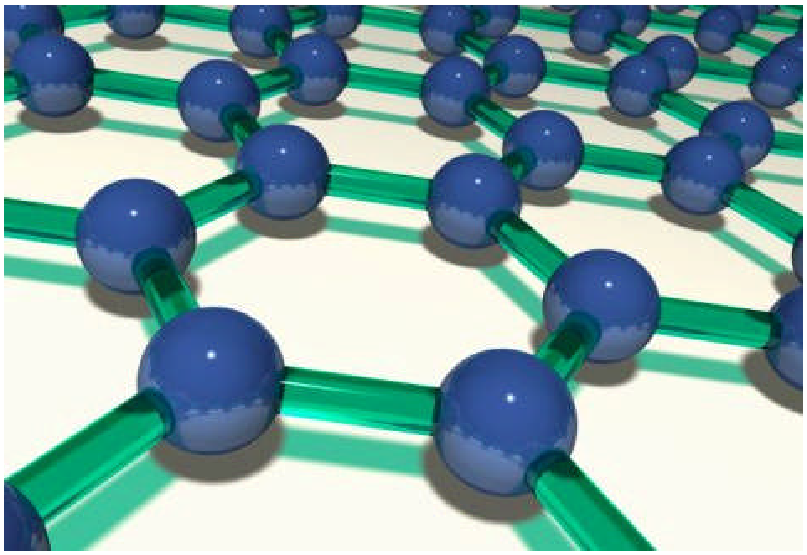
Healthcare Practice



Healthcare M&A:
Trends &Outlook

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I. Current State of the Industry

A. Fundamentals

Healthcare is the largest US industry, employing more than 15 million people, and it remains the fastest growing. Fundamental demand in healthcare is driven by such strong trends as aging populations, advances in medical technology, and increased access to healthcare. Each of these growth factors will continue to influence the industry despite the ups and downs of economic cycles.

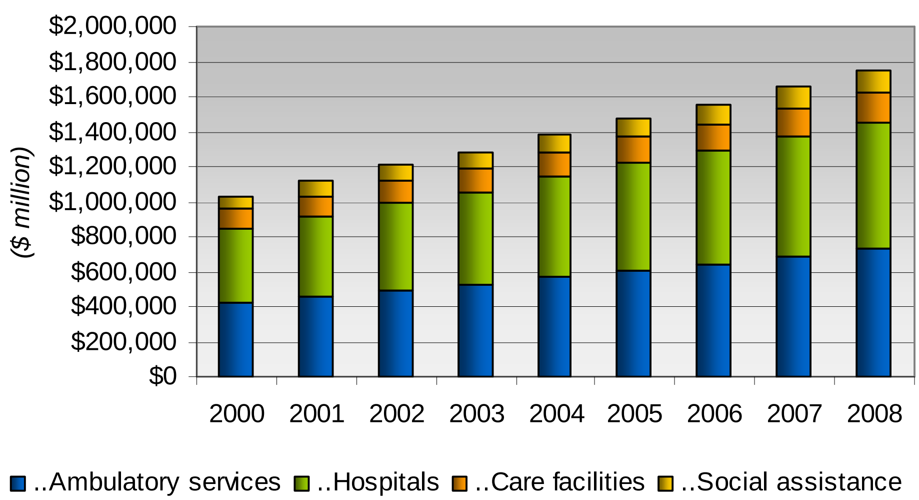
According to the Agency for Healthcare Research and Quality, Americans' monthly use of healthcare services has remained remarkably consistent over the past 40 years. In an average month, 800 of every 1,000 Americans experience health-related symptoms; 217 visit a doctor, and eight are hospitalized. In addition, managed care now covers the majority of Americans. In fact, Government programs, including Medicare and Medicaid, have acquired many of the characteristics of managed care plans. For example, these plans make payments only for allowed procedures and at a fixed price.

Broadly speaking, the healthcare industry can be divided into services and technology. The services sector includes ambulatory services, hospitals and nursing and residential care facilities. The technology sector encompasses information technology, pharmaceuticals, biotechnology and medical devices.

For most industry sectors, top line growth and profitability exhibit upward trends:

- **Revenues** – Revenues for the US healthcare industry's services sector (NAICS 62) exceeded $1.7 trillion in 2008 while growing at a 6.8% average annual rate.

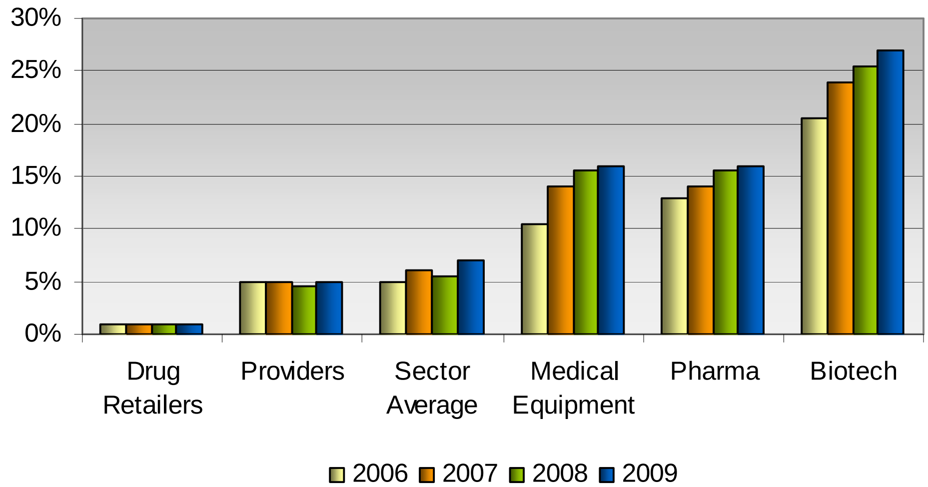
<u>HEALTHCARE REVENUES</u>



Source: US Census

- **Net Margins** –While net margins steadily increased for most US healthcare businesses during the past four years, they remained flat or slightly depressed in two sectors: drug retailers and healthcare providers.

HEALTHCARE GROSS MARGINS

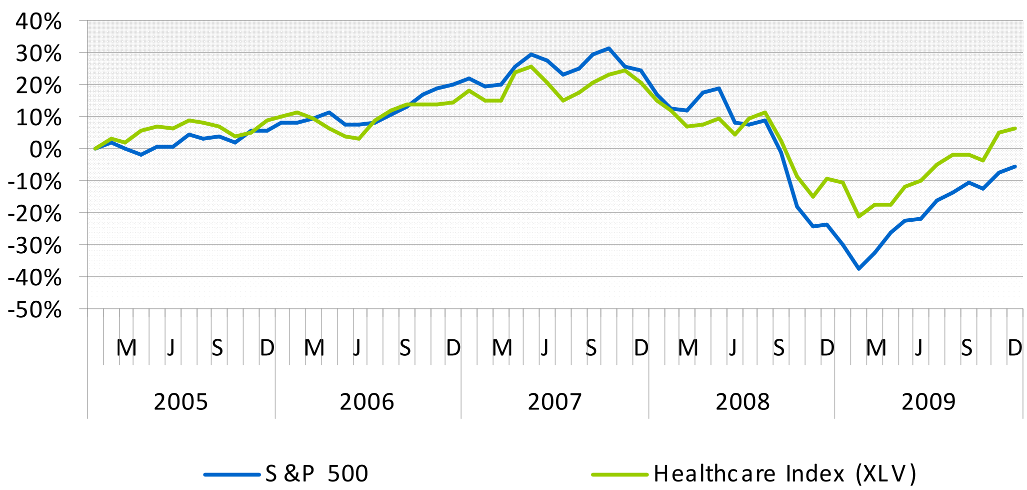


Source: S&P 500 Healthcare Index

B. Public Market Performance

While under-performing the broad market index for much of 2006 and 2007, healthcare companies in the S&P 500 index held-up better than the overall market during the 2008 crash. Even as the stock market recovered in 2009, healthcare companies in the S&P 500 have continue to outperform the broader markets. In fact, many US healthcare industry executives believe the recession helped them achieve rising profit margins and a positive earnings outlook.

US STOCK MARKET PERFORMANCE



Source: Capital IQ

II. Emerging Trends

A. Services

Several US healthcare services sector trends are likely to have lasting impact on how the industry operates. Such developments as: ongoing efforts to contain industry costs; expected shortages of primary care physicians; the emergence of alternative medicine, and the cost of malpractice insurance are transforming many of the industry's traditional practices while forcing the federal government and private sector alike to seek sustainable long-term solutions.

- **Cost Containment** - Cost containment continues to drive the healthcare industry as demonstrated by the growing emphasis on providing services on an outpatient, ambulatory basis, limiting unnecessary or low-priority services and stressing preventive care, thus reducing potential costs of undiagnosed, untreated medical conditions. Also, enrollment in managed care programs—predominantly preferred provider organizations, health maintenance organizations, and hybrid plans such as point-of-service programs—continues to grow. These prepaid plans provide comprehensive coverage to members and control health insurance costs by emphasizing preventive care. These changes are likely to reshape not only the nature of the healthcare workforce, but also the manner in which healthcare is provided.

- **Projected Shortages of Primary Care Physicians** - Health professional workforce projections are mostly silent on the future supply of, and demand for, primary care services. This, of course, is symptomatic of an ongoing decline in the nation's financial support for primary care medicine. Ample research in recent years concludes that the nation's overreliance on specialty care services at the expense of primary care has led to a less efficient healthcare system. At the same time, research indicates that primary care medicine in the form of preventive care, care coordination for the chronically ill, and continuity of care can achieve improved outcomes and cost savings. Conventional payment systems tend to undervalue primary care services relative to specialty services. To counteract this trend, some physician organizations are proposing payment system refinements that emphasize primary care services.

- **Alternative Medicine –** A growing segment of the population is turning to a wider, more diverse set of techniques and therapies to meet health-care needs. The alternative medicine catchall refers to any practice outside of conventional medical treatments, including homeopathy, acupuncture, massage therapy, and chiropractic. Americans increasingly are turning to herbal remedies to treat ailments, spending more than $4 billion annually on herbs and other botanical remedies. As a result, health-care providers and insurance companies are beginning to recognize the legitimacy of some of these alternatives and to accept some nontraditional techniques for treating chronic health issues.

- **Malpractice Insurance –** The cost of medical malpractice insurance is a significant expense for most US physicians. Premiums have risen rapidly during the past few years causing significant problems in many states. It should be noted, however, that despite malpractice premiums' significant increases in recent years, malpractice insurance is an unprofitable business line for most insurers. The US insurance industry lost money on malpractice insurance every year from 1998 through 2004. High malpractice premiums have caused some physicians to move, retire prematurely or limit their practices. In other cases, physicians perform otherwise unnecessary tests and other procedures on their patients solely to minimize the risk of potential liability.

B. Technology

The healthcare technology sector also is experiencing changes that will have long lasting-consequences. Most significantly, the industry slowly is embracing the adoption of information technology and intelligent medical devices that will improve service delivery and the quality of care. Meanwhile, ongoing federal government and private sector investments in research and development are increasing the pace of discovery. And, as baby boomers age and science progresses at an ever increasing pace, prospects for healthcare advances remain truly unprecedented.

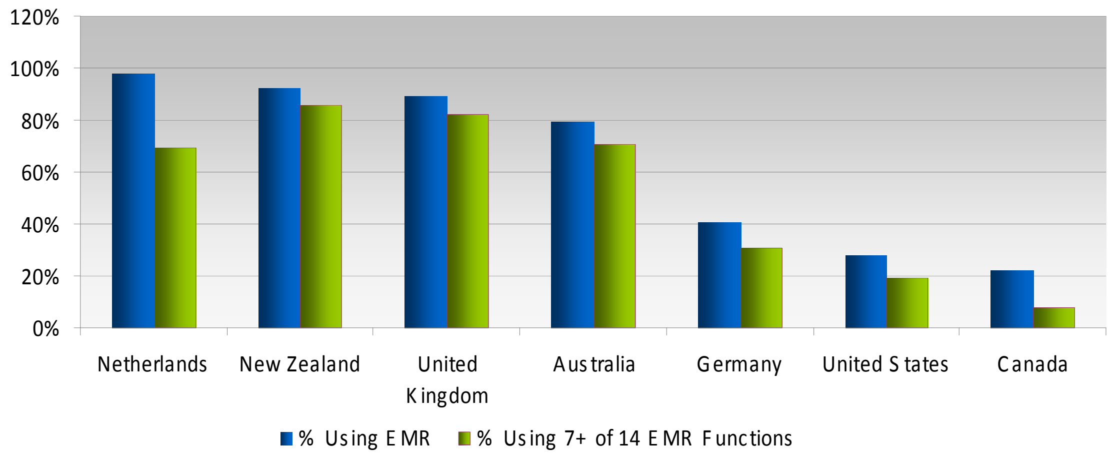
- **Telecom companies integrate into health delivery –** The need for proven communication channels to deliver specialized IT capabilities and the lack of dominant health industry IT innovators are driving a convergence among telecom, technology and healthcare organizations. Moreover, the Federal government's 2009 stimulus package which provides $598 million to establish regional health IT extension centers and a national Health Information Technology Research agency has accelerated this trend..

- **Care Delivery Continues Migrating Out of Traditional Venues –** A 2008 PricewaterhouseCoopers survey concluded that consumers are open to alternative means of receiving healthcare outside of traditional settings. Some 50% of PWC survey respondents said they would be willing to use telephone consultations or computer and Internet technology to access healthcare. E-mail consultations topped the list of preferred methods to access care, followed by online consultations increasing availability of remote patient monitoring systems will complement disease management and home healthcare, providing consumers with constant, real-time health feedback.

- **Monetizing Medical Device Research –** Despite impressive advances in medical sciences throughout the 20th century, the pace of medical discovery is projected to quadruple through 2030. The convergence of discovery, demand and resources points to increasing opportunities for companies that have leveraged medical device research. In 2005, healthcare accounted for 16% of the US economy healthcare. By 2015, the percentage is expected to grow to 20% and the nation's total healthcare bill will rise to more than $4 trillion. Therefore, those in the medical devices sector will continue to have unprecedented opportunities to advance life sciences while capitalizing on medical device research.

- **Use of Electronic Medical Records –** Physician use of electronic health records (EHR) has increased from 18% in 2001 to 28% in 2006. The use of EHR has the potential to improve medical quality while reducing healthcare costs. A study by RAND Corp. indicates that healthcare costs could be reduced by an average of $40 billion per year if 90 percent of healthcare providers used EHR. Moreover, the benefits would increase over time ($75B over 15 years). In spite of these benefits, the United States lags many countries in the use of EHRs. Countries with high EHR usage tend to have government programs subsidizing their use.

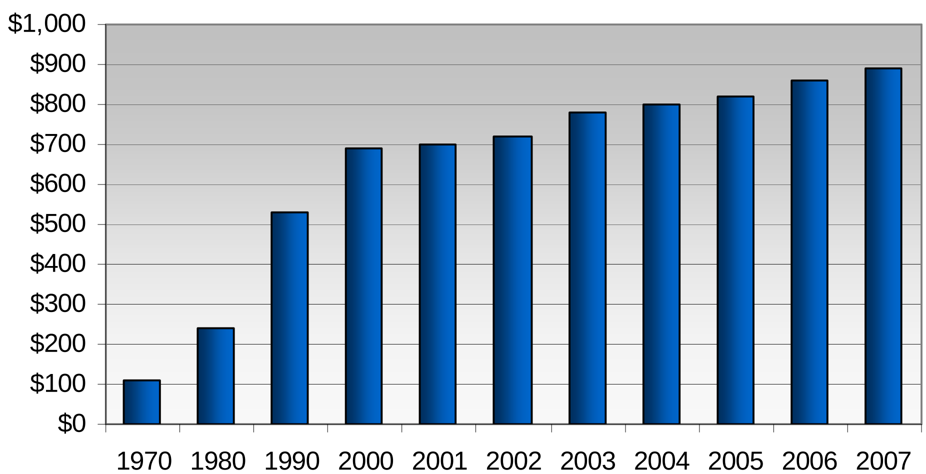
ELECTRONIC MEDICAL RECORDS USE



Source: KPMG, 2009

C. Macro Trends

- **Per Capita Out of Pocket Spending –** Per capita out-of-pocket expenditures for healthcare in the US increased dramatically over time from $110 in 1970 to $890 in 2007. This represents an average annual increase of about 6%.



Source: McKinsey & Company, Dec. 2008

- **Demographic Trends Pose Challenges For Employers and Workers –** There are four demographic trends which are likely to have long-lasting effects both in the workplace and the way in which public benefits are funded. First, decreasing birth rates and increasing life expectancy will lead to fewer workers per retiree. Second, retiring baby boomers are likely to create skills gaps in certain occupations. Third, pension plans which have been shifting financial and longevity risk to individuals will result in less secure retirements. Lastly, the increased ratio of elderly to younger workers will certainly add pressures in public benefits.

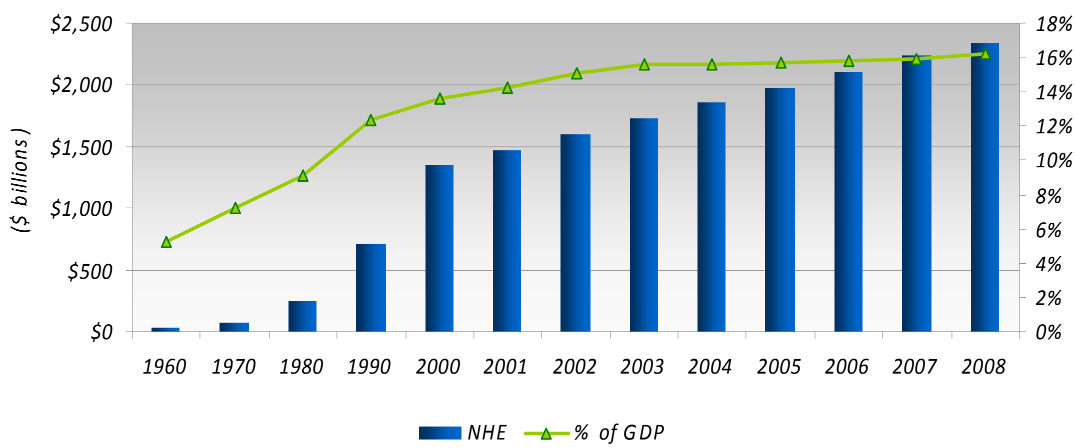
D. The Need for Healthcare Reform

Total healthcare spending in the US reached $2.4 trillion in 2008 – or $7,900 per person – according to an analysis published in the journal Health Affairs. In fact, the US spends 52 percent more per person than the next most costly nation, Norway, according to the Kaiser Family Foundation. There's little debate that healthcare reform is necessary – the US government, the American Medical Association and America's Health Insurance Plans, an industry group, all agree that the system must be reformed. However, these parties currently disagree on how to reform it.

Both public and private sector action is required to address the looming healthcare crisis. However, the path to reform remains uncertain as the healthcare industry confronts serious structural challenges:

1. **Healthcare Spending –** Total healthcare spending is outstripping financing sources, which depresses growth of non-healthcare-related consumption. US healthcare spending totaled $2.4 trillion in 2008 but is expected to nearly double to $4.4 trillion by 2018. Price cuts involving hospitals, physicians, health plans and drugs constitute the quickest way to reduce healthcare costs, but savings likely would prove temporary. In the short run, such cuts likely would result in job losses, reduced benefits and fewer new drugs.

US NATIONAL HEALTH EXPENDITURES



Source: Centers for Medicare and Medicaid Services, National Health Expenditures

2. **Public Benefits –** Underfinanced Federal healthcare programs reflect our aging population and a greater willingness to finance healthcare spending via budget deficits. Individuals eligible for Medicare increasingly are accelerating the advent of the Medicare Part A Hospital Insurance Trust Fund's projected insolvency (from 28 years in 2003 to 8 years in 2009).

3. **Insurance Premiums –**Healthcare benefits' rising costs constrain cash compensation growth and increase burdens on families. In 2000, family health insurance cost $6,772 on average when purchased through an employer. By 2008, it cost $12,680. By 2016, it is projected to cost $24,291.

4. **The Uninsured –** Currently, some 36 million Americans have no health insurance and the number continues to grow. The decline in competition among health insurers resulting from consolidation within the industry has allowed insurance premiums to increase rapidly as well. Consequently, employers are passing on an increasing share of the cost of health insurance coverage to employees, to the point that many people find it simply unaffordable.

5. **Healthcare IT –** The lack of industry standards, privacy and confidentiality imperatives, and physicians' and nurses' relative inexperience with advanced IT are but a few of the obstacles to the widespread adoption of advanced healthcare IT solutions. Yet, healthcare IT investments should yield significant future benefits in both reduced costs and improved quality. Electronic medical records can offer healthcare providers a patient's complete medical history which in turn may improve administrative efficiency while avoiding duplicate tests, preventing inappropriate treatments, and reducing medical errors.

6. **Malpractice Reform –** While the cost of malpractice insurance is a significant expense for healthcare providers, malpractice insurance historically has been much less profitable than other insurance industry casualty lines. As a result, many insurers have exited the business. The fear of malpractice liability encourages healthcare providers to perform otherwise unnecessary tests or procedures in the increasingly prevalent practice of "defensive medicine."

In the end, any effort to address the current healthcare challenges must focus on at least three goals:

(1) Expand insurance coverage

(2) Modernize the health system

(3) Increase prevention and wellness initiatives

While these strategies may have minimal short-term impact, they likely will decelerate healthcare cost increases while providing individuals affordable alternatives to obtain the care they need.

III. M&A Trends

A. Transactions

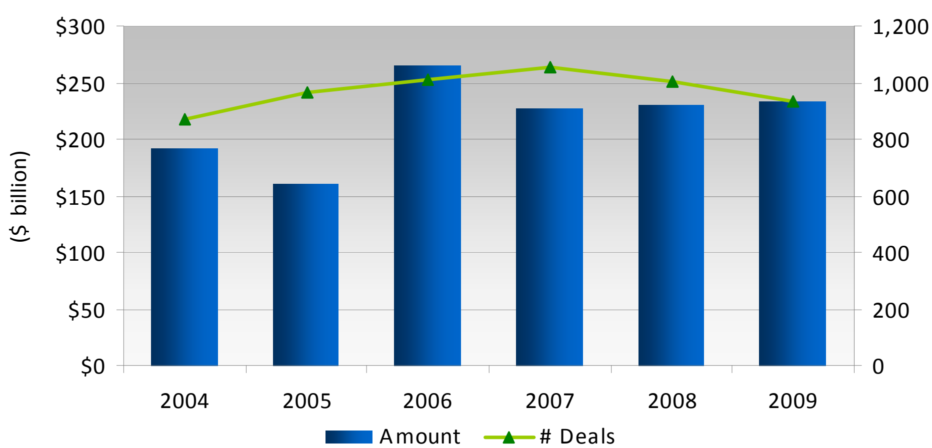
Despite the current financial crisis, the healthcare industry continues to show some resilience. While deal amounts in 2009 increased 3% vs. 2008 to $233 billion, deal volume declined nearly 7% in the same period (932 v. 1001 announced deals). However, average 2009 deal size increased nearly 9% to $250 million (Source: Capital IQ).

Factors driving the sustained increase in healthcare M&A activity include demographic shifts (aging population), rising costs and Federal/state government incentive programs. Both government and market participants are working hard to overcome such obstacles to the ongoing healthcare industry transformation as a lack of standards, negative financial incentives, and physician reluctance.

The Federal government also is working vigorously to establish the Electronic Medical Records program by combining stimulus funding with a mandate to computerize all health records within five years. The ability to track patient data while providing cross-communication among healthcare providers is critical to increasing patient safety and slowing the rise of healthcare premiums, and it will certainly result in operational savings. Ultimately, the standardization of IT protocols and procedures will facilitate post-merger integration efforts and may further accelerate M&A activity.

This growing and increasingly attractive market opportunity has prompted 3M, Cisco, EMC, GE, Google, IBM, Microsoft, Phillips, and Siemens to expand their healthcare industry presence, particularly in IT. And, although financing conditions remain constrained, it is highly likely that takeovers in this sector will continue whether as part of a longer-term strategic plan, reaction to healthcare reform and reimbursement changes, or in anticipation of future increases in capital gains tax rates.

M&A TRANSACTIONS



Source: Capital IQ

B. M&A Trends

The healthcare industry remains one of the US economy's most dynamic sectors despite the current economic cycles. For well-capitalized companies, particularly those focused on broadening their capabilities long-term through consolidation or diversification strategies, market opportunities abound.

While much of the M&A activity has been – and is expected to remain – concentrated in well-defined healthcare sectors, there are some signs of convergence. Aside from horizontal consolidations, many opportunities exist for firms to cross sector lines and explore vertical consolidations to realize economies of scale. Takeover activity also is being driven by slower growth, increasing operating pressures to realize higher margins and the need to acquire new lines of business or capabilities or offset declining R&D productivity.

Patent Expirations - Good Prospects for Biotech

One of the most interesting healthcare industry trends involves big pharmaceutical giants and nascent biotechnology companies. As revenues from existing drugs slow and the number of approved new drugs in the pipeline decreases, pharma companies are focusing on acquiring smaller biotech firms to reinvigorate their drug pipelines.

The Wall Street Journal projects that, between 2007 and 2012, competition by generic drugs will wipe out $67 billion of top companies' annual US sales as more than three dozen drugs lose patent protection. This amounts to roughly half of those companies' combined 2007 US sales. Hence, patent expirations are certainly a big problem for pharmaceutical companies.

Typically, drugs are granted 20 years of patent protection, although companies often fail to get a product to market before half of that period has elapsed. Once it hits the market, the patent-protected drug is highly profitable (gross margins tend to be around 90% to 95%). Yet once patents expire, generic makers offer similar products at costs much closer to the cost of production. The rise of generic drugs wouldn't matter so much if research labs were creating a stream of new blockbuster drugs. But that is not the case.

And this creates opportunities for biotech companies. As the patent expiration of blockbuster drugs erodes pharma revenue, and in-house R&D realizes diminishing returns on productivity, biotech firms increasingly will be positioned to fill product pipeline gaps by sourcing new innovations and drug prospects— especially with diagnostic and therapeutic biologics.

Patent Expirations	
Drug	**Patent Expiry**
Lipitor (Pfizer)	2010
Seretide (OSK)	2010
Flavix (BMS)	2011

Zyprexa (Lilly)	2011
Zeroquel (AZ)	2011
Singular (Merck)	2011
Xeloda (Roche)	2011
Diovan (Novartis)	2012
Lovenox (Sanofi Aventis)	2012
Boniva (Roche)	2012
Rituxan (Roche)	2014
Nexium (AZ)	2014
Rituxan (Genentech)	2015
Tarceva (Genentech)	2018
Herceptin (Genentech)	2019

Source: Frost & Sullivan

Pharmaceutical Companies and Biotech (Redux)

In addition to pursuing strategies to compensate for patent expirations of blockbuster drugs, large-scale M&A activity remains an integral strategy of pharmaceutical companies and will contribute 63% of sales growth between 1995 and 2014 (Healthcare Finance News). Analysis of the 22 largest M&A transactions involving pharmaceutical companies since 1995 demonstrates that there are two distinct acquisition types: the purchase of smaller target companies with the primary strategic motive of extracting future sales growth ("buy growth") and the purchase of larger target companies with the primary strategic motive of gaining an immediate increase in scale ("buy scale").

A major wave of M&A-driven consolidation took place in the industry between 1999 and 2001 resulting in the creation of AstraZeneca and GlaxoSmithKline and large corporate additions to Pfizer and Sanofi. Ten years later, a similar wave of M&A involved Pfizer and Wyeth, Merck and Schering-Plough, Abbott and Solvay..

These mega-mergers are playing a crucial role in allowing large pharmaceutical companies to maintain their shares of the total prescription drug market. In turn, this allows them to retain competitive scale advantages so crucial to players in this sector.

Information Technology Interoperability

Today, the number and variety of technology vendors gets in the way of widespread adoption of technology standards and makes true interoperability nearly impossible to achieve. This discourages physicians from adopting such life-saving technologies as electronic health records (EHR).

Such initiatives as the Certification Commission for Healthcare Information Technology, which ensures that products meet minimum functionality and interoperability standards, encourage broader physician adoption of EHRs. Ultimately, certification and consolidation will advance the standardization of operating systems and data while making true interoperability a reality.

Vertical Consolidations

Vertical healthcare industry associations are also proliferating. For instance, the number of physician practices owned or managed by hospital-based systems has been increasing for the past 10 years. A number of HMOs have sold off their physician operations often to physician management companies through which they then contracted physician services. Examples include Aetna/US Healthcare, FHP International Corp., Foundation Health Corp., and Physician Corp. of America. Likewise, provider-owned HMOs and PPOs increasingly are being sold to insurers.

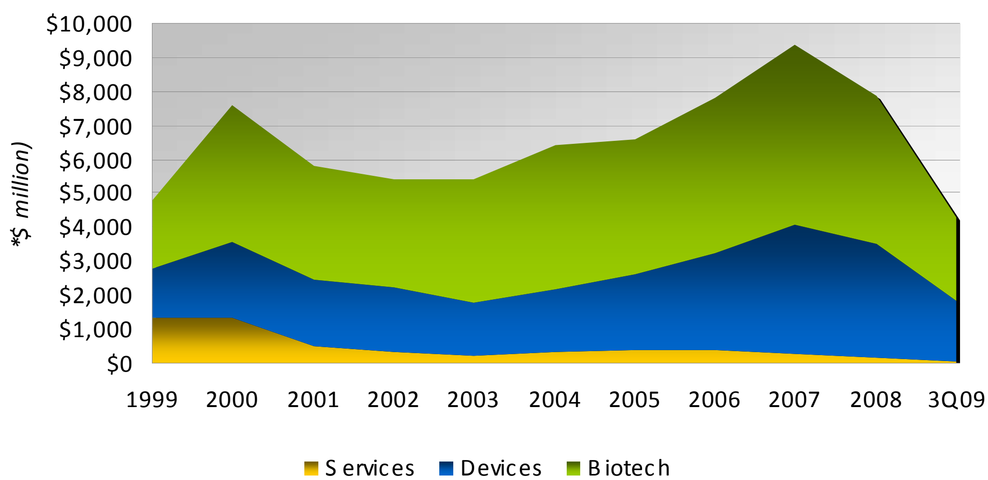
In addition, while the integration of drug manufacturers and pharmacy benefit management firms has been criticized as anticompetitive, it appears that such integration reflects efforts by drug manufacturers to migrate from product- to service-oriented business models to position themselves for an environment dominated by managed care.

C. Investments

From 2003 to 2007, private equity investments in healthcare increased at an average rate of 15% per year – particularly in the biotech and medical devices sectors. Since then, although the investment activity in this industry surpassed $5 billion in 2009, a downward trend has emerged.

Nevertheless, healthcare is and will be a resilient industry supported by strong demographic and technological trends. Despite the challenging investment environment in 2008-2009, the pace of healthcare industry investment is picking up, particularly in biopharmaceuticals and medical devices. In 2009, venture capital firms' investments in healthcare exceeded their investments in IT for the first time. And, although the $7.7 billion invested by VCs represents a 14% decrease from the previous year, it's far less than the 35% decline in IT investments, which totaled just $6.1 billion in 2009.

HEALTHCARE INVESTMENTS



Source: National Venture Capital Association

Investment Priorities

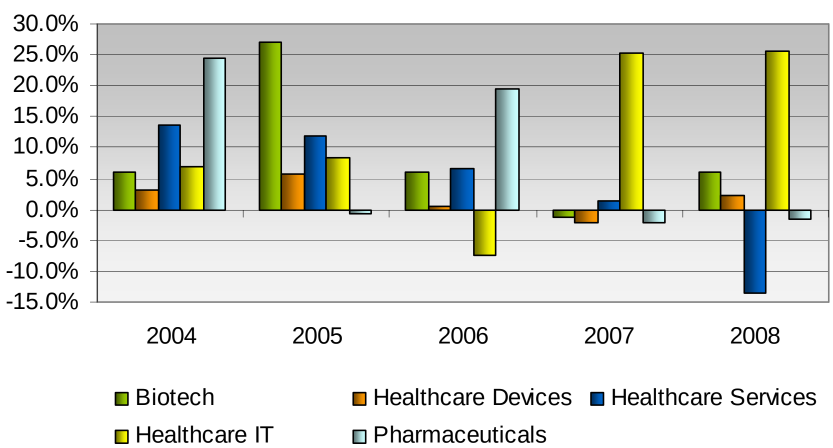
In its 2005 Modern Healthcare IT survey, PricewaterhouseCoopers reported that among hospitals, clinical improvement has emerged as the prevailing rationale for IT spending, surpassing the traditional top reasons of improving worker productivity and management effectiveness. In fact, the hospital industry is acknowledging the strong link between the pursuit of clinical quality and IT investments.

Investment Area	
Inpatient clinical information systems	64%
Diagnostic imaging storage, retrieval and transfer	46%
Clinical communications and links to physicians	40%
Ambulatory clinical information systems	32%
Consolidation of all information system functions	20%
Financial apps (e.g. patient and general accounting)	20%
Physician office/practice management	19%
Data warehouses	16%
Telecommunications, network management	15%
Receiving software via application service provider	9%
Home healthcare systems	3%

Source: PricewaterhouseCoopers, Health Brief, 2005

Venture Capital Returns on Vintage Year Companies

Despite the healthcare industry's resiliency, venture capital firms continue to struggle in their quest to produce adequate returns for their limited partners. Pharmaceuticals and biotech have always been capital intensive and high risk areas and investment returns in these sectors are a stark reminder of their volatile nature. Moreover, although it is difficult to draw any definite conclusions, the average return across all vintage year funds in all healthcare sectors is significantly less than what investors would expect given the risk of investing in early stage companies. One notable exception are investments in healthcare IT which demonstrate ample opportunities to profit from the industry's modernization. A less sanguine argument, however, can be made for investments in biotech, healthcare devices and healthcare services.



Source: VC Performance 2Q09 – NVCA

D. Outlook

a. M&A

Notwithstanding the recent turmoil in the credit and stock markets, healthcare M&A has managed to maintain its momentum. Going forward, much of the healthcare industry's M&A activity is expected to occur in the technology sectors: IT, pharmaceuticals, biotechnology and medical devices.

To a lesser extent, healthcare services sectors – ambulatory services, hospitals and nursing and home care facilities – will continue to experience deal activity, albeit at a more moderate pace. Unlike the technology side of the industry, healthcare services will see fewer deals and less capital committed to transactions due to uncertainties associated with current reform efforts. It is important to note that the national debate over healthcare reform inevitably will impact government reimbursement levels and established industry practices. This inevitably will slow M&A activity. With hospitals, physicians and drug makers unable to predict government reimbursement levels, dealmakers cannot easily forecast cash flows or establish a sensible transaction price for an acquisition target.

On the bright side, however, reimbursement pressures on service providers will tend to restrain valuations. With depressed valuations, buyers more readily will spring into action to acquire companies having very attractive valuations. In fact, large healthcare industry players will continue to make strategic plays by acquiring companies and technologies and by forging development agreements or licensing deals that often include commercial or clinical milestone and earnout payments.

b. Private Equity Investments

Venture View 2010 reports that respondents to an annual survey conducted by the National Venture Capital Association (NVCA) believe the venture industry will experience gradual increases in investment levels and exit transactions in 2010 even as venture capital as an asset class continues to shrink in size over the next five years. Currently, there is a significant lack of enthusiasm for seed and early stage companies and thus the investment trend in nascent medical devices and biotech companies remains uncertain.

Although healthcare companies have remained somewhat insulated from debt market turmoil and the recession, investors are expected to be more conservative going forward. It is also expected that the due diligence process will become much more detailed and protracted as investors address myriad uncertainties associated with an industry in flux. At the very least, investors will want to know about a company's FDA approval strategy and how they plan to get reimbursement codes. Questions about training increasingly will come into play as investors know that hospitals are reluctant to bring on new devices or equipment will require additional physician and staff training that will drive up operational costs. Devices and technologies that are seen as reducing costs are likely to get a better reception.

Investors also will be looking for business lines with steady revenue streams such as generic drugs or older drug lines that have an established name and customer base. What they will avoid is drug development which requires costly R&D for drugs that might never make it to market.

Despite the challenges, private equity investments in the healthcare industry will continue to increase in response to excellent opportunities offered by healthcare's services and technology sector firms. Hospitals and medical practices present ample potential for technological innovation as breakthroughs in biotechnology and pharmaceuticals, combined with strong demographic trends, presage increasing demand for services and products by an aging population. A promising investment environment awaits investors willing to do their homework and assume calculated risks.

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