

Healthcare Outlook 2008

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In the following paragraphs, the author will explore a holistic view of the healthcare market, its trends and areas for potential M&A deal flow.



Overall Trends

Frost and Sullivan reports that the US high acuity care information systems market will grow at a healthy compound annual growth rate of 12.5% through the year 2012. According to Irving Levin Associated, Inc., publisher of *The Dealmakers Forum*, there were 991 healthcare M&A deals in 2006 with 471 of those in the healthcare technology segment. In 2007, there were 1,051 deals announced, a 4% increase over 2006 and the highest volume since 2003. We believe that the number of deals will continue to rise as the industry continues to consolidate. However, barring any unexpected market hiccups, the total \$/transaction may decline. We believe that there are too many mega HIS players and too many niche applications, so the HIT industry is ripe for consolidation. In 2007, there has been a fair amount of consolidation among pharmaceutical, hospital and managed care companies.

Hot Segments

- Wellness/disease management
- BioMed - DNA profiling
- Consumerism
- Surge planning/emergency preparedness
- Local integration/RHIO
- Financial dashboards
- PFP Management Systems
- Data mining and management
- Staff Optimization tools
- TeleHealth and remote monitoring
- Financial Dashboards
- Performance Management tools

Hot Services

- Ambulatory/Outpatient services such as diagnostic labs, respiratory (sleep and DME), rehabilitation, hospice and home health
- Retail clinics and services
- Outsourcing and staffing services
- HSA Financial Management
- Retail Disease Management
- Case Management
- LTAC/SNF/Assisted Living

Technology Drivers

- Best of Breed vs. One Size Fits All
- Integrated vs. Interfaced
- Language Management
- Access Management
- Real-Time Data and Decision Support

Buyer Categories to Watch

- Financial Buyers – Private Equity Groups and REITs
- Strategic Buyers
- International Buyers due to the falling value of the dollar
- US buyers due to the raising value of the dollar relative to foreign currency

Areas of Investment Concern

- Credit market hangover
- Presidential election year uncertainties
- Falling value of the US dollar
- Will the capital gains rate remain at the historically low 15%?

Segment Liquidity

Software, Biotech, Medical Devices, Health and IT services continue to top the investment lists as detailed in the recent PwC/MoneyTree survey. Most investors require a planned liquidity event before making an investment. Since many of the companies supporting the healthcare segment are privately held, we expect continued M&A deal flow within the segment. As a medium term strategy, many of today's investments could liquidate over the next 8-12 quarters.

Healthcare and Technology Spending

According to Forrester research, in previous years the Gross National Product (GNP) growth fell between the range of 2% to 3.5% percent. More recently, GNP growth is now down to 0.6 percent. That said, Forrester has cut IT spending forecasts for 2008 down, from 8 percent to five percent. National health expenditures, as a percentage of GDP, are expected to rise to 19.6 percent by 2016. According to HFMA's *Healthcare Finance Outlook*, the two most significant factors over the next 3 to 5 years are the increasing costs of capital and the threatened tax exempt status of most not-for-profit US hospitals.

Politics

The upcoming presidential elections are causing some uncertainty among the M&A community as well as most industry sub segments that are heavily regulated or reliant on continued funding by HHS and/or CMS.

Workforce Optimization

Clinical workforce shortages will continue to stimulate the need for efficient processes, workforce automation and marriages with local universities to increase clinical rotations. According to a recent study, U.S. nursing schools turned away over 40,000 qualified applicants from baccalaureate and graduate nursing programs in 2006 due to an insufficient number of faculty, clinical sites, classroom space, clinical preceptors, and budget constraints. According to *Healthcare Financial Management* magazine, there is an increased connection between nursing and finance. Although smaller than the currently expanding nursing shortage, there is a shortage of qualified pharmacists supplying the growing demand created by the boom in retail outlets. According to the Convenient Care Association, the number of retail clinics

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will grow from 500 in 2007 to nearly 700 in Q108. The US healthcare consumer seems to favor the extended hours and no appointment necessary approach to low acuity care. Similarly, insurance companies support the use of retail clinics given the lower reimbursements as compared to similar care provided in higher acuity settings. According to the U.S. Bureau of Labor Statistics, the number of new jobs created in nursing totals 703,000 during a recent ten year period. The U.S. temporary healthcare staffing industry is projected to reach 12 billion in revenue this year. Some of the drivers are the aging population of nursing professionals, legislation surrounding nurse staffing levels, hospitals willingness to outsource and nursing's desire for job flexibility. During times of shortages, the workforce optimization tools will become key to better utilizing the existing workforce.

DNA to the Rescue

The industry clinical targets haven't changed dramatically since 2007. Aging populations and other chronic diseases such as obesity, diabetes, COPD and others, top the lists of having the most potential impact on the health (and therefore costs) of our nation. The HIT industry must make the mental shift from reactive, symptom-based care, to predictive and genetic-based proactive care. There are a growing knowledgebase of biomarkers that influence a disease long before we need to react to an N-Stage condition. Some companies are exploring DNA-driven predictive modeling for preventative care.

Stimulating Improvement

Pay For Performance (PFP) is the latest buzzword in the healthcare sector and remains hotly contested. The notion of paying bonuses to physicians for certain activities seem counter to the larger movement of Consumer-Centered Healthcare. This author is a big fan of PFP in most industries. One could argue that a clinician should only get paid for doing the correct procedure and the topic of bonuses should only be triggered on exceptional clinical outcomes. The focus should be on decreasing avoidable procedures, complications, re-admissions, total ownership of patient outcomes and shifting from clinical best practices to better or even world class practices. If a clinician provides the wrong care then the industry should shift away from bonus reductions to penalties, full/partial license revocation and/or credentials management. Many providers are deploying scorecards that balance clinical efficiencies, outcomes, patient/family satisfaction and revenue, as a bridge from the new PFP approach and the time-tested sales compensation models of motivation.

Pay-for-Performance (PFP) and the need for transparency, seem to be coupled. PFP programs are expected to grow from 140 in 2007 to over 160 in 2008. Recent analysis done by Premier Inc. and CMS, demonstrate that using financial incentives to reward better quality of patient care avoids complications for the patients. However, PricewaterhouseCoopers (PwC) recently scored US-based PFP programs with an "incomplete" rating. To succeed, PwC suggested that the industry must first agree on a universal set of quality measures. Without which, we will never align the priorities of all the health stakeholders. As

CMC continues to trickle out PFP incentives for small/medium sized PCP practices to adopt EHRs, this same population of businesses are being sold at a feverish rate. In fact, over the last year, Levin Associates details a 28% jump in Physician Medical Group M&A transactions.



According to a recent *HealthLeaders Fact File*, some healthcare practitioners have questioned whether bonuses and pay incentives are appropriate in medicine, where patient care and adherence to the Hippocratic oath should trump financial concerns.

Finally, there is a growing body of research and publications supporting the quality-based payment approach as a savvy next step for PFP. Value-driven healthcare uses standard quality measures and available transparent pricing, which provides consumers with the ability to make informed health decisions. In order to support PFP initiatives, CIOs across America are being asked to implement systems that satisfy requirements of coupling clinical outcomes to actual reimbursements. A recent survey suggests that CIOs priorities are now focused on reimbursement, performance metrics and security. It wasn't that long ago that security was number one on the list.

Consumerism

Managed care is collapsing and driving the new consumer/patient-driven healthcare model. Hopefully, consumer-centered healthcare, via its enabler Health Savings Accounts (HSA), will eliminate the need for PFP. HSAs coupled with cost and quality transparency will arm the patient with the tools to make competitive decisions about their own health. HSAs should change purchase patterns from the current hospital-centered decisions, to Primary Care Providers (PCPs), to specialists in retail outlets located in malls for routine procedures. HSAs will also drive down prices of routine procedures via comparison-shopping and the inevitable competitive pricing. On the consumer side, one-stop-shopping is not the key as several large companies divest assets. HRA/HSA financials management services will soon be offered by most financial institutions. The HRA/HSA trend is expected to significantly alter the existing B2C market. Health Savings Accounts (HSAs) continue to gain momentum in the US largely due to increased consumer awareness triggered by many initiatives including daily stump speeches of most presidential candidates. Research suggests that well over 30M Americans will use HSAs by 2010. According to a recent Harris Interactive report, approximately 117M US adults use web tools to research health information and half of them talk to their doctor about their on-line research.

Transparency

Healthcare consumers, advocacy groups and politicians will continue to push for cost and quality transparency. Personal benchmarking applications will augment transparency initiatives. This data will allow consumers to price compare

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and perform their own price/quality analysis, as most do, with all other important decisions.

Insurance

Traditional insurance companies offering employee medical coverage will need to modify their existing product portfolios to include Consumer Directed Health Plans (CDHP), HSA and other High Deductible Catastrophic coverage. This move may drive traditional sources of insurance company revenue down. Over recent years, financial risk of providing care is shifting from the government and its intermediaries, to insurance companies, to physicians. Defined standards of care and automated protocol compliance, will finally become policy within the payer community. Significant amounts of VC/PE money is being poured into companies who automate the reimbursement from payers via an ASP model using Artificial Intelligence (AI), like technology that automatically learns from each denial, updates the rules engine, and instantly provides the new rules engine to all of its subscribers.



Un-insured Lives

The Census Bureau reports that there are 47M uninsured Americans, up nearly 16% from last year. According to the Robert Wood Johnson Foundation, 6.6M children were covered by State Children's Health Insurance Programs (SCHIP). Last year but nearly 9M more children remain uninsured. During Q307, the Senate passed a bill to reauthorize the program.

Regulatory Reform

The recent exceptions clauses added to the Stark Laws including modifications for electronic prescribing and Electronic Health Records (EHR) will stimulate additional data sharing between practice and hospital systems. Sarbanes Oxley compliance will continue to hurt profits of publicly traded providers and increase compliance of not-for-profit (NFP) providers. US hospitals provide more than \$25B in uncompensated care annually. Given the 45 million uninsured patients in the US, Federal regulation is expected to increase the growth rate of charity care. Acuity levels are rising. Year after year, hospitals are treating sicker patients. With increased regulation on the horizon (75% rule, 72 hour rule, transparency, acuity driven patient care, nurse-to-patient staffing ratios to name a few), compliance tool companies will stimulate some M&A deal flow. New reimbursement rules will force hospitals to increase bed turnover which will drive downstream care such as Long Term Acute Care (LTAC), Skilled Nursing Facility (SNF), home care and others, but US-based clinical shortages will limit capacity. Within the home health arena several reimbursement changes are driving growth. Medicare PPS's final rule became effective on 1/1/08. The market basket was also increased by 3 percent in the beginning of 2008. In Q4 of 2007, we also observed a 3.3 percent increase in hospice reimbursement rates.

Divergence away from the Hospital

Through the 90s healthcare was supposed to converge with managed care leading the charge. In 2007, healthcare is more segmented than ever. Specialists have flourished. Private practice and other downstream clinical businesses will continue to pull revenue away from the former hospital mother ship. Doctors are no longer associated with a single healthcare facility. Some surgicenters are taking market share away from community hospitals which has prompted some hospitals to build/buy surgicenters of their own. Vendor's sales quotas are increasing at smaller targets such as doctor's offices and outpatient clinics. The Center for Medicaid & Medicare Services (CMS) is now funding part of the Practice Management System (PMS) proliferation via Quality Improvement Organizations (QIO) like New York's I-Pro.

Sub-Acute Care

Skilled Nursing Facilities (SNF) are adding facilities in many strategic markets and divesting of non-profitable/non-strategic business units. Given the tighter reimbursement environments, most businesses are driving operational efficiencies. Some are considering expansion of service lines, clinical programs, and complimentary offerings such as: surgery, rehab and wound care. CMS projects, that the U.S. homecare industry will grow to a \$150 billion market segment by 2016, for a CAGR of 6.5 percent.

Ancillary Care

Ancillary care, such as lab dialysis, rehab, DME and diagnostic imaging, is responsible for 16 percent of the total \$11.6 trillion annual healthcare costs. Within the ancillary market segment exists a highly fragmented provider base, with no clear market leader and is ready for consolidation.

Capital Improvements

HIT spending will continue to rise. Emergency Department (ED) visits will continue to rise but ED capacity will limit growth. Hospitals will continue to spend capital funds on facilities improvements, new buildings, mini-clinics, ED overhauls, and appearance projects such as new lobbies and third party brand installations, like Starbucks and McDonalds to improve the patient experience. Women and Children's care will continue to drive new investments into existing facilities. The For-Profit will continue to fund capital improvements via the market. NFP hospitals will be able to take advantage of the flat/inverted yield curve to further tap the debt market, however, the recent pause in the Fed Fund Rate will cause some deals to shift from debt to debt/equity mix structures. There are approximately 956,000 staffed beds in all the U.S. hospitals. According to *Modern Healthcare* and the AHA, that number is expected to rise, given the volume of hospital construction projects.

Disease Management

The management of chronic diseases such as mental health, diabetes, obesity, COPD, asthma, allergy and CHF will continue to drive revenue from hospitals, to outpatient clinics, to doctor offices, to retail (mall based) healthcare. These diseases account for nearly 50% of all healthcare costs in the US. Insurance companies and employers are expected to offer incentives for healthier lifestyles and other

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wellness programs. Current disease management offerings will expand into retail settings. Horizontally integrated Disease Management (DM) programs are gaining significant momentum as multiple providers, across the continuum of care, join forces to manage the patients plan of health. A study from the RAND Corporation found consistent evidence that DM programs can improve healthcare quality, increase disease control and reduce hospital admissions for patients with CHF. Disease management is a critical component to lowering overall healthcare costs.

Wellness

The industry momentum is shifting from a health system to a wellness system. According to MetLife's Fifth Annual Employee Benefits Trend Study, employees are starting to promote wellness and prevention programs and some are beginning to offer health insurance credits for employees that follow wellness guidelines.

Pharmaceutical

The Leapfrog Group, the Agency for Healthcare Research and Quality (AHRQ), and others, will continue to focus on patient safety and medication administration due to reports of tens of thousands of annual deaths due to medication errors. The Pharmas will be required to manufacture pills in barcoded or RFID enabled unit dose medication packaging. This will ultimately force the robot companies, who currently take large pill bottles and convert them into unit-of-use packaging, to change business models. Counterfeiting is a large pain point for the Pharmas. The use of RFID and other tracking technologies to scan an entire pallet of pills to determine its origin, contents, destination and potential tampering will lower theft and compliance. Consumer directed healthcare will ultimately lower sales of expensive brand drugs and increase sales of over-the-counter or generic equivalents. As mega-patents expire or continued legal pressure, force change in drug usage, we will also see increased licensed technology or full acquisitions of bio-tech companies by the larger Pharmas.

Clinical Trials

The clinical trials services market is another area of growth. Frost and Sullivan, et. al. highlight that we should expect nearly \$24 billion in pharma R&D expenditures this year.

Retail Care

The local drug store of yesteryear will continue to feel competitive pressure as the large chains continue to improve location, number of stores and service levels. The proliferation of retail level mini-clinics will continue the erosion of local market share. Overall script writing volume is expected to increase but margins are expected to decline with automation, internet sales and mail order competition. Compliance systems that ensure the accuracy of each retail completed orders will create some M&A deal flow. Like other clinicians, retail pharmacists may be held accountable for patient outcomes and not simply putting pills in a bottle, a task that several companies have proven that robots are quite efficient at completing. Ironically, several of the Pharmacy Benefit Manager (PBM) companies, that administer the delivery drugs via retail pharmacies, own mail-order houses. Since most chronic disease management

cases require long-term drug usage, most of the retail business shifts to the lower cost mail order companies that deliver >90 day supplies. At the retail health layer of elective procedure key drivers include Healthcare Savings Accounts (HSA), flex spending and consumer financing options. As an example, TLC Vision expects to complete over 1.4 million refractive procedures this year.

Data

One could argue that he/she, who owns the data, wins! As national databases and benchmarking companies proliferate, the data companies will continue to acquire the smaller data providers, data acquisition firms and data analytics companies.



Hospice Care

According to CMS, the number of hospital-based hospice units continues to grow year after year. However, the number of freestanding hospice facilities continues to grow at a double digit rate.

Distant Care

Larger traditional device companies will continue to develop and acquire advances in technology. Some smaller companies that make home monitoring devices will continue to stimulate market activity. Continued investment into the Picture Archiving Communication Systems (PACS) space and the next wave of remote diagnostics/telemedicine venues will allow foreigners to access US care and increase revenues to once distant businesses. Broadband/fiber to the home and rural areas will increase access to expert care. Advancements in remote control will increase the use of robot care as recently highlighted on several mainstream TV programs. Tele-health and remote monitoring is expected to significantly reduce the cost of home/rural care for chronic illnesses/disease management. The Advanced Medical Technology Association reports that hospital admissions have reduced by 50% for severe respiratory patients and a 60% reduction for CHF patients when monitored remotely.

Provider Consolidation

NFP hospitals will increasingly rely on philanthropy from local investors, community based donations as well as government, commercial and private research grants. Given the abovementioned divergence, Hospital M&A is expected to continue in the community markets as CMS reimbursement shift away from traditional facilities to LTACs, SNFs, etc... Buy versus build decisions are being made daily in the assisted living market as the wave of baby boomers continue to retire. Consistent with the Levin Associates data, the Center for Studying Health System Change reports that the percentage of solo MD practices have dropped from 41% in the mid-90s to 32% in just 10 years later.

Healthcare Communities

The number of healthcare community/social networking tools, are expected to increase, as boomers increase market liquidity and HSAs cross into mainstream consumerism.

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Emergency Management

On October 30, 2005, well over 1 million patients lost their paper-based medical records forever. The Katrina-effect will continue to stimulate market activity as emergency preparedness and surge planning continue to secure mindshare of Hospital CEOs and community leaders. Furthermore, the economic impact of a potential pandemic/bird flu will drive the increased need for new services, drugs and technology. According to data from the American Hospital Association's annual survey, the average number of ED visits is flattening as the total number of EDs is increasing.



Technical Direction

Messaging, mobile information and instant access to data will continue to drive R&D, IT investments and M&A deal flow. Adoption of integrated real-time, evidence-based clinical decision making is finally surpassing the initial market penetration phase. Large medical device companies will continue buying Hospital Information System/Clinical Information System (HIS/CIS) firms to balance their medical offerings. Within the HIS community, more consolidation is expected to occur. Interoperability (linking hospital, outpatient clinics, ambulatory, device and MD offices nationally) will continue to spark deal flow as some players struggle to keep up with evolving standards. Staff, resource and patient scheduling systems will continue to stimulate deals. As detailed in a report from the RAND Corporation, the widespread adoption and proper implementation of HIT could result in an annual savings of more than \$77B. Given this technology platform, the addition of world-class evidence-based disease protocols will greatly improve patient outcomes. Improved outcomes, are slightly lagged by decreased length of stay (LOS) within the in-patient community and immediately trailed by decreased cost structures and healthier P&Ls of most US hospitals. Personal health records (PHRs) and SmartCard usage continue to make strides, but have not yet hit critical mass.

EMR/EHR Penetration

A recent survey suggests that pediatricians are gaining significant momentum with implementing EMRs. However, solo MD practices still lag with only 3.5% penetration, while nearly 1/3 of larger practices have made the technology leap. In recent years, over 800M outpatient visits were made to small MD practices, compared to over 110M visits made to larger MD practices.

Case Management

Demand for Case Management (CM) services in both the inpatient and outpatient settings will increase. Since CM services are not reimbursed under current reimbursement rules, most hospital CEOs limit their CM staff. This will change. CEOs should overstaff the CM department with MBA/MHA types that coordinate care, in partnership with

emerging Hospitalist positions and manage reimbursement issues to maximize revenue and promote all services provided by the hospital and associated clinics. Current HIS systems do a poor job of meeting the needs of most CM departments.

Talent Management

Recruitment of highly competent staff and development/retraining of existing staff will be key to the long-term growth of the industry. Tools that manage this portion of the human capital balance sheet will stimulate deal flow.

Supply Side Management

In many cases, clinical managers are forced to manage supply side relationships. Many hospitals are \$B businesses, yet most of them do not have Enterprise Resource Planning (ERP), Just-In-Time (JIT) inventory and vendor management solutions that manage the entire continuum of care and supporting logistics. Some vendors are deploying "smart shelf" technology that automatically detects product usage that triggers JIT medical supply chain replacement activity. Other vendors have developed electronic pedigree (ePedigree) applications that track supplies through the entire manufacturing and distribution supply chain.

Disparity in the HIS Community

HIS firms are continuing to heavily invest into their CPOE and Medication Administration Record (MAR) offering which will continue to create deal flow with smaller companies that have nailed the workflow and process automation sequence. Kaiser's \$2B non-equity spending spree with Epic, caused many within the HIS community to pause and wonder. Moreover, it created a swirl of activity around the free (as in \$0) HIS offering, offered by the US Government. VA hospitals, over the last decade, have developed a system called CPRS/Vista that is a fully functioning HIS with integrated Computer Physician Order Entry (CPOE), PACS, electronic prescribing with complete PMS integration. The product is installed in hundreds of paperless facilities around the world, providing instant access to millions of VA patient records with complete interoperability. Since the software was developed using public funds, it is available for free. One has to wonder about hospital board decisions that approve an HIS installation that cost tens of millions of dollars and years to implement, when there are free options available.

National Health/Local Integration

Regional Health Information Organizations (RHIO) are forming to facilitate the flow and access of medical information to distant clinicians for emergency and other telemedicine needs. To date, RHIOs have received their initial funding from several sources but have no sustainable business models, however, the Bush Administration's 2014 Healthcare Plan and state projects like the \$1B HEALNY program are stimulating HIT funding. Electronic Medical Record (EMR) usage is mandated by 2014 by the US government and 2010 by some states such as Arizona.

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Financial Dashboards

Financial Information Systems (FIS) will continue to evolve as CFOs begin to abandon their green bar reports and move to sophisticated, real-time, flexible and demand generated dashboards, in order to run their businesses.

Quality

As six sigma and other quality-de-jour programs penetrate healthcare from other manufacturing sectors, quality related software and service vendors will begin to look attractive to the HIS/CIS players already in the healthcare space.

Service Companies

Outsourcing back office service lines offshore to India and Ireland will continue to grow. However, with the growing popularity of outsourcing administration, IT, revenue cycle and supply chain management will continue to be fueled by the large domestic service providers as well as niche and regional firms.

In conclusion, 2007 was a great year for Healthcare. We believe that 2008 will be another extremely busy year for HIT-focused strategic coaches, mergers and acquisitions teams, their Clients and supporting legal, accounting and tax professionals.

About the Author

Jim Brennan, Head Coach



Mr. Brennan is an industry veteran with a strong record of results-driven business execution and deal making, which includes twenty years of experience in strategy, corporate / business development, sales and marketing management, international business while deploying software, services and devices. Jim has successfully led two healthcare turn-around projects; founded several companies; led the acquisition or sale of numerous healthcare companies; managed the North American healthcare team at a Fortune 500 company which successfully delivered more than 300 healthcare IT projects, led over 200 people in the US Air Force; launched several mobile computing products; has been quoted in many trade publications; currently sits on the board of two technology / services firms and has been awarded a US Patent. To date, Jim has negotiated over 130 technology license and acquisition deals domestically and has worked on projects in Japan, Singapore, India, England, Germany, Austria, France and Poland. Mr. Brennan has earned a Masters of Business Administration (Finance) degree from New York University and a Bachelors of Science (Electrical Engineering) degree at Cornell University. Jim is a member of HIMSS, HFMA and is a Fellow of the American College of Healthcare Executives (ACHE) where he holds a FACHE accreditation. Jim volunteers with the Three Village Baseball and Softball League, a non-for-profit organization supporting the sportsmanship and skills development for more than 1600 local children. Last, but far from least, Jim enjoys spending time with his wife and four sons, rebuilding homes, outdoor activities, music and reading.

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About VirtualCDO

The VirtualCDO specializes in engineering corporate growth, governance and mergers & acquisitions (M&A) for healthcare companies. The coaching staff at the VirtualCDO also guides hospital executives through strategic planning, technology acquisition and contract negotiations. www.VirtualCDO.com