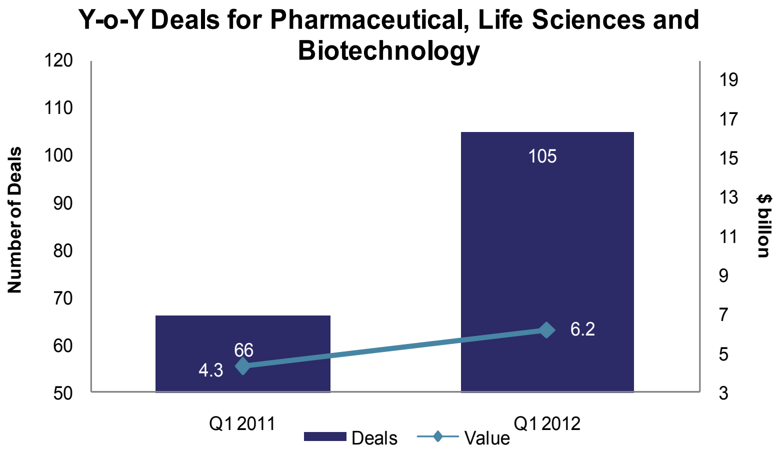
Key Highlights

- *M&A activity in pharmaceutical, life sciences and biotechnology domain soared in Q1 2012, with 105 deals announced during the period*
- *Imminent patent expiration continued to be the major driver of M&A activity in this segment*
- *With a consolidated disclosed deal value of $813.1 million, funding from private equity and venture capital gained momentum in Q1 2012*

6.1. Deal Volume Jumps in Q1 2012

Although there was just one deal that crossed the billion-dollar mark at the start of the year, M&A activity in the pharmaceutical, life sciences and biotechnology segment in Q1 2012 outnumbered both in Q1 2011 and Q4 2011. As of March 2012, 105 deals were announced in the segment, representing a 45.8% increase from Q4 2011 and 59.1% from Q1 2011.



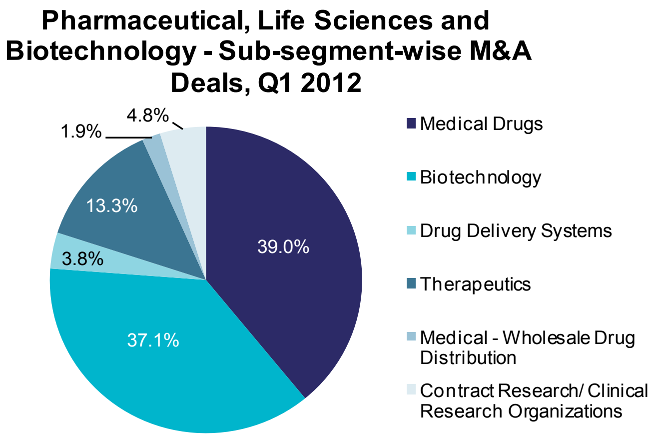


However, despite this significant increase in deal volume in Q1 2012, the total deal value from disclosed activity dropped to $6.2 billion—a 64.6% decline from Q4 2011. Comparing it to the disclosed deal value of $4.3 billion recorded in the same period in 2011, there was a gain of 43.4% y-o-y.

6.2. Segment Analysis

In Q1 2012, 41 deals (39%) took place in medical drugs (small molecules and generics) sub-segment, followed by 39 deals (37.1%) in biotechnology (biologics), out of a total of 105 deals in pharmaceutical, life sciences and biotechnology segment.

The quarter had significant growth in therapeutics, with total deals in the segment rising to 14 in Q1 2012 from zero made in Q1 2011 and one deal in Q4 2011.



Source for above charts: Bloomberg, Factiva and Press

This comeback is in line with the continuing consolidation of the drug industry with AmerisourceBergen's $520 million purchase of healthcare logistics company World Courier Group and the acquisition of Elevation Pharmaceuticals by Novo Nordisk and Canaan Partners, TPG Biotech, Care Capital and Mesa Verde Venture Partners in a $30 million deal.

In Q1 2012, M&A activity involving contract/clinical research organizations (CROs) picked up slightly from the last quarter in terms of deal volume, but remained lower than Q1 2011 (nine deals worth $100 million). From just three deals in Q4 2011, five CROs attracted funding from private investors and other CROs, including Integrated DNA Technologies and Ockham, in Q1 2012. However, even the consolidated value of $73.6 million of CRO deals in Q1 2012 remained much lower than the financing of $3.4 billion of Pharmaceutical Product Development by venture capitalists in Q4 2011.

Largest 5 Medical Drugs M&A Deals Announced, Q1 2012				
Announced Date	Acquirer	Target	Target Industry	Deal Value ($ million)
1/7/2012	Bristol-Myers Squibb	Inhibitex	Pharmaceutical, Life sciences and Biotechnology	2,065
3/26/2012	Bausch & Lomb	ISTA Pharmaceuticals	Pharmaceutical, Life sciences and Biotechnology	500
1/24/2012	Watson Pharmaceuticals	Ascent Pharmahealth	Pharmaceutical, Life sciences and Biotechnology	393
1/26/2012	Celgene	Avila Therapeutics	Pharmaceutical, Life sciences and Biotechnology	350
2/22/2012	Polaris Venture Partners, Private Investor	Receptos	Pharmaceutical, Life sciences and Biotechnology	50

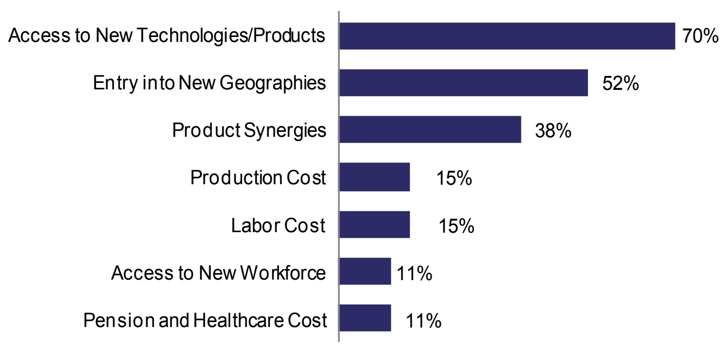
Largest 5 Biotechnology M&A Deals Announced, Q1 2012				
Announced Date	Acquirer	Target	Target Industry	Deal Value ($ million)
1/26/2012	Amgen	Micromet	Pharmaceutical, Life sciences and Biotechnology	902
2/29/2012	Dainippon Sumitomo Pharma	Boston Biomedical	Pharmaceutical, Life sciences and Biotechnology	200
3/5/2012	Abcam	Epitomics International	Pharmaceutical, Life sciences and Biotechnology	155
3/15/2012	Shire	FerroKin BioSciences	Pharmaceutical, Life sciences and Biotechnology	100
2/14/2012	Biogen Idec	Stromedix	Pharmaceutical, Life sciences and Biotechnology	75

Source: Bloomberg, Factiva, and Press

6.3. Patent Cliff Driving M&A

The rise in merger activity in Q1 2012 may be attributed to the fact that many blockbuster drugs are going off patent at a time when there are not many approvals being granted. With slowing sales, most drug manufacturers are now looking for growth by acquiring companies that have promising pipelines—a trend followed for quite some time now by Big Pharma that taps on the agility, ingenuity, and entrepreneurial talent of smaller life sciences companies.

Pharmaceutical M&A Drivers

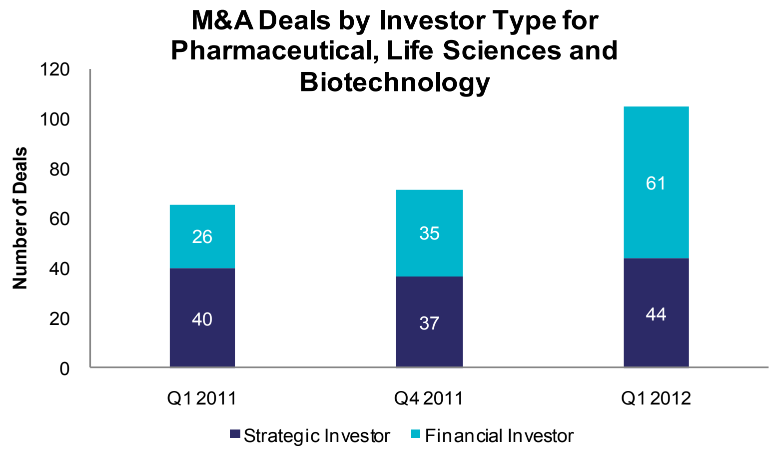


Source: KPMG Pharmaceuticals Executive Survey (2011)

Other factors driving M&A in the pharmaceutical, life sciences and biotechnology segment include access to novel technologies/products, new geographies, product synergies, production and labor cost, new workforce, and pension and healthcare costs.

6.4. Venture Funding

Private equity and venture capital funding in the pharmaceutical, life sciences and biotechnology space increased in the first quarter of 2012. A total of $813.1 million was raised in 61 deals during Q1 2012. Private equity and venture capital deals superseded the strategic ones (44 deals) in terms of volume in Q1 2012, though venture capital took a lead in consolidated disclosed deal value of $5.4 billion. Another major trend that emerged during Q1 2012 involving private funding was that almost all drug delivery companies (4 out of 5) received funding from private equity and venture capital and three among five CROs were financed by venture capitalists, raising a consolidated $73.6 million in CRO funding rounds.



High private-equity investment in CROs is due to emerging contract/clinical research becoming established as an organized and specialized service industry throughout the research cycle, and not just as a product-based industry where returns depend on the development and commercialization of products.

Largest Private Equity and Venture Capital M&A Deals Announced, Q1 2012				
Announced Date	**Acquirer**	**Target**	**Target Industry**	**Deal Value ($ million)**
2/13/2012	Linden Capital Partners	SeraCare Life Sciences	Pharmaceutical, Life sciences and Biotechnology	61
2/22/2012	Polaris Venture Partners, Private Investor	Receptos	Pharmaceutical, Life sciences and Biotechnology	50
2/15/2012	Venrock Associates, Johnson & Johnson Development Corp, GBS Venture Partners Ltd, Enterprise	Celladon	Pharmaceutical, Life sciences and Biotechnology	43
3/6/2012	OrbiMed Advisors, Renaissance Technologies, Aisling Capital, Column Group	Aragon Pharmaceuticals	Pharmaceutical, Life sciences and Biotechnology	42

The quarter also brought on a new trend of product-based companies partnering with private equity and venture capital to provide funding to smaller pharmaceutical/biotechnology players in the U.S., especially those with some breakthrough technology. In three such funding and strategic deals in Q1 2012, Novo Nordisk, Shire and Novartis partnered with various private investors to acquire start-up companies operating in therapeutics and biotechnology sub-segment.

6.5. Thin Line of Difference

A look at the announced M&A in Q1 2012 within the pharmaceutical and the biotechnology segment highlights that the distinction between the two is quickly disappearing. Companies operating in the two domains not only present tremendous overlap now but also, in some cases, use the terms pharmaceutical and biotechnology quite interchangeably.

Source for above charts: Bloomberg, Factiva and Press

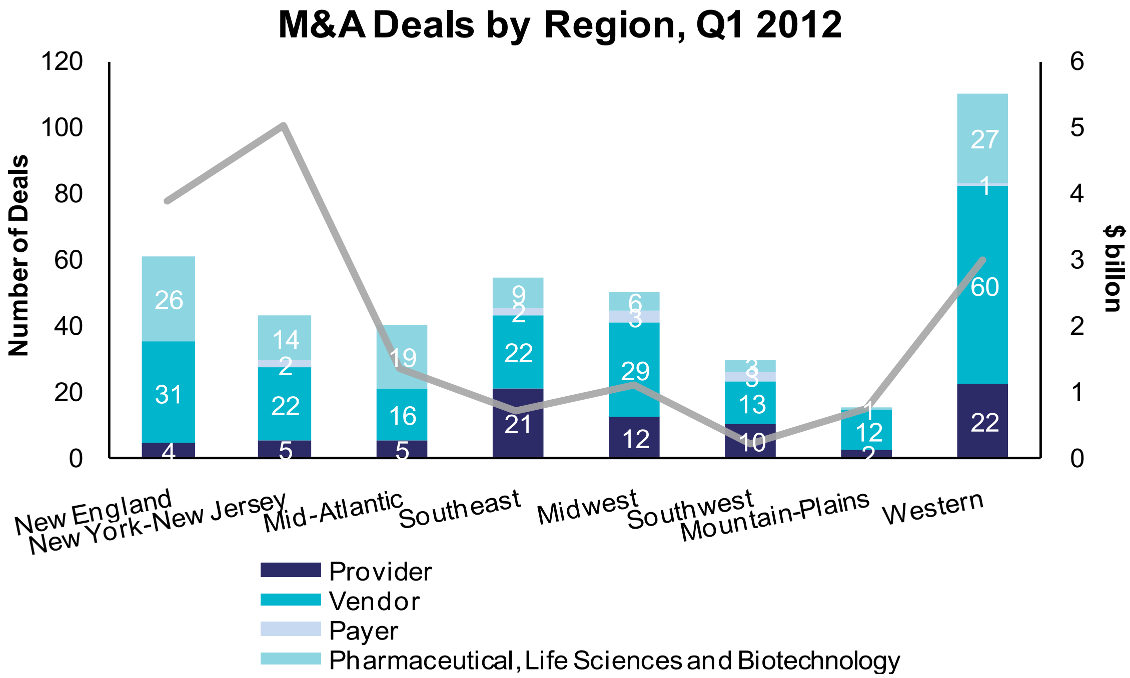
Most newly formed companies that started out as major pharmaceutical players, using their knowledge of synthetic chemical compounds to cure certain ailments, are gradually adopting the biotechnology classification to describe their business operations.

Some of the major deals announced during Q1 2012 strengthen the fact. For instance, the major biotechnology player Bristol-Myers Squibb acquired the drugs and biologics company Inhibitex; the drug manufacturing company Shire acquired NeuroPhage Pharmaceuticals, a biotechnology company.

6.6. Outlook

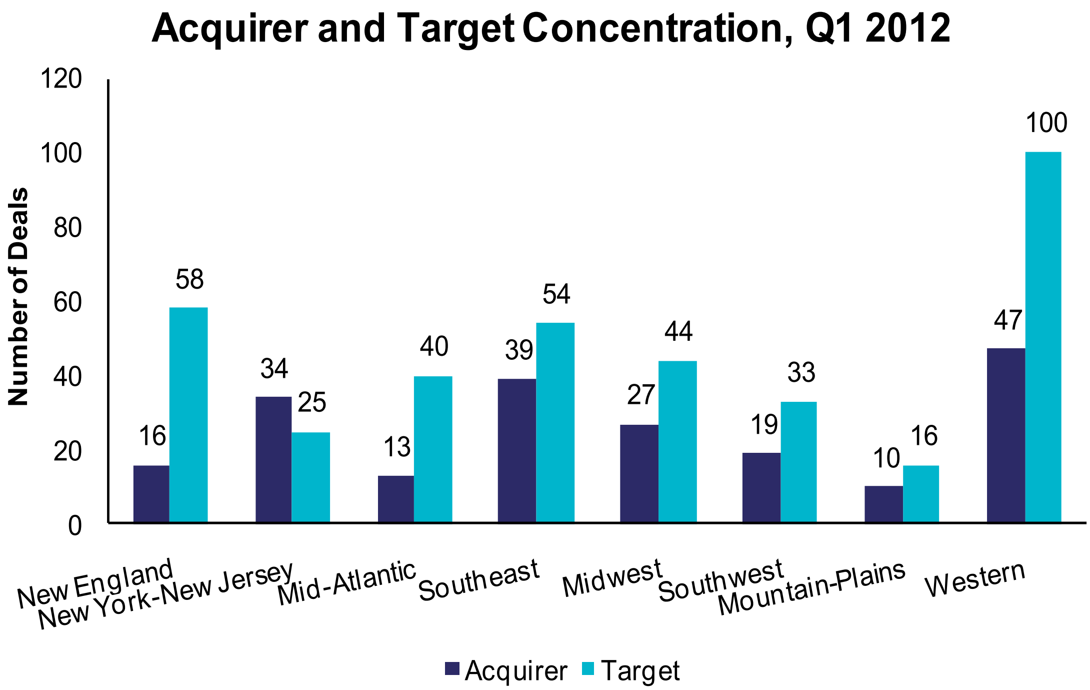
The overall surge in healthcare M&A activity witnessed during the last few years is expected to continue in 2012. With patent-related challenges looming large over the Big Pharma, companies have taken to M&A and in-licensing to deliver better returns. Companies focused on niche therapeutic areas and attractive pipeline candidates or technologies will see a rise in the deal activity in the next few years.

7. Regional Landscape



Source: Bloomberg, Factiva, and Press

- Western region, was the most active region in the vendor segment, accounting for 60 deals, of those, California accounted for 75% (45 deals)
- The Western region-based provider Ensign Group was involved in six acquisitions in Q1 2012
- Payer and provider deals were most active in the Southeast and Western regions
- Maximum deals in the pharmaceutical, life sciences and biotechnology segment were recorded in the Western region
- Pharmaceutical-related deals made in Q1 2012 was highest in the Mid-Atlantic region
- Of the total 51 private equity and venture capital deals struck in the Western region, 36 were in vendor segment
- Twenty four deals were signed in the pharmaceutical, life sciences and biotechnology segment out of 39 private equity and venture capital deals in New England region
- Of the total deals announced in Q1 2012, 14% (56 deals) were cross-border. Non-U.S. deals involving Europe accounted for more than 50% of the cross-border activity
- The U.S. attracted $3.7 billion in foreign investment (based on deals with publicly disclosed value) in Q1 2012; the vendor segment remained the most active healthcare segment in the cross-border deals, followed by pharmaceutical, life sciences and biotechnology



Source: Bloomberg, Factiva, and Press

- A total of 159 private equity and venture capital deals were registered in Q1 2012, with 32% in the Western region; New England followed at a distant second with 25%
- Majority of target companies were based in the Western region, followed by New England and Southeast regions, respectively
- Accounting for 83% of the deals, California was the hotspot of M&A within the Western region; of the total deals in the New England region, Massachusetts accounted for 79% of the deals in the region during Q1 2012
- Compared to other regions, only the New York-New Jersey region had more buyers than targets
- The deal between Bristol-Myers Squibb and Inhibitex in the New York-New Jersey region had the highest disclosed value across all regions

8. Appendix

Data Source

This report was researched and compiled by contributing data and analytics partner WNS Global Services (www.wns.com). Additional source references questions can be addressed by contacting Modern Healthcare's Research Department at 312-649-5459 or research@modernhealthcare.com.

Industry Segmentation

Group	Segment	Sub-Group
Provider	Healthcare Provider	• Hospitals/Clinics • Nursing Homes/Home Care/ Senior Care/ Rehabilitation Centers • Behavioral Healthcare • Physician Practice Management • Pharmacy Benefit Management/ Pharmacy Services
Vendor	Healthcare Equipment	• Medical Devices & Products • Diagnostic Equipment/ Kits • Direct Marketers • Distributors
	Healthcare Info Systems	• Medical Info Systems • Electronic Medical Records • Enterprise Info Systems • Specialized/ Other Software
	Medical Services	• Diagnostics/ Testing Labs • Healthcare REITs • Ancillary Services (includes healthcare consulting, staffing, marketing, logistics, allied services etc.)
Payer	Insurance	• Health Insurance
	Managed Care	• HMO/ PPO
Pharmaceutical, Life sciences and Biotechnology	Pharmaceutical	• Medical Drugs, Generics, • Drug delivery systems • Medical – wholesale drug distribution • Therapeutics • Contract Research/ Clinical Research Organizations
	Biotechnology	• Biotechnology (Medical)

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