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> "Digital pathology has helped us speed up and improve collaboration across four different hospital sites for almost immediate diagnosis."
>
> **Dr. Raimundo García del Moral**
> Head Pathologist at Hospital Campus de la Salud, Granada, Spain

Customer
Hospital Campus de la Salud, Granada, Spain

Challenge
Delivering pathology diagnostic services to the province of Granada, with a patient population of approximately one million people, from four laboratory locations

Solution
Philips IntelliSite Pathology Solution

Results
- 21% increase in diagnostic capacity on average[1]
- Instant access to expert opinions across four sites

Pioneering digital pathology with a 21% productivity gain

In 2016, Hospital Campus de la Salud in Granada became the first fully digital pathology lab in Spain.

Using the Philips IntelliSite Pathology Solution, pathologists are now able to instantly share images across four different hospital sites, reducing the need for physical transport of glass slides while facilitating multidisciplinary collaboration.

Since the implementation of the Philips IntelliSite Pathology Solution, pathologists in the Granada hospital network have experienced a 21% increase in diagnostic capacity on average compared to microscopy when using a digital workflow for primary histopathology diagnosis[1].
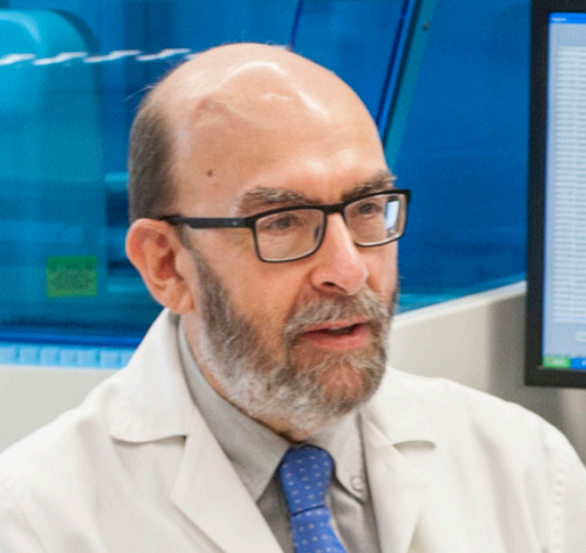
> "Thanks to digital pathology, pathologists based at peripheral hospitals in our network can now request immediate consultation from specialists located at the central laboratory."

**Dr. Raimundo García del Moral,
Head Pathologist at Hospital Campus
de la Salud, Granada, Spain**

Hospital Campus de la Salud in Granada, together with a network of peripheral hospitals, offers advanced care to approximately one million people in Andalusia, in the south of Spain.

Challenge

At Hospital Campus de la Salud and three peripheral hospitals in the surrounding area, a team of 23 pathologists diagnoses over 280,000 tissue samples each year. Fast and seamless collaboration across hospital sites is essential for quick and accurate diagnosis.

"Our goal was to implement digital pathology in our hospitals to create a fully digital multi-site network," says Dr. Raimundo García del Moral, Head Pathologist of the Pathology Department at Hospital Campus de la Salud. "The benefit of digital pathology is that digital images of tissue specimens can be easily analyzed, measured, quantified, compared, and shared with other pathologists."

Solution

In 2016, the pathology department at Hospital Campus de la Salud implemented the Philips IntelliSite Pathology Solution, as part of a long-term strategic partnership with Philips.

After appropriate testing and validation to ensure diagnostic accuracy using digital images was comparable to that using a microscope, the transition to digital pathology took place in a short period of time. Dr. Raimundo García del Moral: "Once we had integrated our Laboratory Information System with the Philips IntelliSite Pathology Solution, which took one month, we were able to fully digitize our image processing workflow within 60 days."

Results

Since its implementation, digital pathology has been used for primary diagnosis of all histopathology specimens at Hospital Campus de la Salud and the other hospitals in the Granada network. According to Dr. Raimundo García del Moral, the creation of a fully digital multi-site network has brought about several advantages.

"Because images can be shared in real time using online streaming, without transport of physical glass slides, we can now assign caseloads among pathologists according to specialty interest, rather than geographical site. Pathologists based at peripheral hospitals in our network can request immediate consultation from specialists located at the central laboratory, avoiding days-long delays that used to result from mailing physical glass slides. Images can also be easily identified, tagged, and displayed during multidisciplinary team meetings."

An internal survey showed that at the pathology department at Hospital Campus de la Salud users of the Philips IntelliSite Pathology Solution experienced a 21% increase on average in diagnostic capacity compared to microscopy when using a digital workflow for primary diagnosis[1].

Dr. Raimundo García del Moral believes that availability of digital pathology will also create opportunities for the use of computer-assisted diagnostic technology, including artificial intelligence, to assist pathology diagnosis. "Deep learning algorithms applied to image analysis have the potential to help us further optimize our workflows. For example, by screening slides to search for malignancy, or by generating preliminary reports. To us, digital pathology represents a first step in attaining the higher goal of computational pathology."

↑ **21%**
increase in diagnostic capacity on average compared to microscopy when using the digital workflow for primary histopathology diagnosis[1]

Learn more
https://www.youtube.com/watch?v=ZMrjWayqjQ0

1. Retamero, JA, Aneiros-Fernandez, J, & Del Moral, RG. Complete Digital Pathology for Routine Histopathology Diagnosis in a Multicenter Hospital Network. Archives of Pathology & Laboratory Medicine. 2019 Jul 11. https://www.archivesofpathology.org/doi/abs/10.5858/arpa.2018-0541-OA

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