

# Case Study

Makati Medical Center  
Manila, Philippines



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## Novarad Supports Efficiency and Innovation in Large Hospital Environment

Doctors, patients, and executives alike noticed increases in efficiency after installing Novarad's RIS/PACS system and diagnostic suite -- making significant progress in both quality of patient care and cost reduction.

For the past seven years, Makati Medical Center (MakatiMed) has been using Novarad software to manage its radiology department. Located in Manila, Philippines, MakatiMed is a 600-bed tertiary hospital established in 1969. As one of the top hospitals in the Philippines, the facility is home to 17 clinical departments, 43 subsections and a host of other subspecialties. Many of the hospital's physicians have trained at top universities in the U.S., including Stanford, Harvard, Mass Gen., Sloan Kettering, Johns Hopkins and the Mayo Clinic. The hospital uses a wide range of products from Novarad to help streamline workflow, facilitate ease of use, and improve patient care.

“MakatiMed’s experience with Novarad has been excellent, and the proof of that is the fact that the doctors themselves have told me how happy they are with the solutions implemented,” said Rose Montenegro, President and CEO of Makati Medical Center. After NovaPACS, MakatiMed added NovaDose radiation dose monitoring, NovaCardio complete CVIS, NovaOrtho orthopaedic PACS, and PACS for Ultrasound OB/GYN. According to Dr. Johnny B. Sinon, MD it’s easy to understand why the hospital picked Novarad. “It’s working perfectly for us. Looking at the system and using it, I understand why they chose this PACS,” Dr. Sinon said. “It’s because of ease of use, easy access, and quick turnaround. It’s a blessing for all of us.”

## Qualitative and Quantitative Aspects to Vendor Selection

Since the 1980s, MakatiMed has strived to keep up to date with imaging modalities and provide top-of-the-line equipment for patient diagnosis—however, image management typically remained paper- and film-based. Montenegro and the hospital’s doctors knew they needed to solve this problem if they wanted MakatiMed to continue to provide a higher standard of service. Naturally, the next step was to begin looking at vendors.

“What is top of mind is normally Siemens, Philips, and GE because they supply so many of the machines in the hospital, especially in radiology,” Montenegro said. “The former chairman of radiology, Dr. Ramon Santos-Ocampo, called me on my first week and he said, ‘Rose, we need to automate radiology. We have to buy Novarad.’”

Montenegro had never heard of the brand, and to give substance to his assertion, Santos-Ocampo sent her to the website of the industry’s leading research firm specializing in product evaluations, KLAS. “The KLAS report interestingly reflected the ratings of the specific companies that were supplying RIS/PACS. I was surprised at the lackluster ratings of some of the better-known brands in the healthcare industry, and I was pleased to see that Novarad was right on the top,” continued Montenegro.

“I was looking at clarity of the images, and storage, because we know storage is a big issue. For continuity of care, we have to keep the images in storage for at least five to seven years. At the time, Novarad did not ring a bell as far as I was concerned because I hadn’t been in the healthcare industry very long. Then as I got to know more about it through KLAS, by doing some Internet searches and getting to know the local distributor better, I realized that it was a world-class enterprise imaging company. It’s specialized in that particular niche.”

In order to find the absolute best software for MakatiMed, she set up a vendor shootout. Montenegro invited Philips, Siemens, and Novarad to set up a pilot and let the hospital’s doctors test out their respective solutions.

“My mission was to have good impact in terms of operational efficiencies. I had to make the doctors understand the corporate side. I had to prove to them that we knew what we were talking about, and I had to do it by coming up with operational effectiveness, efficiency,” said Montenegro. “Since I’m a quality practitioner, I created a questionnaire for the things [the doctors] liked and didn’t like. We would have a quantitative base apart from deciding intuitively.” Following full use of each vendor’s software, the doctors ultimately decided on Novarad. “They loved the ease of use, the way it simplified things and made the whole process easier,” said Montenegro.

## Integration Concerns for a Large Hospital

While MakatiMed’s relationship with Novarad started with RIS/PACS, the hospital soon realized that in order to increase hospital profits, it needed to automate a lot more than simply radiology. However, they needed software that could integrate seamlessly throughout the large hospital, and Novarad was up to the task.

“When you integrate things, what you want later on is to merge it with the hospital system, which we have already done,” said Dr. Jackson Dy. “Making an integrated system throughout the entire hospital, regardless of size, is easier for the clinicians, for all the doctors. . . not just the radiologist. It allows us to see the patient as a whole person, as a whole individual.”

According to Dy, vendors he had encountered in other hospitals would typically not try to integrate the entire system to the hospital, instead simply trying to sell them on it without ensuring it was really in the hospital’s best interest. “I think the idea for the Novarad system is to expand it to cover as much as you can,” Dy said. “If it involves the entire hospital, then that should be the way.”

In addition to enabling a holistic view of the patient, Novarad’s ability to integrate different aspects of its software into the hospital has helped reduce patient risks and save money. “The cost of the examination has been brought down significantly simply because we have also lowered costs elsewhere,” Dy said. “Having everything placed in one system—for example, examinations that use radiation—ensures that the data you’re going to get is going to be very robust and very accurate, which reduces risk to the patient.”

Through implementation of additional software, MakatiMed also sees the potential to increase its profits. “We’re looking at orthopedics and mammography as well as a money maker,” said Montenegro. “When I walk around the hospital, the various specialists would ask me, ‘Why can’t we have RIS/PACS version for our specialty department?’; and that’s how we ended up getting OrthoView, that’s how we ended up getting RIS/PACS for cardiology.”

“ [Novarad] is working perfectly for us. We chose this system for ease of use, easy access, and quick turnaround. It’s a blessing for all of us. ”

— Dr. Johnny B. Sinon  
MD, Medical Director and ED Consultant  
at Makati Medical Center

## Confidence in Pricing Helps Plan for the Future

Having confidence in the quality of your software solution is an absolute must; following the initial quality check, however, having confidence in the price point and future costs associated with it is equally as valuable.

“When we look at vendors, we always look at the sales and service support, and the costs associated with that support,” said Montenegro. “It could be affordable, but if it costs an arm and a leg then it becomes untenable. Additionally, costs are very important as far as our patients are concerned. While we are a premium hospital, we understand that we have to be sensitive to the financial capability of the patients who come to us. We treat patients from all walks of life, especially in regards to our corporate social responsibility programs. It was important for us to balance to costs.” According to Montenegro, it has not only made the doctors happy, but has helped cut down on turnaround times and keep the hospital’s records more organized.

## Decreased Turnaround Time Leads to Greater Productivity

Having access to Novarad’s PACS and RIS has helped to increase the hospital’s productivity, especially when imaging is involved. “With digital technology, it’s almost instant and I can make a decision right there,” said Dr. Sinon. In addition to being a workflow time-saver, Novarad’s RIS/PACS also prevents many misunderstandings that typically would have caused even further delays to patient care. “Everything is easier because we don’t have to write anything down. People don’t have to decipher others’ handwriting,” said Sinon. On the side of more corporate business operations, implementing a RIS/PACS system meant eliminating much of the time-wasters and actual, physical waste around the facility. “When I first came [to the hospital], the films alone that were stored all over the place and the tons of paper made me feel like, ‘Hey, if we went the Novarad way, we would be able to eliminate a lot of the paper and reduce cost in the process, and improve efficiency,’”

Montenegro said. “That would let us retrieve the images and have them at our fingertips rather than going through lugubrious filing systems in order to get the images. Those were the things I looked at, and it made me feel very comfortable.” Elimination of much of the hospital’s paper waste helped MakatiMed save time and money, and the software’s user-friendliness encouraged painless adoption amongst physicians

## Easy-to-Use, Vendor-Independent Software Encourages Smooth Transition, Easier Adoption

While investigating Novarad’s KLAS rankings, one thing that stood out to Montenegro was the acclaimed ease of use. “These things struck me. [KLAS reviewers] mentioned ease of use, so that it would be something that the doctors would be able to use readily,” said Montenegro. “They mentioned the way you can write comments on the image itself, which I thought was excellent, you didn’t have to keep paper anymore.”

Sure enough—during product testing, a major aspect MakatiMed’s doctors liked about Novarad was its ease of use. Novarad received top marks from the doctors in regards to this. Additionally, according to Dy, a factor that made adoption and acceptance of Novarad’s software at MakatiMed was the true vendor-neutrality of it all. “What differentiated Novarad from competitors was that it’s a vendor-independent product,” said Dy. “That simply means that any machine—whether it’s this brand or that brand—Novarad would cater to it. Any other vendor would be very specific with what they want placed inside their servers, inside the RIS/PACS. We didn’t want that to happen.”

## A Great Solution Paves the Way for More

“If you were to ask me to give [Novarad] a scorecard, I’d say it’s been excellent,” Montenegro said. “Problems are addressed in a timely fashion and conclusively. Because of that, we have the confidence in purchasing other software applications that come our way.” Today, Makati Medical Center is not only using Novarad’s RIS/PACS solution, but has also implemented the companies’ radiation dose management software, NovaDose, its orthopaedic PACS, NovaOrtho, and its mammography viewer, NovaMG. Together with Novarad, Makati Medical Center has developed a system whereby patient and provider alike have confidence that they are receiving, or giving, the greatest care.

Solutions  
used at  
Makati  
Medical  
Center



NovaPACS™



Nova RIS™



NovaDose™



NovaOrtho™



NovaMG™