



## Multidisciplinary Equipment Usage Bolsters French Private Hospital's Bottom Line

As a private hospital, Clinique Clairval needs to keep a keen eye on their bottom line. By sharing operating theaters and equipment, cardiologists and neuroradiologists are helping their institution to get a quicker return on investment.

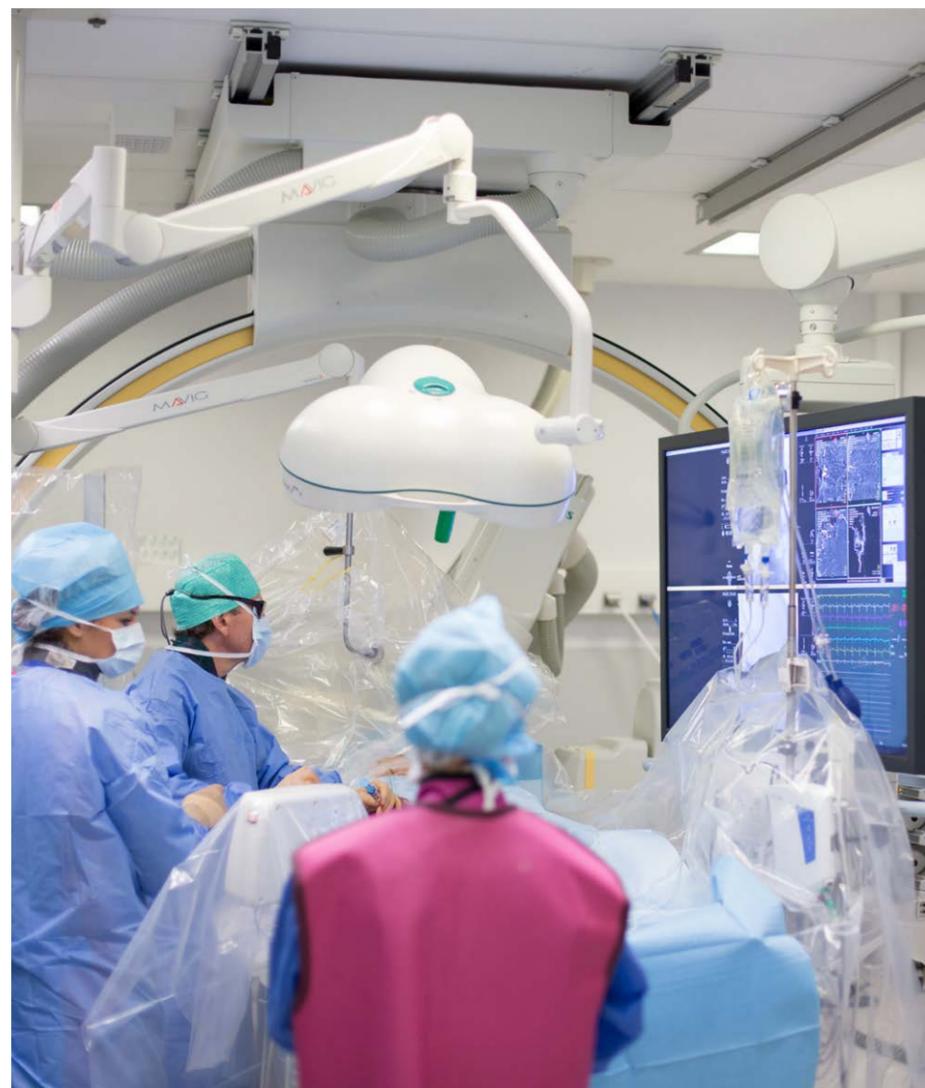
Text: Matthew Lenson | Photos: Matthieu Colin

Serving France's second largest city, Marseille, on the Mediterranean coast, the 385-bed Clinique Clairval overhauled its interventional units to allow two of its flagship specialties, cardiology and interventional neuroradiology, to work side-by-side. This move coincided with the purchase of two angiography systems, a biplane and single plane. And it led to an unprecedented collaboration between the two disciplines.

The biplane system is an "indispensable tool for endovascular cerebral interventions," according to Olivier Levrier, the neuroradiologist who conceived the scheme and sold it to the business side. "All neuroradiologists in interventional neuroradiology or endovascular neurosurgery everywhere have biplanes," he says. "It's the most appropriate tool. If we didn't use it, we'd see poorer results. That's not the case for cardiology."

At Clinique Clairval, the monoplane system is run by cardiology alone, but by sharing the better-equipped biplane installation, essential for interventional neuroradiology, the hospital can ensure top quality across the board while making a quicker return on its investment. This opens up the possibility of more frequent equipment updates, meaning that the institution can always offer its patients the best available technology. At the same time, various positive side effects have been observed, such as increased collaboration across disciplines and improvements in staff skills as well as greater satisfaction as employees learn about other kinds of interventions. The biplane system also helps stroke patients. "In France, there are few neurosurgical centers," says Levrier. "Stroke care is urgently needed."

The development of new procedures and technologies has led to a convergence of the two disciplines because they share the same space. The biplane system has been used more often, which has led to a quicker return on equity for the hospital. The support teams can now work in both specialties, which helps to improve efficiency and reduce overtime. This collaboration leads to better emergency management and knowledge sharing among interventionalists, thereby improving outcomes.



The Artis zee biplane system is used by cardiologists and interventional neuroradiologists, which means a quicker return on equity for the hospital.



*"If you use a machine eight hours a day instead of four, it's better. It's that simple."*

Olivier Levrier, MD  
Head of Neuroradiology  
Clinique Clairval, Marseille, France

### Selling it to the business side

Such multidisciplinary cooperation is still unique in France, says Levrier. "We're the only private hospital in France doing these kinds of neuro-interventions," he says. "The others are academic university hospitals, where the biplane is usually dedicated to neuro. They aren't so worried about financial issues." The biplane system has brought clinical benefits in a number of different procedures including auricle closure, permeable foramen closure, and stroke management. It has also allowed the development of innovative spinal interventions in collaboration with neurosurgeons and reductions in contrast media use when imaging children.

Even a decade ago, Levrier knew that he and his colleagues needed biplane technology. But how could they justify the extra cost if the system were to lie dormant for half the day? With a few exceptions, such as pediatrics (due to the reduced need for contrast media), cardiologists feel that they can do the job with the single plane system.

So how about letting the cardiologists use the system the rest of the time? Even if they only require the single plane mode, at least it would still be in use, treating patients and generating revenue. "That was the business plan that I presented at the beginning, about ten years ago, to the manager of the clinic," Levrier recalls.

As technology and medical practices have evolved, an increasing number of cardiological procedures, including atrial appendage and patent foramen ovale closures, may benefit from the biplane technology, Levrier believes.

The head of interventional cardiology at Clinique Clairval for the last 25 years, Frédéric Collet, agrees that developments on both sides, such as auricle and paraprostatic leak closures in cardiology, and coil and stent embolization techniques in interventional neuroradiology, have helped forge more joined-up thinking.



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Frédéric Collet, MD  
Head of Interventional Cardiology  
Clinique Clairval, Marseille, France

### Sticking to the schedule

Nobody remembers any problems or even a kink in the sharing process. They divided the five weekdays into ten half-day segments. With its greater stream of patients, cardiology had six of these segments and occasionally even uses a spare hour on the neuroradiology calendar. "Sometimes the interventional neuroradiologists have a light schedule and we can use the biplane," says Collet. "It depends." By optimizing the schedule, the hospital can avoid paying overtime to technicians, thereby saving money. Levrier adds: "There's no problem working together and sharing the room, as long as we have mutual respect. We can mix cultures. It's never a disadvantage. We feel enriched. It's really about human relationships."

### Learning from each other

Beyond the obvious, the human relationships are among the main benefits of the multidisciplinary approach. "It's quite exceptional to

The collaboration across disciplines has led to efficient system utilization and a versatility of the teams.



see this convergence," says Collet. "We managed to bring together two very different specialties, the staff, the timetable, and the reception of emergencies. At the end of the day, it works well."

The technicians have become proficient in both specialties. "It's better because it allows the staff to avoid doing the same thing all the time," says Levrier. "It's also good for the staff and the anesthesiologists to have this versatility."

Ultimately, for private hospitals, it all comes down to the bottom line. "It depends on the economic healthcare model, but one thing makes sense," says Levrier. "If you use a machine eight hours a day instead of four, it's better. It's that simple." ●

**Matthew Lenson** is an American science and healthcare writer based in Paris.

The statements by the Siemens Healthineers customer described herein are based on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g., hospital size, case mix, level of IT adoption) there can be no guarantee that other customers will achieve the same results.