



Aspen Advisors

U.S. Health Delivery A Prime Opportunity For Indian IT

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Meet the Author

Mr. Coate has over 20 years experience in provider and payor healthcare. He focuses on linking business benefits and priorities to operational and information technology initiatives.



He is skilled at leading large-scale clinical, operational and financial projects. In 2005-06, Mr. Coate relocated to Bangalore, India where he developed expertise in creating and growing global capabilities to support U.S. healthcare technology and business process needs. His clients have included academic medical centers, managed care and Medicare Advantage organizations, specialty university hospitals, multi facility/multi regional Integrated Delivery Networks, large physician group practices and start-up technology companies.

In the 1970s and 80s, shifting production outside of the U.S. revolutionized steel manufacturing, automobiles, and most other U.S.-based industries. In the 1990s, the spike in demand for Y2K software remediation and the rise of global communication networks opened the way for software services to be provided to many U.S. industries by global suppliers. India is a prime supplier of these IT services and is reaping the benefits.

While other U.S. industries have embraced the benefits of Indian supplied IT, the U.S. hospital segment has been much slower to adopt global IT sourcing. In the U.S., the “hospital segment” is typically referred to as the health delivery industry. It is comprised of hospitals, integrated delivery networks, and physician clinics. While Indian IT companies face stiffening competition for existing business in other industries, the U.S. health delivery market has remained virtually untapped. In the near future, U.S. health delivery will be a gold mine for well positioned Indian IT companies and IT professionals.

Demand for U.S. Healthcare

Let’s first look at the demand for U.S. health services. The U.S. experienced an explosion of births after American soldiers returned home from World War II. Sociologists define those Americans born between 1946 and 1964 as “Baby Boomers”. Today, these Baby Boomers are 28% of the U.S. population and are 40-58 years old.

In a 1997 Harvard Business Review article, management guru Peter Drucker made a very simple but undeniably accurate observation, “In human affairs — political, social, economic, or business — it is pointless to try to predict the future.... But it is possible — and fruitful — to identify major events that have already happened, irrevocably, and that will have predictable effects in the next decade or two. It is possible, in other words, to identify and prepare for the future that has already happened.” The Baby Boom is a key piece of the future that has already happened.

Baby Boomers have been hyper-consumers all their lives. Now as they age, they will increasingly become hyper-consumers of healthcare. It’s no surprise that people consume more healthcare as they get older —

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what's surprising is the rate of increase. In the U.S., 75-79 year olds consume twice the amount of healthcare as 65-69 year olds. Now, combine this fact with U.S. life expectancy being over 77 years, and it's clear that the aging Baby Boom will drive up the demand and spending for U.S. healthcare services. We are already seeing this trend as the U.S. government recently announced that health expenditures rose over 12% in 2004 and are expected to rise over 11% in 2005.

Baby Boomers are getting older and will live a long time — they also vote. For the foreseeable future, their needs, wallets, and votes will drive the agenda of U.S. healthcare. They will demand the cost reduction and quality improvement that IT can help provide.

Global Sourcing of IT in Other Industries

While the demand for U.S. healthcare will continue to increase, the global sourcing of IT in other industries is currently growing even faster. Forrester Research recently reported that the export market for Indian software has more than tripled in the last three years — from \$4.0 billion USD in 2000, to \$12 billion in 2004.

The Future That is Destined to Happen

The U.S. Baby Boom has happened — its impact on U.S. health delivery is known and predictable. Global IT sourcing has happened in other industries outside of healthcare. It is clear that these two mega trends are on a collision course.

The convergence of global IT sourcing and U.S. health delivery is not a question of “if”, it is a question of “when”, “how”, and who will benefit.

Why It Hasn't Happened Already

If the future is so clear, why hasn't it happened already? It's a good question, and there are several reasons. The first is history — health delivery has consistently been slower than other industries to adopt new IT trends. Global sourcing is just one more IT trend. It is important to note that although the health delivery IT industry is slow to adopt — all major IT trends have eventually taken hold within health delivery.

The second key reason is privacy and security. U.S. citizens are very concerned about keeping their medical information private and secure. There have been much publicized breaches, where medical information was compromised when U.S. hospitals employed resources outside of the U.S.. As example, the 2003 incident at the UCSF Medical Center involving a Pakistani Transcriptionist slowed the overall adoption of global sourcing in U.S. health delivery.

The next reason is fragmentation — the fragmentation of hospitals and clinics, and the fragmentation of standards. There are over 4,500 hospitals in the U.S., and many more clinics. While hospitals and clinics often belong to relatively small, regional integrated delivery networks — very few are part of a national chain.

From the standards perspective, healthcare is still in the process of developing truly meaningful clinical standards. Although more progress has been made in the financial side of healthcare, the U.S. National Library of Medicine's recent licensing of the SNOMED clinical dictionary will accelerate clinical standards adoption.

Although the above barriers appear daunting, it's important to note that American citizens are increasingly fed up with what they need to pay for quality healthcare. More importantly and powerfully, employment in the U.S. is stunted because of the increasing cost that employers shoulder for each new U.S. employee. Given this mounting pressure, the U.S. government and private organizations will be driven to mitigate these barriers.

Demand for IT in U.S. Health Delivery

The combination of aging Baby Boomers, historically slow adoption of IT, and overall rising costs of U.S. healthcare all point to an industry that needs, but cannot afford, a major IT overhaul.

As example, U.S. President Bush has the goal of using IT to reduce the US's annual \$1.7 trillion healthcare spending by 20 percent over the next 10 years. However, in the magazine “Federal Computer Week”, experts estimated that achieving this goal will take a \$500 to \$700 billion USD investment in IT.

In another example, Intel CEO Craig Barrett was recently touring India. In his comments at a Nasscom forum he said, “Health care was one of the last of the industries to make good use of IT and this is going to be a great area of opportunity for us.” He backed up his statement with money, Barrett announced that Intel would invest \$40 million USD in its Bangalore center.

Specific Opportunities for Indian IT

Now that the general case has been made, let's look at specific opportunities for Indian IT companies and professionals. In addition, there are particular characteristics that Indian IT companies will need to win business.

As background, it's important to understand the current state of U.S. health delivery IT. Given the combination of health delivery's complexity and the relatively small size of individual U.S. health delivery organizations — a mix of packaged application systems are typically used. Generally there is some limited augmentation of these transaction systems with custom developed software. The most visible custom software tends to be browser-based applications for viewing key clinical data. Health delivery organizations began developing these custom applications late in the dot com boom (2000-2001). While not a comprehensive Electronic Medical Record, these browser-based systems allow user-friendly access to key clinical information. Due to the intuitive nature of these applications, they are very well-liked by casual users (especially the influential physician community).

Opportunities: Vendor-based

The first key opportunity is clearly the development and testing of packaged applications for prominent U.S. vendors. Examples of prominent U.S. clinical vendors are Cerner, Epic, Eclipsys, and Siemens — key US ERP vendors in health delivery are Lawson and PeopleSoft (now acquired by Oracle). While Siemens and PeopleSoft/Oracle currently have an established global and Indian presence — the other vendors have been much slower to utilize Indian IT resources.

Development and testing for U.S. vendors can be delivered via several different approaches. The most straightforward being the direct set-up of Indian operations by U.S. health delivery vendors. While this approach means the most control for the vendor, it also means the longest set-up time. In addition, with attracting and retaining IT professionals to a “start-up” situation when other much more established Indian IT firms are vying for these professionals.

The second approach to delivering development and testing is to have the US firm simply outsource specific work to an Indian IT partner. While this can result in “quick-hit” progress — there is significant loss of control by the US vendor. Given that U.S. health delivery vendors typically have years of U.S.-based development tradition — few established vendors will choose this course-of-action. In addition, U.S. vendors will be concerned with having intellectual property jeopardized in the off-shore, outsourcing transaction.

The Build-Operate-Transfer model (BOT) is a hybrid of the above two approaches and incorporates key benefits of each. Given this, the BOT model is likely to be preferred by U.S. health delivery IT vendors. In BOT, the client (in this case, software vendor) and IT supplier sign a multi-year deal that includes the IT supplier initially building, and then subsequently operating the client’s Indian IT operations. At the end of the specified period (typically 4-6 years), the client has the option to transfer ownership of the business within their corporation, or to continue having the IT supplier operate the organization. This hybrid approach has the advantages of giving U.S. vendors a quick entry into the Indian IT world — especially important for packaged application software vendors that are late-entrants to global sourcing. In addition, the U.S. vendor has more intellectual property protection given the more partnership-oriented approach of the BOT deal. Finally, building a capability with an established Indian IT supplier is generally more attractive to professionals looking to tie up with a locally well-known company.

Development and testing are not the only areas of opportunity with U.S.-based health delivery software vendors — implementation services will be another key place where Indian IT can contribute. Complex packaged application systems require significant preparation before productive use at a hospital or clinic. The package must be designed, integrated with processes, configured, and carefully tested. In addition, it must be interfaced to legacy applications, and often significant quantities of data converted. In U.S.

hospitals today, virtually all of these tasks are done by a team of client, third-party and/or vendor analysts on-site at the hospital. This is a very expensive mix of staff – for both time, and travel and living expenses. As an example of this, research in leading U.S. hospitals has shown that for each dollar spent on software and hardware — two-to-three dollars were spent on implementation. Given that these services require more real-time, end-user interaction than code development or testing — it will be challenging to deliver using globally sourced resources. However, the reward to both the U.S. health delivery organization and the IT services supplier is great.

Opportunities: Hospital and Clinic-based

In addition to vendor opportunities, the access to low-cost and high-quality IT services will change the way that some, larger U.S. health delivery organizations look at their build vs. buy decisions. Because of the prevalence of packaged applications, U.S. health delivery IT vendors typically compete with each other and not with the option of a health delivery organization incrementally building functionality. Therefore, vendors have tended to develop large, monolithic systems that are very expensive and require years to implement.

In the near-future some U.S. health delivery organizations will balk at the proposed costs of purchasing and implementing a new clinical system from an established vendor. These organizations will compare the vendor proposed costs and timeframes, to internally transforming their current view-only, web-based applications into full-fledged hospital and clinical information systems. In the past, this build vs. buy decision was calculated using the cost of expensive, domestic IT resources – (almost) invariably the decision came down on the “buy” side. However, recalculating — using a significant mix of global IT sourcing — will result in a more “build” decisions for U.S. health delivery organizations.

As an example of this, a relatively large U.S. health delivery organization that I have worked with is in the midst of implementing a vendor-supplied clinical system that will cost over \$40 million and require over 5 years to implement. In comparison, this organization had invested about \$1 million to develop a very good and well-liked web-based clinical viewer. While this organization made the right decision to “buy” in 2001 — I believe its build vs. buy decision would have been different if made in 2004 factoring in the cost and quality of readily available Indian IT talent.

Key Characteristics Needed to Win

Given the above opportunities, there are specific characteristics that Indian IT companies will need to win U.S. health delivery business. The key characteristics are: commitment, domain knowledge, and client relationship management skills. Additionally, there will be a distinct advantage for Indian IT suppliers that are incorporated within the U.S.

About Aspen Advisors

Aspen Advisors is a professional services firm dedicated to helping healthcare providers optimize the value of their information technology investments. Our experienced team is highly skilled in all aspects of healthcare technology. We understand the complexities of healthcare operational processes, the vendor landscape, the political realities and the importance of projects that are executed successfully – the first time. Every client is critical to us, and our past and current clients are 100% referenceable. Established in 2006, the firm has grown significantly year over year. Our hallmarks are top quality service and satisfied clients.

Health delivery is a very complex and conservative industry. Companies that succeed will need a solid commitment to the healthcare industry. “Outsiders” should not expect to walk into health delivery organizations and get business. Buyers will want to see a proven past commitment to the industry, and a clearly-articulated future direction.

Given that health delivery organizations are relatively new to global sourcing – their processes and capabilities to manage remote vendors are immature. IT suppliers will need to help provide those capabilities. Therefore, the companies that provide IT services to health delivery organizations and vendors, will need to provide solid domain and client management skills. In addition, given the “high touch” nature of healthcare work, IT services organizations will need to have an on-site presence. While providing domain and client relationship management resources will increase the cost of services, it will be necessary to prove that global sourcing can — and does — work.

Finally, IT suppliers must understand the importance of data privacy and security to health delivery organizations. The U.S. Health Insurance Portability and Accountability Act of 1996 (HIPAA) dictates specific protections that health delivery organization have with Business Partners (such as IT services firms). However, these protections are really only enforceable with Business Partners that are incorporated within the U.S. Therefore, Indian IT services firms that are subsidiaries of U.S. firms will have a distinct advantage in allaying client concerns about data privacy and security.

Summary

The aging Baby Boom will drive up the demand for U.S. healthcare over the next 20-30 years. While global sourcing has revolutionized other industries, U.S. health delivery has not adopted global IT sourcing due to healthcare tradition, privacy and security concerns, and fragmentation. However, the pressures of the aging Baby Boom will soon precipitate U.S. health delivery organizations and vendors adopting, and embracing, global IT sourcing.

Indian IT firms can and should prepare themselves to take advantage of this inevitable future. The Indian IT firms that capitalize on this opportunity will need to be committed to healthcare, and provide domain and client relationship management skills.

A larger, eventual benefit to the country of India will be that Indian IT professionals will develop significant knowledge and skills from working with U.S. health delivery organizations and vendors. Not only will these IT professionals be highly valued in the marketplace, they will also have the future satisfaction of applying their learning to the advancement of Indian healthcare.

The French poet and novelist Victor Hugo said, “There is nothing so powerful...as an idea whose time has come.” The opportunity for Indian IT to assist U.S. health delivery is clearly an idea whose time has come.