



Forging a Unified Healthcare Culture



CDPI is one of the most prestigious imaging clinics in Brazil and now part of DASA, Latin America's largest diagnostics corporation.

With more than 200 million exams per year, DASA in Brazil is the largest diagnostic company in Latin America. DASA Chairman Dr. Romeu Domingues explains why it is crucial to invest in innovation, in new technologies, and in being a pioneer.

Text: Reinaldo José Lopes Photos: André Viera and Siemens

Rio de Janeiro radiologist Romeu Domingues, MD, joined the ranks of DASA, Latin America's largest diagnostics corporation in 2011 after years of successful work at CDPI, one of the most prestigious imaging clinics in Brazil and now part of DASA. As Chairman of the corporation's Board of Directors, Domingues says his aim is to forge a unified culture for DASA's manifold brands, based on innovation, high quality service, and productivity. He explains how DASA's partnership with Siemens is helping his company to achieve those goals and fulfill its social commitment in a country with growing needs for high quality and high productivity in medical services.

How would you describe your first few years with DASA and your vision for the company?

Domingues: DASA is a relatively young corporation. It became public in 2004, only ten years ago, and it underwent a strong phase of mergers and acquisitions making it the largest Latin American company in the field of medical diagnostics, and the fourth largest in the world. We have 20,000 employees plus 2,000 doctors.

CDPI joined DASA in January 2011 as a member of a group of imaging diagnostics companies from Rio de Janeiro. Now we manage 26 different brands. ►



The greatest challenge is creating a new, unified culture of doing things inside DASA. We've been doing this for two and a half years now and we realize it's not easy. You need at least five years to accomplish this. We need, for example, to integrate our IT systems – right now we have more than 20 different IT systems, and that generates a lot of inefficiency.

Nowadays, about 65 percent of DASA's revenue comes from clinical analyses in vitro, and 35 percent from imaging exams. Those medical service businesses are very different from one another, and the challenge is how to get the most out of both. Clinical analyses are very much based on logistics, production, and supply. With factory-like efficiency, the laboratories at DASA use fully-automated systems to speed the delivery of test results and gain productivity. While lab tests are run on patient samples, imaging exams, on the other hand, are performed on people. You need motivated doctors and well-trained radiologists.

We also needed new systems. Especially in our units in São Paulo, our machines were quite outdated; some of them had been in use for more than ten years. And we had to improve our call-center system. This was important, because the healthcare market in Brazil is customer-driven. Patients choose which lab to frequent and the lab report belongs to the patient. Call-center operators help patients schedule exams and learn about test procedures.

“We cannot afford not to invest in innovation, in new technologies, in being a pioneer.”

Romeu Domingues, MD, President of the Administrative Council, DASA, Brazil



Healthcare Challenges in Brazil

In the past few decades, Brazil's demographic profile has changed substantially with a major impact on how the largest Latin American country deals with its healthcare challenges.

From 1980 to 2010, for example, average life expectancy for Brazilians increased from 62.5 years to almost 74 years. Today, about 7.5 percent of Brazilians (about 15 million people) are 65 years old or older, and demographers from IBGE, Brazil's official statistics bureau, predict that number will quadruple by 2060, with senior citizens making up around a quarter of the country's population.

At the same time, a period of relatively robust economic growth has boosted formal employment and income, creating what Brazilian economists call "the new middle class" or "class C". This ascendant group, corresponding to over 20 million people with monthly household incomes of up to US\$ 2,000, now has easier access to

private services such as health insurance. As a result, in the past ten years, the number of Brazilians who use private healthcare (either as individuals or employees), has risen considerably from 30 million to nearly 50 million people.

These demographic changes are part of DASA's success story and are creating both challenges and opportunities for the company, says DASA Chairman Romeu Domingues, MD. One of the relevant factors is the sheer scale of the demand for clinical exams. "In the past few years, we have been increasing our head count and are investing in order to deal with such a huge demand," he says. When it comes to imaging exams, the increase in demand has also led DASA to invest in its call-center system. "For imaging, you need an extremely efficient call-center so that everything works smoothly, from the doctor's request to the right preparation by the patient; otherwise you lose precious time and money."

This just gives a glimpse of how complex DASA is. Many of the biggest labs in the world don't offer imaging exams, they only do clinical analyses – and vice versa.

How hard is it to deal with so many different brands and the different kinds of clients they serve?

Domingues: One of DASA's interesting facts is that we're dealing with four different market segments. Private patients account for 74 percent of our revenue – including both payments in cash and from patients with insurance plans. Ten percent comes from our "lab to lab" or "B to B" work: Small labs that send their more complex exams to us. In that area we have a client portfolio of about 5,000 small-to-medium labs throughout Brazil.

Next, we have the private hospitals, around 80 of them, for which we perform exams. All of this calls for testing systems that deliver high quality, high

throughput, flexibility, scalable automation, and cost efficiency. And, finally, seven percent of our revenue comes from the public health system, from SUS [Sistema Único de Saude, Brazil's nationwide free health system], and it's a pity that it is only seven percent. When we manage to get a public contract, it's very gratifying because we can offer the same exam with the same quality for a patient that lives in a fancy neighborhood as for one who lives in a poor community.

Why is it important for you to work with the public sector?

Domingues: The profit margins we manage to get in the public health system are smaller. On the other hand, there's our sense of social responsibility, and it helps us to generate an economy of scale. After all, we're now the largest diagnostic lab in Latin America. We do more than 200 million exams per year, which is more than three times the number of our closest competitor.

So, in that sense, scale is very important when you're going to automate a central lab like the one we have in Rio, where we do five million fully-automated exams per month. When you're going to negotiate with a supplier to buy software or to arrange maintenance, scale matters. If we didn't have that scale, we wouldn't be able to work with the public sector without losing money, and the same goes for our "lab to lab" work.

In the social responsibility front, we are very proud of a project called Imagem Solidária [Solidary Imaging] that is working beautifully. We established a clinic for low-income patients in the Jesuit school I went to in Rio. We have magnetic resonance imaging (MRI), ultrasound systems, and mammography-producing exams with quality that is undistinguishable from the quality we offer to the patients from fancy private practices. ►

DASA at a Glance

Number of doctors: **2,045**
(as of December 31, 2012)

Geographical spread:

521 units in **12** Brazilian states
and in the Federal District

Exams per year:

200 million (in 2012)

Number of brands: **26**
Market share in Brazil: **13%**

Company value:

R\$ 3.6 billion

(US\$ 1.59 billion)¹

Total profits in 2012:

R\$ 84.7 million
(US\$ 37.47 million)¹

Main Imaging equipment:

CT: **70** MRI: **105** Ultrasound: **392**

Labs: **26** including **9** central labs

Papers published in
international journals per year: **30**

¹ as of Nov. 11, 2013

This year, Siemens in São Paulo also organized an effort, together with some of its other partners, including Hospital do Coração and Hospital Sírio-Libanês, to offer a number of free examinations – more than 100 MRIs and about 100 computed tomography scans, in DASA's case – to public hospitals in São Paulo State. We agreed to participate through the Siemens initiative and the effort was pretty successful.

DASA has a strong interest in research and innovation. What are the benefits of that approach for your company?

Domingues: We can't afford not to invest in innovation, in new technologies, in being a pioneer. If I need to negotiate a raise in reimbursement with an insurance company, I usually barely manage to compensate for last year's inflation. So, how does our business stay afloat in the long run? Only with innovation, with a focus on being a pioneer, because that brings higher aggregated value and greater prestige to our portfolio.

In sum, that's the approach we have to pursue, and it's great to see that, in the medical imaging field for example, in the past five years probably half of the Brazilian scientific output has come from our group. And if you go to the RSNA (Radiological Society of North America) meeting in Chicago, half of the papers presented by Brazilians are by our group. Why? Because we have residents, we have fellows, a good team of medical physicists, and a partnership research agreement with Siemens. That means: As soon as new work-in-progress software is available, they let us know. We test it and then publish the results. Once every two years I visit Siemens headquarters with three or four colleagues to get to know what the most important innovations are. We can't afford to lose this pioneer spirit.

We didn't have a similar engagement in research in our laboratory branch, but we're also managing to change that. In 2011, for example, we presented 11 papers during the AACC (American Association for Clinical Chemistry) meeting. That number shot up to 53 last year. In terms of our commitment



DASA runs a fully automated laboratory equipped by Siemens.

to innovation, both areas need to go hand in hand.

In what sense do you think your partnership with Siemens has boosted your performance when it comes to offering innovative exams?

Domingues: I think I can assess more clearly what impact Siemens had in our work when I look at the MRI field, which is my specialty. In that area, in the past ten years, Siemens really leapt ahead in technology, with several important innovations.

It was the first company to bring full-body MRI to the market, with the possibility of connecting several coils at the same time. It was the first to devise a 70-centimeter, Open Bore magnet. The first to have MR/PET. It was clearly a huge investment in research that has paid off in terms of market share.

DASA operates on such a big scale that you also need to aim for the highest possible productivity. Is your collaboration with Siemens an asset in raising productivity levels too?

Domingues: One thing we realized right away was Siemens' increasing concern with high productivity when it started manufacturing MRI equipment where you could use several coils at the same time, for example. Not so long ago, if you had to scan a patient's lumbar spine and then his hip, you needed to reposition the coils. Nowadays, you don't need to touch the patient. It may not sound like much, but that kind of thing results in much higher productivity.

Ten years ago, Siemens put an end to pre-scan – before, we needed to spend a few seconds before starting a sequence. If you save up to ten seconds here, ten seconds there, at the

end of the day that's a lot of time and money you save. So we discovered that, besides technical quality, we could be a lot more productive.

Another good productivity example in São Paulo is DASA's Public Laboratory. With its Siemens solutions, DASA has reduced turnaround time and error rates. The need to split samples into multiple test tubes for analysis dropped from 100 percent to 62 percent after the introduction of the ADVIA LabCell System, and 22 percent of the staff were reallocated to other activities. A good balance between productivity and quality is absolutely possible.

Reinaldo José Lopes is a science writer at *Folha de S. Paulo*, Brazil's largest daily newspaper. He lives in São Carlos.

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