

Everyman's MRI

Despite economic pressures, a German radiology practice's key to success is to make life easier – not just for patients but also for staff.

By Eric Johnson



Although Bad Nauheim is only about half-an-hour drive from the modern metropolis of Frankfurt and the Frankfurt Airport, its look and feel is of an entirely different time and place. Gracious cobblestone streets make their way past Victorian villas, parks, and sanatoria, all built when recuperation from an illness consisted of a “cure.”

On the edge of town, the Sports Clinic Bad Nauheim offers housing for the Practice for Radiology and Nuclear Medicine (“Gemeinschaftspraxis Radiologie und Nuklearmedizin”), which is also offering its services in several other practices across the Frankfurt area. The buildings give a whiff of the old television soap opera “Dallas.” Wooden clapboard facades are ringed by planked verandas, and directly adjacent stands an operating stable and show ring for a resident herd of horses. The mood is easy, almost care-free. But looks can deceive. The same cost pressures felt by clinics everywhere and anywhere are also felt here. Reimbursement from German insurers has steadily fallen. Because the system is heavily regulated, movement is ordered, not volatile. But the trend is clearly unidirectional: heading down.

“What we have here is a demographic fact of life,” observes Thomas Maier, MD, managing partner of the Practice for Radiology and Nuclear Medicine, “Ever fewer people are paying premiums to support ever more beneficiaries. This has led to an imbalance of payers and payees, one that is getting steadily worse.” This is actually a gross understatement. Over the past two decades, reimbursements for MRI scans have fallen – in nominal terms, that is, without adjustment for inflation – by about one-half.

Faced with such income declines, physicians are forced to “do the splits,” as Associate Professor Axel Küttner, another of the radiology partners, puts it. “We’re torn between the realities of balancing the books, which of course is necessary to stay in business, and providing our patients with the highest quality treatment.”

The Sports Clinic as well as the Radiology Practice have managed to square the circle by making a clever compromise. While



Faster exams and less patient anxiety lead to fewer motion artifacts and better diagnostic-quality images.

both institutions serve large numbers of patients covered by conventional, regulated insurance policies, they also are the healer of choice for elite athletes. Sporting luminaries – most notably Formula 1 legend Michael Schumacher – are known to rely on the expertise of the Sports Clinic’s founder, Johannes Peil, MD.

For these guests, money is usually not the first thing they worry about. Indeed, their profits most likely benefit from the orthopedic know-how of world-renowned expert Peil and the Sports Clinics’ excellence in trauma medicine, internal medicine, cardiology, and rehabilitative medicine. It is unusual that the private fees of the rich and famous are used to subsidize the care of the less wealthy majority. This clear and simple transfer, says Peil, would be unthinkable in other fields. “Can you imagine a lawyer giving one client a discount, because he was able to charge another client a lot?” he asks rhetorically. “Definitely impossible!”

Feel-good Factor

Like it or not, this richer-poorer trade-off is a fact, and the Sports Clinic makes the most of it. A clientele of high-octane sportsmen and sportswomen is a solid and increasing part of the clinic’s trade, and not just because Peil is a charismatic orthopedist renowned academically and because of his sporting connections,

often in the media. The Sports Clinic most prominently stands out from its competitors because of its dedicated focus on patient comfort. “Patients don’t really want to be here,” Peil concedes. “They’re frightened, they’re upset, they’re nervous. Of course our number one aim – and their number one aim – is to diagnose and heal their illness, but it makes a real difference if we can improve the quality of that experience.” That is exactly what the Sports Clinic as well as the Radiology Practice do, for wealthy and less wealthy alike. The patient experience is, all things considered, maximally human and minimally hospital-like: sterile, cold, clinical, and impersonal.

Instead, the atmosphere at the Radiology Practice is much closer to that of a private home. Colors are varied and inviting; the facilities are spacious and comfortable, including changing and pre-exam rooms; furniture is more living room and home-office than clinic. And natural light floods the building, with endless, sterile neon-lighted corridors only a dim memory. Even the magnetic resonance imaging (MRI) rooms have a human touch. Walls are decorated to blend into the scanners, making the latter less optically imposing. Sizeable windows let in the sun, and allow patients to gaze out upon the horse meadows during a scan. What a contrast to most conventional settings, notes

Accessible Innovations

Across the globe, economic pressure on healthcare systems and their providers is eminent. Industrialized countries are challenged with an aging population and growing demand for healthcare services. Emerging economies and their growing healthcare systems are increasingly in demand of access to premium patient care. As a result, reimbursement policies across the globe are being adapted toward increasing accountability for quality and cost across the entire care continuum. Providers must demonstrate lower hospital readmissions, high-quality outcomes, and low operational costs to stay competitive. A Siemens initiative named Accessible Innovations meets these demands in the field of medical imaging.

It is no surprise that total cost of ownership (TCO) is an important factor influencing the global healthcare environment. Determining the economic value of an investment is important for all healthcare providers – regardless of their circumstances. Assessing total cost of acquisition, operating costs, and investment protection highly contribute to profitability over time. Profitability may by no means be confused with the responsibility to provide high-level imaging standards that benefit the patient in the end.

Within this context and to serve common goals among the global healthcare landscape, Siemens is introducing a new range of imaging systems. With Accessible Innovations, Siemens is equally improving the availability, quality, and efficiency of healthcare by combining state-of-the-art diagnostic capabilities with a highly sensible TCO argumentation for its customers. Quantifying the financial impact of deploying a healthcare product over its life cycle goes hand in hand with making healthcare more accessible for more people all over the world. MAGNETOM® Spectra¹ magnetic resonance imaging system, SOMATOM® Perspective² computed tomography system, and ACUSON S1000™ ultrasound system are proof that Siemens is taking its responsibility seriously – the responsibility to innovate and invest in cost-efficient, premium imaging standards.

¹ This product is not commercially available in all countries. Due to regulatory reasons, its future availability cannot be guaranteed. Please contact your local Siemens organization for further details.

² The information about this product is being provided for planning purposes. The product is pending 510(k) review, and is not yet commercially available in the U.S.

Küttner. “Usually scanners are in a windowless room, often in the basement somewhere.”

“Patients feel comfortable here,” Maier says. “Many don’t rush off after an appointment. Often they will stay for a chat with the staff, or a coffee on the veranda.” This comfort policy pays off in patient loyalty: Many travel up to 250 kilometers (155 miles), past many other clinics, to reach the institutions here in Bad Nauheim. Moreover, comfort delivers clinical benefits. “Relaxed, unstressed people move less on the examination table,” Maier adds. “The scans come out with better resolution and fewer artifacts.”

Plug and Play

So, why did the Radiology Practice buy a MAGNETOM® Spectra¹ MRI system?

Not because its 3 Tesla (T) field strength is new to the market. By the time it was installed, in November 2011, 3T systems had been commercially available for years. But until now, for a practice – as opposed to a hospital – these have been a luxury. Until recently, they have been much more expensive than 1.5T MRIs. MAGNETOM Spectra, agree both Maier and Küttner, is priced more competitively: The clinic expects to see payback in six to eight years.

Second, earlier MRI systems have been much more complex. “Some hospitals employ full-time medical physicists to keep 3T systems in line,” Küttner points out. “They sort out the settings, the planar positioning, and they deal with artifacts, quantum effects, and other negative influences. Practices don’t have the

scale to employ someone like that.” Practices can, by contrast, easily employ the MAGNETOM Spectra’s Tim® (Total imaging matrix) and Dot™ (Day optimizing throughput) technologies. “They organize the work for the MRI operator,” Küttner explains. “Our exams are guided by the system and we always get excellent results.” So what is the combined benefit of MAGNETOM Spectra? A typical cardiac exam on a 1.5T scanner with conventional software takes an hour. According to the customer, with 3T and Tim and Dot, this time can be significantly reduced. And for certain cases, the extra power of the 3T delivers major benefits. For instance, thanks to the hand/wrist coil of MAGNETOM Spectra, the scan is more comfortable for the patient, which may decrease patient movement and thus

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Thomas Maier, MD, Managing Partner, Practice for Radiology and Nuclear Medicine, Frankfurt, Germany



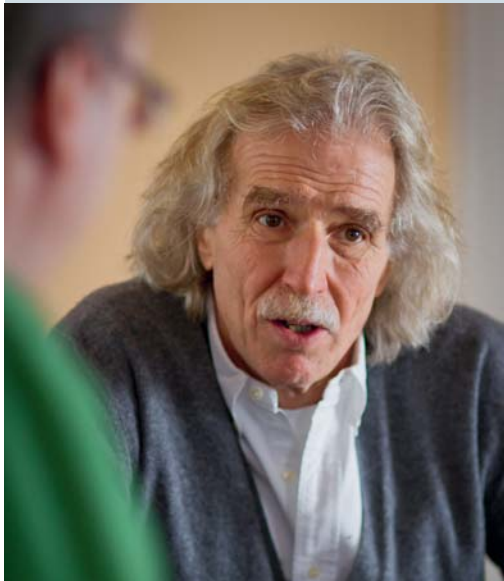
motion artifacts. Küttner recently treated a patient, who, conventionally, would have needed exploratory surgery to assess her possible bone and cartilage damage. With the 3T, only one scan was needed. MAGNETOM Spectra eliminated the need for a costly, potentially risky, and painful procedure: That’s about as user-friendly as MRI can get.

Eric Johnson writes about business, the environment, medicine, and technology from Zurich. He studied chemistry, and prior to working independently, headed what is now a Thompson-Reuters bureau and corresponded for McGraw-Hill World News.

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Johannes Peil, MD, Founder, Sports Clinic Bad Nauheim, Germany



Summary

Challenge:

- Bringing the power of 3 Tesla MRI beyond the reach of large hospitals to smaller clinics, without incurring excess cost and operating complexity

Solution:

- MAGNETOM Spectra will open the world of 3T imaging
- Tim and Dot will allow an easy and efficient operation of the system

Expected Result:

- Quick exams
- Excellent image quality
- Comfort for patients and ease-of-use for staff

“Patients need time and a comfort zone to express specific problems. We as physicians have the time and environment to carefully listen.”

Associate Professor Axel Küttner, Partner, Practice for Radiology and Nuclear Medicine, Frankfurt, Germany



Further Information

www.siemens.com/MAGNETOM-Spectra