PHILIPS

Customer story

Department of Radiology, Hospital Nuestra Señora del Rosario, Madrid, Spain

Who?

Eliseo Vañó Galván, MD
Cardiovascular Radiologist, Chair of the CT & MR Department, Hospital Nuestra Señora del Rosario

Where?

Hospital Nuestra Señora del Rosario, Madrid, Spain

- Private, full-service hospital
- 200 beds
- 16 CT and MR radiologists
- 35,000 highly specialized CT and MR studies per year
- 120 open clinical trials

Challenge?

- Consolidate workflows in a single workspace
- Enable advanced analysis and quantification on the fly
- Simplify reporting
- Ensure quality to optimize outcomes

Solution?

Reporting and Advanced Visualization tools integrated within a single radiology workspace

Streamline imaging workflows and automate clinical insights

Hospital Nuestra Señora del Rosario is a mid-sized, private hospital with a commitment to diagnostic innovation and quality reminiscent of large, publicly funded research institutions.

200 beds

16 CT and MR radiologists

35,000 specialized studies per year

In a radiology department of approximately 26 radiologists, 16 are exclusively dedicated to CT and MRI studies. These radiologists specialize in fields such as neurology, cardiology, head/neck and prostate.

To enable consistent quantification or deeper analysis, many studies require the use of Advanced Visualization. There are many options for incorporating such tools within the radiology environment. However, the challenge is to integrate these tools in a way that allows for seamless reading, collaboration, reporting and sharing of results—without hindering workflow productivity.

Philips: A proven partner

Hospital Nuestra Señora del Rosario has been using Philips radiology solutions for many years. In Philips, the institution has found a dedicated and trusted partner that is attentive to the needs of its users. Philips offers a substantial roadmap combining seamless access to Advanced Visualization empowered by Artificial Intelligence, together with collaboration capabilities and reporting within a single workspace, for convenient reading.

"The Philips platform is simple, with an intuitive interface, and it covers all our visualization, collaboration and reporting needs. There's no one reason for choosing Philips. It's simply our favorite solution all around."

Eliseo Vañó Galván, MD
Cardiovascular Radiologist, Chair of the CT & MR Department, Hospital Nuestra Señora del Rosario

Four pillars of success

1 Saving time and enhancing productivity

Hospital Nuestra Señora del Rosario's CT and MR radiologists complete approximately 35,000 highly specialized studies per year, with individual super-specialists dedicated solely to prostatic, pelvic, cardiac, neurologic, head/neck and other difficult studies.

All these studies are crucial to effective treatments, optimal outcomes and the advancement of medical knowledge. But every study also takes time. At Hospital Nuestra Señora del Rosario, many studies call for advanced imaging—Dr. Vañó estimates the proportion to be 30 to 40%—and a significant number of these make use of Hospital Nuestra Señora del Rosario's on-site 3D imaging lab. Hospital Nuestra Señora del Rosario places the highest value on diagnostic quality, and access to a full set of advanced imaging tools is essential to ensure accurate and complete reporting.

30–40%
of studies at Hospital Nuestra Señora del Rosario require advanced imaging

Integrated tools save "at least 1 to 2 minutes per patient"[1]

But accessing these tools can be time consuming. Depending on the clinical specialty, Hospital Nuestra Señora del Rosario's CT and MR radiologists may report dozens of extremely complex and advanced studies every day in addition to their more routine workload. When they have to wait an average of 60 seconds for images to open into a separate Advanced Visualization workstation, it's a major impact to their productivity. With Philips' integrated workflow within a single workspace, Dr. Vañó says, "We save at least one to two minutes per patient. So that is a lot of time saved at the end of the day, across every specialist in our department."

Philips' Artificial Intelligence capabilities also help radiologists work more efficiently and effectively by automating tasks and workflows based on predictive usage patterns. Artificial Intelligence algorithms also help with generating results and measurements, saving time. Integrated voice dictation accelerates reporting within the workspace and helps eliminate errors, and it even includes the ability to hyperlink prior studies via simple voice commands.

Dr. Eliseo Vañó works with multiple Philips Advanced Visualization applications simultaneously within the diagnostic workspace.[2]

"Increasing automation and quantification greatly increases the quality of the report."

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2 Enriching reports with advanced quantification for greater quality of care

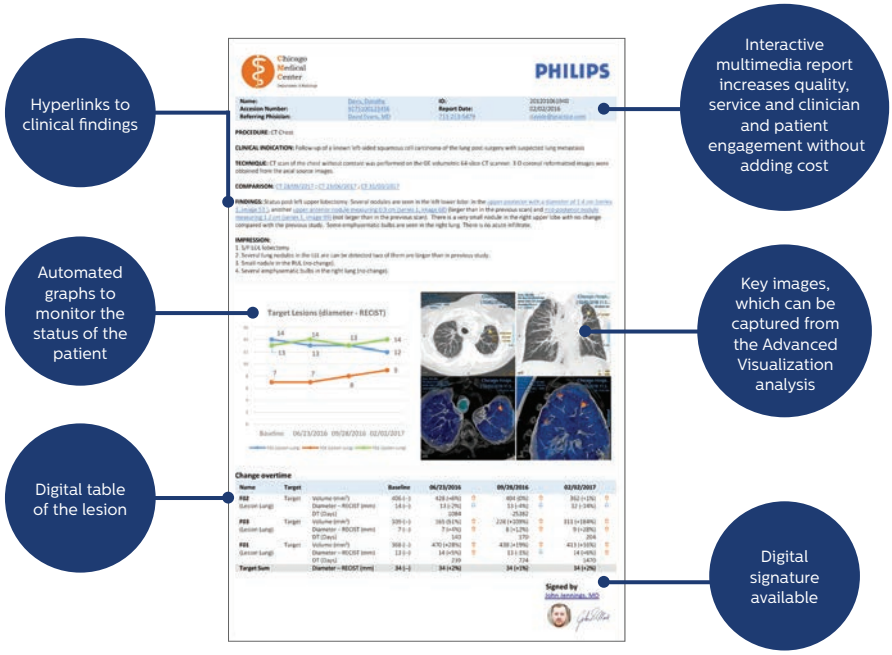
The time saved in gathering quantified, actionable information in a unified workspace contributes directly to the quality of reporting. With poorly integrated systems, there can be an unconscious bias against using advanced tools and quantification functionalities in many cases. The radiologist may decide that the 2D static images are already sufficient to report with confidence, and move on to the next case.

But with Advanced Visualization tools available in the same workspace, it's quick and easy to take a closer look, run an automated lung CAD, or quantify pulmonary volumes, for example. Integrated collaboration tools also make it easy to consult with a colleague and obtain a second opinion in a matter of seconds. Greater quantification in reports improves quality of care and research in all specialties, of course, but the advantages of faster reporting with more advanced quantification have never been more evident than in the midst of the COVID pandemic.

A second opinion can be obtained in a matter of seconds for greater quality of care

"With the new integrated workflow, we quantify much more than ever before," says Dr. Vañó. "For example, we can easily quantify pulmonary volumes, and we are using that capability for every single COVID patient. We have very positive feedback from our clinicians."

"The availability of Advanced Visualization tools within a single reading and reporting workspace has made us more efficient with our workload," Dr. Vañó says, "but it also enables us to provide quality and consistency in our reporting. Increasing automation and quantification greatly increases the quality of the report, and we expect to be continuously improving our work in the future."



Interactive multimedia reports support auto population of structured information.[2]

Interactive reporting saves time and reduces errors

- Auto population of DICOM and HL7 data shortens reporting time and improves accuracy.
- Hyperlinks to prior studies can be inserted by voice command, eliminating long dictation of dates and minimizing the risk of errors.
- A single user interface for reading images and dictating reports leads to improved proficiency and productivity using the system while making better use of desktop real estate.

A single radiology workspace integrating Vue PACS and IntelliSpace Portal Advanced Visualization

- A single, unified workspace incorporates advanced 3D post-processing and distribution, opened in an additional viewer tab.
- Embedded Advanced Visualization functionality is tied into the workflow to expand visualization capabilities.
- Users can select the applications relevant to their current study, with 70+ advanced applications across multiple clinical domains available from Philips.
- Artificial Intelligence automates tasks and workflows, predicting usage patterns.

"We're creating much richer reports, and we're getting very, very positive feedback. You could even say we are getting famous in the Madrid health community."

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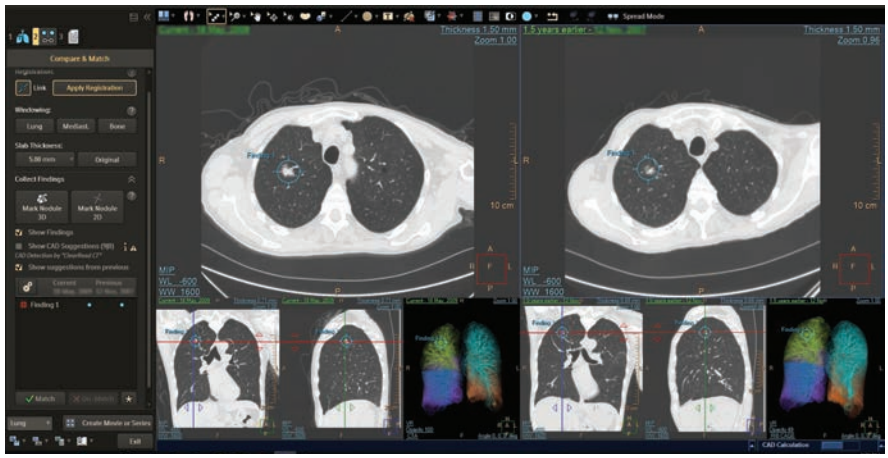
3 Enhancing collaboration with clinicians through multimedia reporting

In addition to consolidating multiple advanced tools into a single diagnostic workspace, the Philips solution enables interactive multimedia reporting. User-defined templates, structured reports and embedded voice recognition accelerate turnaround time. And radiologists can embed active hyperlinks directly into their clinical reports, providing clinicians with one-click access to information such as previous images and reports, technologist notes, scanned documents and more.

1-click access to priors, analyses, notes, documents and more

The radiologist can add hypertext links to indicate the most significant nodules that can be found via several Advanced Visualization applications—for example, CT Lung Nodule Assessment. Clinicians can easily access previous studies from the same workstation for direct, side-by-side comparison to evaluate the progress of the disease and the effectiveness of treatment.



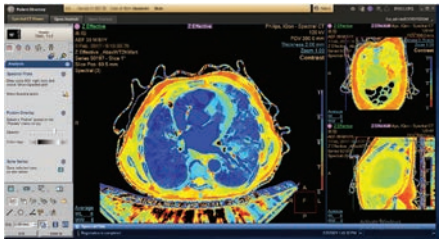
Semi-automated lung analysis utilizing IntelliSpace Portal Advanced Visualization[2]

These collaborative capabilities improve the quality of reporting and also extend beyond the radiology department to help referring physicians better manage the course of treatment and achieve better patient outcomes. "We are providing curated data at the point of care to support the diagnosis comprehensively," says Dr. Vañó. "We're creating much richer reports with our Advanced Visualization capabilities and the ability to share mutliple media types, from images to graphs."

"We're getting very, very positive feedback. Our clinicians use multimedia reporting every day, and they love it. Referring physicians love it too," Dr. Vañó adds. "With multimedia reporting, you could even say we are getting famous in the Madrid healthcare community."

4 Integrating spectral imaging in the workflow

The Philips solution also supports spectral CT imaging, integrated directly on the the radiology reading workflow. Spectral technology greatly improves visualization of a wide range of pathologies, often enabling earlier disease detection and more skillfully targeted treatment.



Dr. Vañó is looking forward to the addition of Philips' Spectral CT scanner, soon to be installed at Hospital Nuestra Señora del Rosario. With it, his team will gain the ability to view multiple spectral images simultaneously in a single workspace, directly on their diagnostic viewer—including multiple spectral analyses of a single study as well as multiple retrospective studies. Philips calls this on-demand, simultaneous viewing capability Spectral Magic Glass™.

Thanks to the Philips solution's tightly integrated advanced workflows, spectral results are easily accessed on the PACS for Advanced Visualization. "The Magic Glass is a game-changer that no other company has—only Philips," says Dr. Vañó.

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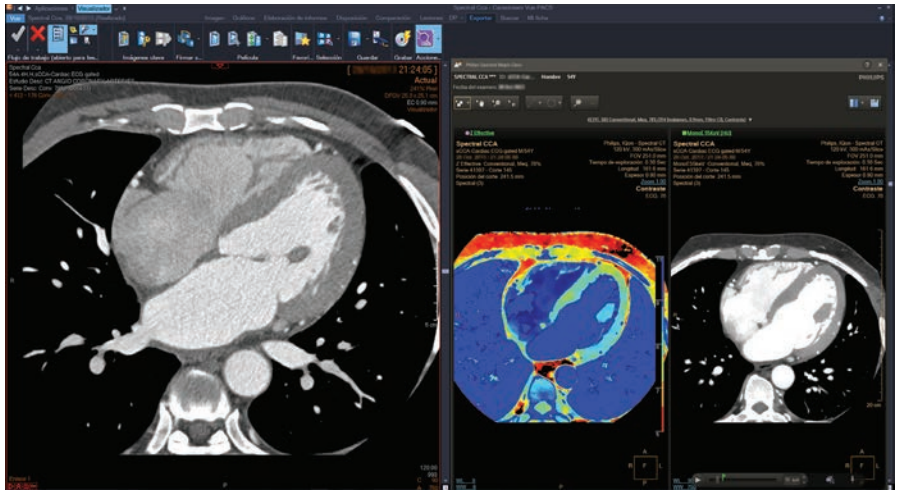

Multiple spectral images displayed in a single workspace.[2]

Seamless access and streamlined workflows with the goal to **improve quality of care**

The Philips solution provides a future-ready informatics suite with the ability to expand Advanced Visualization, Artificial Intelligence, collaborative care and other capabilities as needed.

One integrated, collaborative diagnostic workspace benefits all stakeholders

IT managers

IT can better serve the needs of radiologists and clinicians by delivering connected, secure, meaningful technologies to help teams at healthcare's defining moments by integrating clinical and radiology data, including historical data, into a single workspace. And ***the burden of managing multiple, disconnected solutions is relieved,*** with only one service contract and one source of technical support to answer any question or resolve any issue.

Radiologists

The Philips solution provides an all-in-one workspace, fully integrated with the enterprise imaging platform and embedded in the diagnostic viewer, with simple, efficient access to all the tools radiologists need. Users can quickly select from more than 70 advanced applications across multiple clinical domains, ***choosing the right tools for the current study without the time and trouble of downloading the study to a different workstation.*** And they have one-click access to Advanced Visualization tools—such as virtual colonoscopy, 3D processing, spectral imaging and others—for efficient interpretation and to support diagnostic confidence.

Referring physicians

The Philips solution ***improves the clarity of radiology reports while shortening the time it takes to read them.*** Hyperlinks provide one-click access to bookmarked findings, as well as to prior studies, tables and graphs, to facilitate tracking of progress over time. And integrated collaboration makes it easy to message the radiologist to answer any questions—again, with a single click.

"It's the perfect tool for giving outcomes to the clinicians and to the patients. The clinicians will never want another way of getting reports. They just love it."

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Dr. Eliseo Vañó demonstrates the solution's fully integrated diagnostic workspace.[2]

Our vision is to fully integrate diagnostics, generating and combining clinical data across radiology, pathology, genomics and longitudinal data.

The Philips informatics portfolio vision

Through an integrated portfolio of healthcare informatics solutions, Philips works to simplify physician collaboration across the community of caregivers, healthcare institutions and networks, recognizing that all are tasked with ensuring quality of care while optimizing operational efficiency. Our vision is to fully integrate diagnostics, generating and combining clinical data across radiology, pathology, genomics and longitudinal data. With the insights enabled by a single patient view, clinicians will be able to confidently perform first-time-right diagnosis and deliver more personalized treatment.

Beyond imaging and beyond the enterprise, our vision is to simplify delivery of the highest standards of care. We are building a centralized information hub and collaboration suite that spans radiology, cardiology, pathology, oncology and operational informatics to enable cross-department and cross-hospital collaboration through sharing of meaningful insights. Philips wants to help doctors achieve a more precise diagnosis, and help healthcare organizations achieve a lower total cost of ownership.

1. Impression of time savings based on a subjective comparison between using the integrated workflow versus accessing a separate AV workstation. Results are specific to the institution where they were obtained and may not reflect the results achievable at other institutions.
2. All pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.

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