# Carlos Rivera Vélez – President, Medical Devices Cluster, Puerto Rico



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*Dr. Carlos Rivera Velez, president of the Puerto Rican Medical Device Cluster, shares the importance of the medtech industry for Puerto Rico and how the cluster is working with various stakeholders to position the island as a globally competitive industry hub.*

**How important is the medical device industry to Puerto Rico?**

The medical device industry in Puerto Rico has existed for more than 40 years. We have seen Puerto Rico evolve into an electronics manufacturing hotspot, before later becoming a pharmaceutical manufacturing powerhouse. This historical combination makes Puerto Rico a very attractive destination for medical device companies. The sector has around 20,000 direct jobs, making it the number one employment generator in the island's manufacturing industry. Moreover, according to government statistics, every direct employment generates between three and seven indirect jobs, meaning that our industry generates directly or indirectly more than 60,000 jobs.

The medical device sector is growing at four percent each year. We estimate our sector to represent ten percent of all the island's exports, which is very close to USD ten billion per year. Being a big employer means the sector is a huge contributor to the Puerto Rican economy. From

Puerto Rico we are exporting to the whole world, our members have reported that half of their exports go to the US and the other half to places like Europe, Asia, and Latin-America.

**Could you give an overview of the Medical Devices Cluster?**

The medical device cluster was established in 2000 under the sponsorship of the Puerto Rico Technoeconomic Corridor (PRTEC) and it is currently formed of 30 manufacturing companies, including seven of the top ten global medtech companies, that have a total of 70 sites scattered throughout Puerto Rico. Major suppliers of components and services as well as companies dedicated to marketing and distribution of medtech products also belong to the cluster. Some of the manufacturing companies provide services to each other, as in the case of Edwards Life Sciences, which provides sterilization to other companies in the cluster. The cluster is a very comprehensive representation of the entire industry.

The mission statement of the Medical Devices Cluster is to advance the sector by educating stakeholders on its importance for Puerto Rico’s socioeconomic landscape; further developing its professional and leadership talent and global positioning it; and diversify Puerto Rico’s offering beyond manufacturing. Our vision is to make Puerto Rico not only a manufacturing hub but an innovation hub as well which is a paradigm shift – the talent already exists, and many members share this vision.

The cluster is aiming at contributing significantly to the economic development of the island. Puerto Rico has many attractive attributes for doing business such as very specialized and hardworking talent, an enabling infrastructure, and very competitive government incentives. To summarize, the cluster’s vision is to retain, attract, expand, diversify, develop people, and help each other become more competitive through sound and innovative benchmarks.

**What are the major concerns of your members today around the competitiveness of Puerto Rico?**

The reliability and cost of electricity is very important for us. The medical device industry is not as capital-intensive as the pharma industry, but there is still a lot of capital invested and a lot of machinery. We are starting to see actions from the government in these areas, but these need to be quick and sustainable. Nevertheless, we are also investing to ensure that we have reliable generational capabilities at a low price.

Additionally, we would like to see Puerto Rico rank higher in term of global competitiveness. The government has facilitated the introduction of new opportunities to Puerto Rico. However, Puerto Rico needs to have a greater presence around the world, so that people become more aware of the opportunities that exist on the island.

**You were appointed President of the Medical Devices Cluster a year ago with the mission of making it grow. What progress have you made so far?**

We have been very involved with all stakeholders in the ecosystem. We are working very closely with other associations such as the Pharmaceutical Industry Association (PIA) and the Puerto Rico Manufacturers Association (PRMA). For the first time in our cluster's history, we are also part of the Private Sector Coalition which is the organization that integrates all the private sector associations. We are working in an integrated fashion between our industries by setting benchmarks and collaborating with each other. Lastly, we are also working with them and the Government to promote Puerto Rico internationally.

**Medtronic's Felix Negron told us that, compared to the pharma industry, product life cycles are very short in the medical device industry, so it would make sense to have incentives to bring new products to the island quickly. Are you discussing this possibility with the authorities?**

Felix is absolutely right, although some medical device products have a relatively long lifecycle given the design complexity they represent and the high barriers to entry on the solutions developing space. However, we have been speaking with the government regarding this topic. We have had several meetings with Secretary Laboy and Governor Vázquez. They are always supportive, open and flexible. They are being very creative when developing incentives and are looking into other innovative ones.

**Manufacturing in all sectors is undergoing a transformation and entering a new phase, dubbed 'Industry 4.0', focused on interconnectivity, automation, machine learning, and real-time data. How is the Cluster making sure that the human capital on the island has the skills and capabilities to implement these technologies?**

We are working on this aspect separately at the moment. The cluster is aware that automation, machine learning, and real-time data are very important factors, however, we have not started to have conversations about what the cluster can do to help.

Nevertheless, many of our members are moving towards full automation. For example, Fresenius Kabi in San German is almost fully automated, and Ocular Vision is fully automated. This is the reason why as a cluster we are developing a very comprehensive curriculum of competencies for the future. In terms of capabilities and knowledge, we are on the right track, we just need to strategize as a cluster how we want to use that as an economic development tool while keep optimizing the value offering within our companies.

**What would you say to a medical device company that wants to come to Puerto Rico but is worried about the island's susceptibility to natural disasters, such as hurricanes?**

I perceive a little hesitation lately to think about investing in Puerto Rico due to the events of 2017. It is part of our human nature. There is a general thought and perception that hurricanes are getting stronger and more frequent. However, we have been managing hurricanes for decades and have solid BCPs (business continuity plans) in place that have evolved with the years and experiences into very robust tools to ensure minimum or negligible business interruption. We have managed so many low magnitude hurricanes without disruption to our organizations and supply chains, and, when impacted by a higher magnitude event, we have also been capable of restarting operations relatively quickly.

Hurricane Maria was an outlier and it has made us stronger. Currently, above and beyond the challenges of our individual organizations, we now have an integrated emergency management and business continuity body, composed of the government, municipalities and private sector leaders that come together to act as needed. We have also invested holistically in our individual infrastructures to become close to bulletproof. We are definitively more prepared to manage this type of once-in-a-century phenomena. When you combine this level of readiness, well thought-out inventories strategies, solid infrastructure, talent, and our cost advantages, it only means that Puerto Rico continues to be a great location for doing business.

I feel very positive. It is important to candidly remind everyone that a natural or human-driven disaster can occur anywhere at any time. That is the reason why it is so important to have proven business continuity plans and recovery procedures in place at all times. Here in Puerto Rico, we know how to manage these things.

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