Medical Product OUTSOURCING

South of the Border and Beyond: “Nearshoring” in Latin America

Cost reductions and other benefits are growing this trend.

By Jennifer Whitney
Editor

Outsourcing. Offshoring. Nearshoring. These are all terms used to describe a growing trend among US medical device makers, who are steadily focusing on these regions as they look for ways to reduce operational costs and reach new global markets.

As the cost of living rises in the United States, so does the cost of doing business. As a result, many medical device companies are lowering operational costs and accommodating customer needs (while maintaining top quality) by opening additional facilities in Mexico and Latin America.

According to a recent survey by Medical Product Outsourcing, 9% of respondents who currently outsource outside the United States have locations in Mexico, and 4% in Latin America. The reasons range from a desire to reduce overall costs, solidify a presence in countries with populations that will increasingly demand more sophisticated medical equipment or complement a customer’s venture in a foreign market. Regardless of rationale, 51% of survey participants believe offshore outsourcing is important to the strategic growth and profitability of their businesses.

While foreign investment has fluctuated in Mexico and Latin America over the years, many experts have noticed a resurgence of medical device companies opening new manufacturing centers in these markets because they offer lower operational costs and other benefits.

“At that time [when we first opened shop in Mexico], we had to beg our customers to let us take them there,” recalled J. Randall Keene, president and CEO of Avail, headquartered in Forth Worth, TX. “Mexico is still a fabulous place to go. We’re going to continue to see radical growth there.” While the company’s original intent was to streamline costs for operations that couldn’t be automated, he noted, “We can take almost anything to Mexico today—it doesn’t matter how sophisticated it is.”

However, China is proving to be a mammoth competitor that can lure business away from these countries. An abundance of factory workers who will work for even lower wages than those paid in Latin America, combined with China’s huge population of 1.3 billion that will grow increasingly dependent on US healthcare innovations, makes China very attractive to US executives. Furthermore, China’s close proximity to Hong Kong’s robust ports enhances operations as the country continually improves its supply chain.

That said, the idea of outsourcing closer to home still remains quite attractive to US device companies.

“Emerging” Frontiers

While areas such as Costa Rica and Brazil are starting to boom with business from medical device makers, not all Latin American markets are growing so quickly. Argentina, Venezuela and Nicaragua are just a few of the countries plagued with problems that can scare investors. Despite the large populations in some of these areas—Argentina alone has 40 million inhabitants—economic recessions and political instability remain. Espicom, a market research company specializing in the medical device sector, reported it sees a burgeoning recovery from these problems but also noted it will likely take many years to reach stability.

Mexico, on the other hand, has a lineage of medical device manufacturing tracing as far back as the 1960s and was among the world’s first low-cost manufacturing centers. While the region’s work force was originally relegated to producing low-tech, high-volume components, in recent years the country has seen a surge in more complex operations.

“Mexico has become a country that performs world class manufacturing,” said Steve Colantuoni, director of market research and communications for The Offshore Group, a shelter service based in Tucson, AZ. “Mexico formerly was solely used for simple assembly, but over time companies started performing more complex tasks there. Today, things are being built in Mexico that, literally, our lives depend on.”

Indeed, once many OEMs moved full product lines to Mexico, contract manufacturers and suppliers followed in a quest to fulfill their needs. Following are examples of companies that have made such a move:

• GW Plastics opened a plant north of Mexico City because the company has a longstanding history of putting operations near customer bases, according to Tim Reis, vice president of healthcare marketing for GW Plastics, which is headquartered in Bethel, VT.

• Avail, the largest outsource manufacturer of single-use medical devices, opened its first Mexican location in 1983. The company now employs 2200 people in Mexico and will transfer another four US-based plants to Mexico in the

first four months of this year.

• Point Technologies, based in Boulder, CO, opened a new plant in Costa Rica in late 2004 because a customer—a top US medical device OEM—operated its only manufacturing plant there. Vice President John O’Brien said the customer didn’t insist that his company should go there, but Point Technologies believed such a move would look good to both that customer and other companies seeking local suppliers.

Import/Export Proliferation

Supply in itself is a big issue for device manufacturers in these regions due to the limited number of native local suppliers and raw materials. This is partially due to many local businesses being smaller operations run by families that do not have enough money to invest in growing their businesses, according to Kevin Fraser, plant manager of The Tech Group’s Guadalajara, Mexico facility (the company’s corporate center is in Scottsdale, AZ).

Workers assemble printed circuit boards for medical device and other OEMs in Guadalajara, Mexico. Photo courtesy of Solectron Corp.

In 2003, more than 70% of Mexico’s medical device imports were from the United States, and some estimates indicate that more than 90% of today’s material imports originate from the United States; exports have soared as well.

One attraction device manufacturers are taking advantage of are the 2,881 Mexican “Maquiladora” manufacturing facilities, which help foster duty-free importing for materials to be used in products that will eventually be exported. Trade agreements, such as NAFTA and CAFTA (the Central American version that went into effect January 1), have further contributed to much of the business swirling throughout both Mexico and Latin America.

Costa Rica particularly has attracted an influx of new business by offering “free zone” trading that allows duty-free importing on both raw materials and capital goods such as machinery and other equipment used for production—even materials used for constructing a new facility are covered. In return, the government requires that companies commit to a certain amount of direct investment and provide a specific number of jobs to residents.

Point Technologies is one US company that took advantage of the benefits offered. “They [the Costa Rican government] want foreign direct investment and they want jobs for their people,” said O’Brien. “We want a good operating environment, and the government says [in return], ‘Our purpose is to make your business successful.’”

According to one source, the medical device sector hit its stride in Costa Rica in 1987, when Baxter Healthcare decided to open a manufacturing location there. Since then, approximately 17 OEMs (including Boston Scientific, Arthrocare and Hospira) have set up shop, and investment by such companies has grown by 245% within one year (and exports have grown 400% in the past five years).

Much of the reason for the migration to Mexico and Latin America is their proximity to US land. Aside of the quick and easy import/export trading, executives have long seen the appeal of doing business in a similar time zone and on a fairly quick flight to and from these locations. About 70% of Mexico’s Maquiladoras are located on the US border because being so close to the United States means products can also get to their intended destination that much quicker.

“Mexico has allowed us to leverage the US supply chain for raw materials,” Keene explained. “By manufacturing in Mexico, because of the proximity to the United States, you’re able to utilize the supply chain in the United States to service the manufacturing [over the border].”

Solectron Corp., headquartered in Milpitas, CA, acquired an OEM site in Brazil several years ago and has since noticed an emergence of business there due to its proximity to the United States. “Brazil has a well educated population and a pretty good medical system for those who can afford it,” said David Busch, vice president of the medical business unit at Solectron. “It doesn’t offer a huge cost advantage over somewhere like China, but the proximity to the US is an advantage.”

The Cost of Doing Business

Aside of proximity, some other major cost-related advantages have drawn medical device OEMs to Mexico and Latin America. In terms of salary, the industry average in Mexico is $2.45/hour vs $21.86 in the United States; in Costa Rica, the cost of production labor is about 20% of US costs. George Blank, president of The MedTech Group in South Plainfield, NJ, with additional manufacturing plants elsewhere in the United States, Puerto Rico and Costa Rica, noted, “Costa Rica has a low wage rate and large number of educated young people who are interested in working.”

Aside of its incredible beauty and strategic location in central Latin America—it’s only two-and-a-half hours from Miami—a major attraction to Costa Rica is its stable economy. The country manages to maintain a 4.5% annual growth rate, boasts a low poverty rate (<20%) and achieves extremely impressive educational levels (a 95.8% literacy rate) in both Latin America and globally.

The vast number of well-educated workers in Costa Rica is partially attributed to the government’s decision, back in 1949, to dismantle and abolish its army and, instead, refocus budgets toward education initiatives. “Since the government has no army, most of the money [it allocates] is put


Single-use device assembly in one of Avail’s state-of-the-art Mexico clean room facilities. Photo courtesy of Avail.

into education,” said Enrique Arguelles, general manager of Precision Concepts Costa Rica (the US base is Winston-Salem, NC).

Although the work force tends to be highly educated (with a high portion speaking English as a second language), workers such as production assemblers and engineers still earn about 50% less than workers on California’s Baja coast, an attractive draw for cost savings.

High productivity among workers is another asset for medical OEMs. According to a report issued by CINDE (Costa Rica Investment Board), silicone breast implant maker INAMED said that its facility in Costa Rica showed a 30% higher production rate than its similarly operated Santa Barbara, CA-based facility.

And while turnover is notorious in Mexico, surveys by CINDE revealed that rates are as low as 1%-4% for managers and technicians/engineers and less than 10% for common laborers. Of the 15 people Arguelles has supervised over the past five years, he said only one has left the company.

Training and related labor costs are also minimal—Costa Ricans tend to be fully trained within four weeks, which is 50% lower than rates for US employees.

Mexico, which has the majority of US business, is not quite as lucky in this department. Because its population generally isn’t as experienced and language barriers persist, the work force needs much more training. “You can’t start with statistics if you have to teach basic math,” explained Reis of GW Plastics. “In the American work force, we have a long history of work ethic and problem-solving. The idea of manufacturing things has been driven into our brains since we were kids. That’s not necessarily the case in Mexico. In many cases, problem solving is a skill set that is continuing to evolve.”

Another major challenge, as noted previously, is Mexico’s high turnover in its work force—especially among the borders.

Labor laws in Mexico also complicate business for device companies. Since the country has no unemployment insurance similar to what the United States offers, it can be cumbersome to fire employees when necessary. Colantuoni explained that, under the current system, if you wanted to terminate employment after a worker has been with a company for three months, the business would have to pay that worker three months’ salary; for every subsequent year of employment, the company is obligated to pay another 20 days’ salary.

“Essentially, if you have to let go of lots of people with seniority, the bill you’re going to have to pay to liquidate them is going to be quite high,” he said.

On top of these challenges, the overall cost of labor is also steadily increasing. In addition, government mandates for better fringe benefits, such as improved healthcare, add to the cost of doing business there.

Beyond all these types of challenges, companies often struggle to protect their reputations when faced with adverse public sentiments about outsourcing to other countries, since many US residents feel such business shifts are limiting their job prospects. However, executives say these moves aren’t just about cheap labor—a move overseas can facilitate corporate growth in the United States by making better use of skilled US staff with more upper-tier jobs.

Keene said that, although Avail has shifted many business units overseas, the company still has 1,000 workers in the United States, most of whom are employed in professional positions; this number has even increased from the 250 people the company originally had before moving operations. He also noted that Avail still employs more “direct” laborers than it did 10 years ago, but the company finds it increasingly difficult to fill these positions in the United States.

“Do you know how hard it is to hire 300 minimum wage direct employees in the United States in any city? It’s nearly impossible because nobody wants those jobs,” Keene said. “More people have college degrees today and [thus] have higher expectations for themselves.”

Colantuoni also offered another perspective on the situation. Citing that 53 million US jobs originate from foreign investors conducting business here, he noted that disgruntled Americans may be judging offshoring US corporations a bit harshly. “People miss the fact that not only do we benefit from outsourcing, we also benefit from insourcing. If an American business executive has the moral imperative to keep business in the United States, then foreign executives have the same imperatives as well. Trade and investment flow both ways.”

Public sentiments probably won’t deter many US medical device makers from investigating the potential of operating in Latin America and Mexico in years to come. As these countries evolve, many of their regions are adding impressive skills to their repertoire and are proving to be loyal partners. Since China still has a long way to go in terms of protecting intellectual property, many companies recognize the value of doing business in places like Latin America, where various laws have been passed to protect both local and foreign inventors.

Medical device executives also say they have seen a major transformation in terms of the quality of what’s being produced in these markets. “If you had said we’d be making Class III devices in Mexico at Six Sigma levels a dozen years ago, people would have thought we were nuts,” Keene said. “Today, we can do it.”

The benefits to US manufacturers are readily apparent. And, in turn, as US businesses increasingly turn to outsourcing business to these markets, economies in both regions should only strengthen in years to come.