

PHILIPS

Services and solutions delivery

Operational
Intelligence

**Putting Operational
Intelligence into
practice to fast
track remote
servicing and
monitoring in Latin
America
during COVID-19**

Operational Intelligence in practice:
**Stories from Latin America with
Felipe Conzalez Berthelon and
Gustavo Cardona**

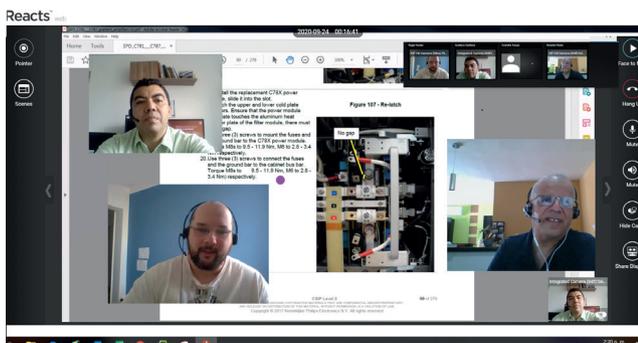


Felipe Conzalez Berthelon



Gustavo Cardona

Felipe Gonzalez Berthelon and Gustavo Cardona explain how the integration of people, process and technology became even more vital during the global pandemic



Philips service engineers in Latin America using Reacts

2020 was a year when the world hit “pause” and was forced to start to rethink the way it worked. In healthcare there are many examples of hospitals adapting to the Covid-19 pandemic: from the redesign of emergency departments¹, to the uptake of telemedicine models² and the restructuring of supply chains³.

During the pandemic, digital change accelerated. With the focus on quickly diagnosing Covid-19 patients in order to begin treatment, hospitals and industry faced a dilemma: modalities such as MRIs and CTs, both vital for diagnosing patients, needed to operate at full capacity — with zero downtime — to avoid any unnecessary disruptions.

Usually hospitals rely on maintenance support to keep equipment up and running, via visits from field service engineers, highly trained in modalities and their use. But as Covid-19 restricted access to hospitals, their Biomedics had to work out how to minimize equipment downtime without onsite support. And with minimal impact on staff and patients.

Transformation that had already started was accelerated as Philips teams in Latin America and their healthcare provider partners worked together to embed Operational Intelligence – their integrated partnership operating model – to navigate and adapt to the ‘new normal’.

What is Operational Intelligence?

Operational Intelligence is the partnership of continually synchronized people, processes and technology. This operating model turns the current trend to think and prioritize technology first, on its head by combining three critical components to create and deliver a healthcare organization’s products and services to result in profitability and growth.

What began as an idea about how a hospital system and a technology provider could better work together has become a powerful new way of working for hundreds of Philips and healthcare professionals.

Using the principles of Operational Intelligence, hospital staff and engineers collaborated and through trust, teamwork and innovation led a humanizing technology digital switch in how modalities were maintained. New operating models quickly emerged, driven by changing needs of hospitals. Instead of in-person hospital visits field service engineers started delivering support online, by remotely monitoring equipment. Working hand-in-hand with hospital staff, digital technologies which had been long in gestation were fast-tracked, new processes were created and innovation occurred ‘in the moment’, benefiting both staff and patients.

1 Science Direct, 'Redesigning emergency department operations amidst a viral pandemic, 2020'. Go to: <https://www.sciencedirect.com/science/article/pii/S073567572030262X>

2 Philips, Tele-ICU & remote critical care for COVID-19 patients, go to: https://www.philips.com/eg/healthcare/medical-specialties/covid-19/tele-icu-covid-19#!=&triggername=menu_one

3 WEF, 'The ongoing impact of COVID-19 on global supply chains', go to: <https://www.weforum.org/agenda/2020/06/ongoing-impact-covid-19-global-supply-chains/>

Spotlight on Latin America: How zero contact made remote monitoring for zero downtime a necessity.

Across Latin America, field service engineers face a range of challenges when they respond to a hospital maintenance request: it costs a lot of money to reach some sites as some hospitals are located hundreds of miles away from a field services engineer. Furthermore, not all hospitals have systems which are connected, allowing data from a modality to feed directly to a remote engineer, who can quickly diagnose a system failure. Even with connected systems the benefits of remote monitoring services are not always clear. Why is it better to have a problem solved remotely, when an engineer can turn up and fix it in person?

In the middle of a pandemic, the need for the shift to remote monitoring was abundantly clear.

Felipe Gonzalez Berthelon, Remote Service Manager for Latin America explains: “While remote monitoring has high adoption rates in other parts of the world, we needed to convince our hospitals that there is a faster way of making sure they are supported with zero downtime. If we could connect their systems, we would have the chance to monitor those systems and predict and prevent failures.

Latin American countries including Brazil, Argentina, Peru and Chile quickly innovated during the pandemic to provide remote services to hospitals using digital tools such as the video conferencing platform, Zoom, and the virtual reality platform, Reacts. These technologies were used to deliver customer training and to diagnose MRI problems remotely. As equipment issues emerged, hospital biomedics turned to remote support to get systems back up and running.”

Felipe Gonzalez Berthelon continues: “In early 2020, remote resolution made up 26% of maintenance requests in Latin America before jumping to 39% in March and then 43% in April during the Covid-19 lockdowns, before steadying to between 35-37% for the months of May, June and July.”*

He continues: “We started this transition to remote support in 2019 and we were looking to extend this model further in 2020. Then Covid-19 arrived and our hospitals asked for our help to fast track connection. Success stories quickly started to emerge because the Hospitals found the support really good and they could see the value. Covid-19 pushed a transformation that would have taken one or two years into the space of a few months.”

*Data source Case Resolution Dashboard in Qlikview. (Direct operations countries only)

Keeping MRIs running during a time of exponential crisis with Reacts in Argentina

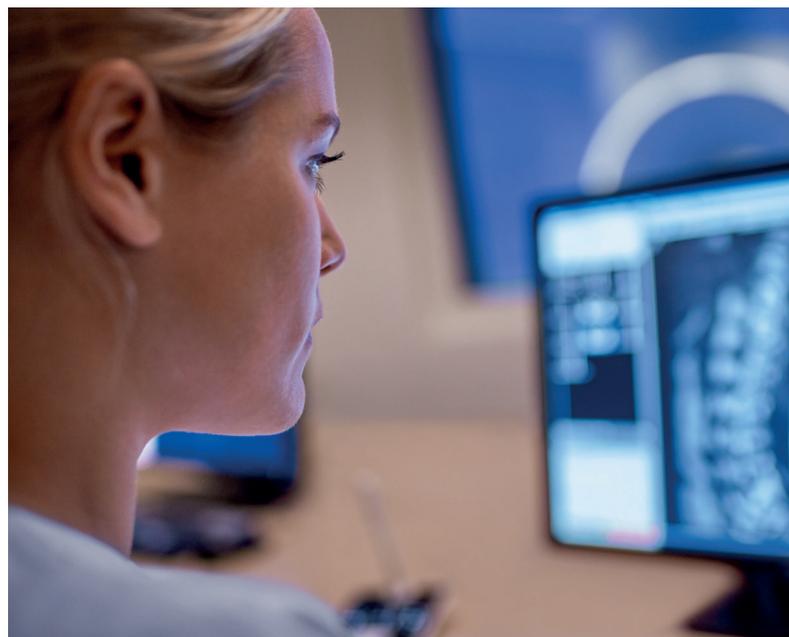
In Argentina, the healthcare provider Resonancia Magnetica Misiones SRL, which is located 1000kms away from field service engineer support in Buenos Aires, reported one of its MRIs was down during the Covid-19 outbreak. It was a complicated fault, that couldn't immediately be diagnosed.

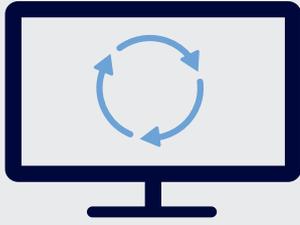
Reacts is the Philips platform of unique interactive tools that make it possible to provide secure expert solutions, and the training and support, needed for physicians to make definitive diagnostic decisions effectively and efficiently from anywhere, at anytime, anywhere in the world.

Using Reacts it took just an hour to detect a failure in the MRI's gradient power supply working in combination with remote engineers, a field service engineer and the hospital's biomed. The faulty part was identified and a replacement was ordered.

Gustavo Cardona, Philips Remote Service Engineer, explains: “Our team shifted from doing long-haul flights and five nights in a hotel to delivering this service remotely. We were able to pinpoint the problem with the modality and then send an engineer with the correct part, which significantly reduced the impact on the hospital's operations.”

At another healthcare provider, Hospital San Roque in Buenos Aires, a PACS configuration took just 30 minutes for remote service engineers to resolve.





What is Reacts?

Remote clinical collaboration is made possible with the Philips Reacts platform, the interactive collaboration platform available across a range of Philips healthcare solutions.

Already deployed in more than 80 countries, across various disciplines in both clinical and educational healthcare settings, the Reacts platform allows healthcare professionals to interact remotely and dynamically in a wide range of applications, from teleconsultations, secure messaging, remote wound care and tele-ultrasound, to interactive telesurgical assistance and remote procedure supervision.

In each example, critical equipment was quickly bought back online to support staff and patients. In Peru and Chile hospital staff were trained by Philips remote engineers in how to monitor equipment themselves, a shift that will lead to 80% of customer training modules being delivered remotely, reducing time and costs.* “What is happening here is a movement away from reactive to proactive maintenance,” says Claudio Palma, a Clinical Applications Specialist at Philips. “Eventually, customers will expect a range of digital tools from industry, including remote training, to help them manage fleets of medical equipment. This is the first step to transforming to a complete digital hub.”

How new service models are contributing to operationally intelligent operating models.

Spurred on by its success, Latin America wants to extend the remote support model further by launching pilots that innovate around hospital service contracts and their equipment usage, based on data. With 82% of its installed base connected and its highest performing country, Brazil, performing around 40% of remote resolution, it is a big opportunity.*

Felipe Gonzalez Berthelon explains: “Our people are our most valuable assets and so, if we can use them in a more operationally intelligent way by utilising their power remotely, it’s a win:win. That was the idea behind our 2020 [remote monitoring] focus. It’s not about removing contact but innovating new service models that connect people, process and technology in the best ways for now and the future. Operationally Intelligent healthcare is a mindset that starts and ends with the patient and the professionals and integrates everything they need to deliver truly connected, people-centric and economically viable progressive healthcare.”

With people and process a key part of the remote monitoring shift, this regional drive includes a retraining program to convert field service engineers into remote service engineers. Across Latam countries this has led to 86 FSEs changing roles.

According to Felipe Gonzalez Berthelon, this is because in Brazil they want to make sure they continue to invest in remote service engineers, transforming experienced FSEs to RSEs.

He explains: “It has also opened up a discussion about what work is best for a field service engineer to do, based on their high value as a ‘resource’. A qualified field service engineer will undergo five to 10 years of training to reach the required level to service modalities in a hospital. “Do we want them replacing keyboards and monitors?” For a lot of smaller jobs we can guide hospitals to replace minor parts using remote support and then deploy our field service engineers for higher value, more technical, engineering work.”

He adds: “We have these digital tools and we have the expertise, but I feel we have to keep going further and further, developing new models to improve the customer experience. We are using the same people, the same tools and we have the same call centres. It’s just a different way of thinking and behaving and connecting people, process and technology. Essentially delivering remote monitoring and servicing, the operationally intelligent way.”

*Data source Case Resolution Dashboard in Qlikview. (Direct operations countries only)



Is your healthcare system operationally intelligent?

Being able to fully exploit the digital capabilities that technology can offer healthcare operations optimization, is not solely about selecting the best technology to achieve your goals.

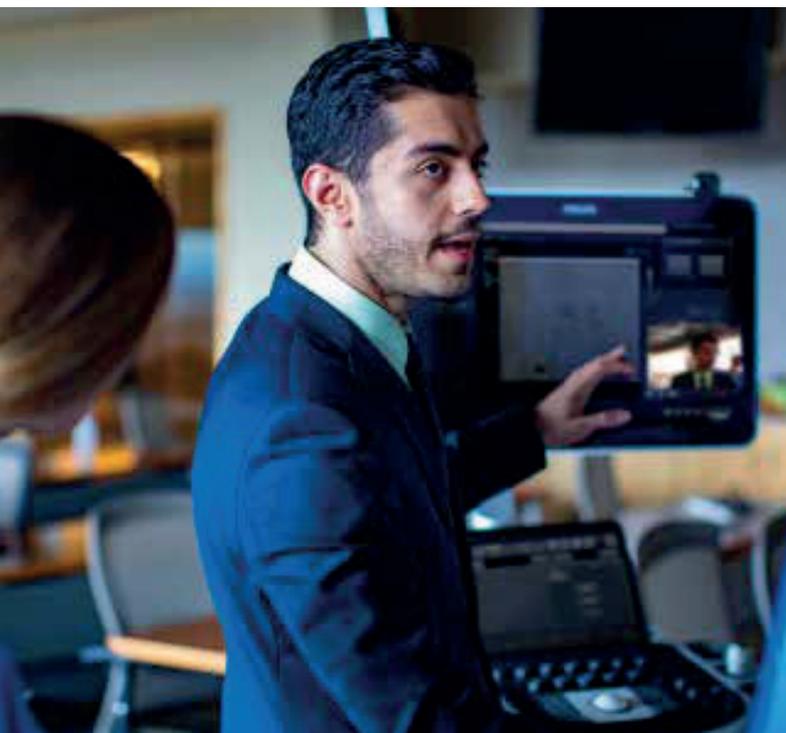
True transformation requires an operating model that combines technologies, people and process in an integrated sequenced way.

Interested to learn more?

Let's talk. Even better, let's collaborate. We'd love to help you translate Operational intelligence for your healthcare operations.

Contact details go here

www.philips.com/operational-intelligence





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healthcare@philips.com