

3.0T imaging at your fingertips

Healthcare is maturing daily — setting and adopting new standards in clinical pathways. At the same time, there is a need for high productivity, improved patient experience and excellence in imaging. Meeting these multifaceted requirements can be daunting. Ingenia Elition S lets you adapt to new directions easily, while enhancing productivity and providing referral value for your practice.

The Ingenia Elition delivers superb image quality even for challenging patients, and performs MRI exams up to 50% faster with Compressed SENSE acceleration for all anatomies in both 2D- and 3D scanning¹. Fast overall exam-time is achieved by simplifying patient handling at the bore with the touchless guided patient setup. Furthermore, the Ingenia Elition offers an immersive audio-visual experience to calm patients and guide them through MR exams. In a study conducted using our in-bore solution, Herlev Gentofte University Hospital in Denmark managed to reduce the number of rescans by up to 70%², allowing radiologists to review more patients per day.

Ingenia Elition **Ingenia Elition S** Up to 50% faster MRI exams with virtually equal image quality¹ Patient-centered productivity The confidence of 3.0T Dramatically improve patient experience Enhance the value of your MR investment

Up to 50% faster MRI exams¹

- ► Virtually equal image quality
- ► Add extra patient slots in your schedule
- ► Easily fit in unplanned patients
- ► Reduce overtime

Patient-centered productivity

- ► Reduce operator workload
- ► Guided exam set-up
- ► Automated workflow
- ► Superior image quality



The **confidence** of 3.0T

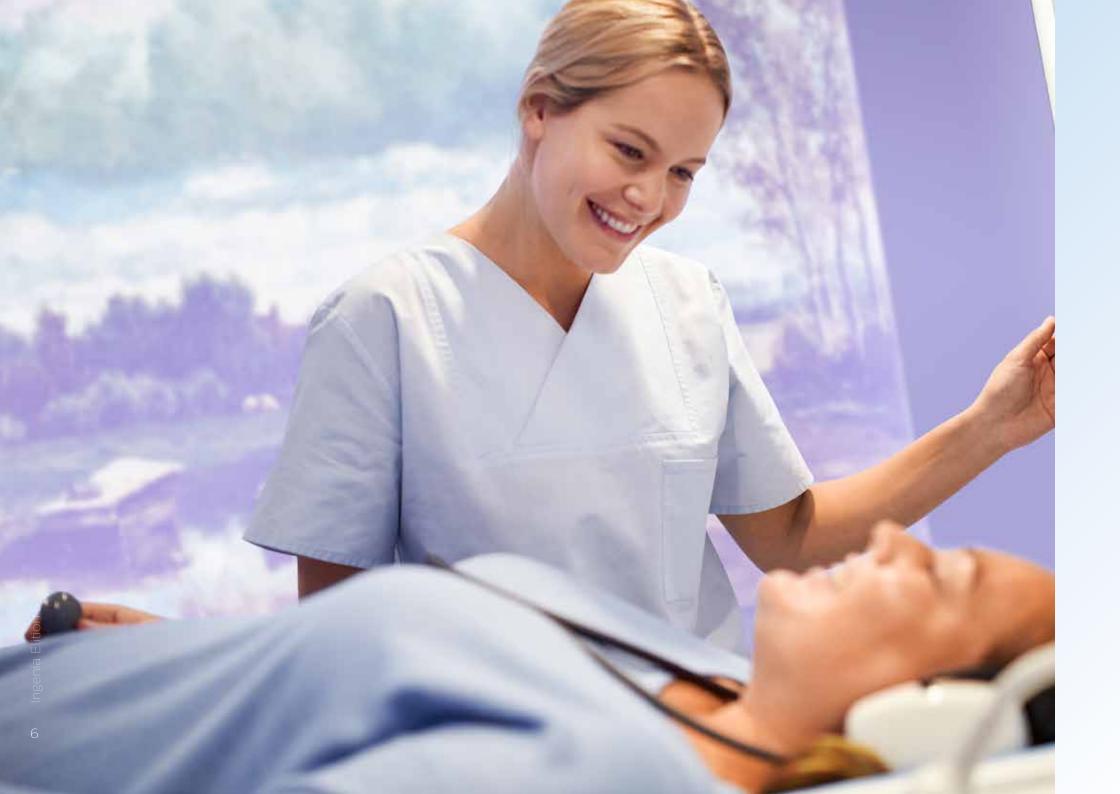
- ► Achieve **up to 60%** higher resolution
- ► Enhance your diagnostic confidence
- ▶ 3.0T performance as easy as 3.0T

Dramatically improve patient experience

- ▶ Provide an immersive visual experience
- ► Guide your patients through the examination
- ► Comfort in every detail
- ▶ Reduce acoustic noise

Enhance the value of your MR investment

- ▶ Prevent issues before they occur
- ▶ Protect your MR equipment
- ► Standardize your MR fleet
- ► Tailored financing solutions



Up to 50% faster MRI exams with virtually equal image quality¹

Time is one of the most precious commodities you have in your MR department.

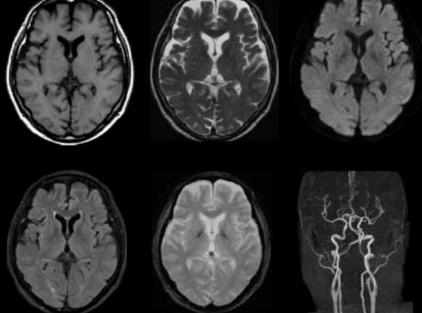
What if we told you there was a way to recover time you have been losing during your MR examinations? And use the time you do have more wisely? Imagine how that could help you make better use of your scarce resources and better meet the demands of referring physicians.

That's exactly what Compressed SENSE can do for your MR department. It accelerates your existing MR scans by up to 50% with virtually equal image quality, frees up time to improve your patient experience and can provide up to 60% higher resolution to enhance diagnostic confidence.¹

Compressed SENSE is suitable for all anatomies and can be used for all anatomical contrasts, in both 2D- and 3D scanning.

Up to 50% faster MRI exams with virtually equal IQ¹

Brain ExamCard

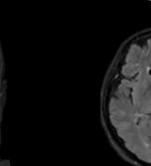


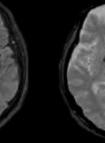
Total Exam time **16:52 min**

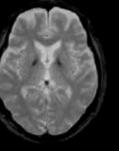
T1w SE
T2w TSE
DWI (b1000)
T2w FLAIR
T2w FFE
3D Inflow

0.9 x 1.3 x 5.0 mm 0.6 x 0.7 x 5.0 mm 1.8 x 1.4 x 5.0 mm 1.0 x 1.2 x 5.0 mm 0.9 x 1.1 x 5.0 mm 0.7 x 1.3 x 1.4 mm





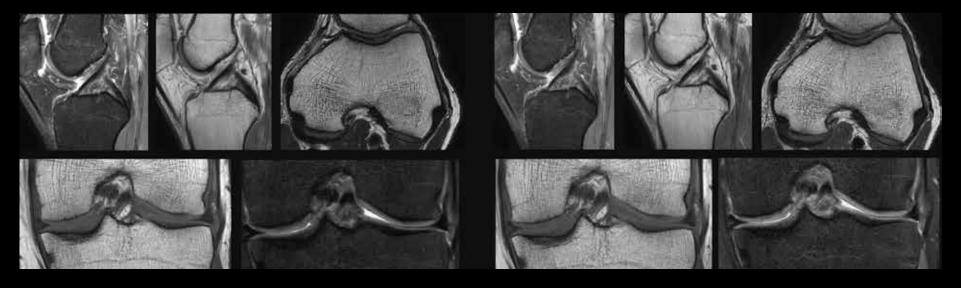




Total Exam time **9:06 min**Compressed SENSE

TIW SE 0.9 x 1.3 x 5.0 mm 1:14 min 12w TSE 0.6 x 0.7 x 5.0 mm 1:30 min 12w TSE 0.6 x 0.7 x 5.0 mm 0:45 min 12w FLAIR 1.0 x 1.2 x 5.0 mm 1:30 min 12w FLAIR 1.0 x 1.2 x 5.0 mm 1:30 min 130 min

Knee ExamCard



Total Exam time 17:32 min

Total Exam time **10:16 min**Compressed SENSE

 PDw SPAIR sag
 0.4 x 0.4 x 2.5 mm
 3:02

 PDw TSE sag
 0.3 x 0.4 x 1.5 mm
 2:20

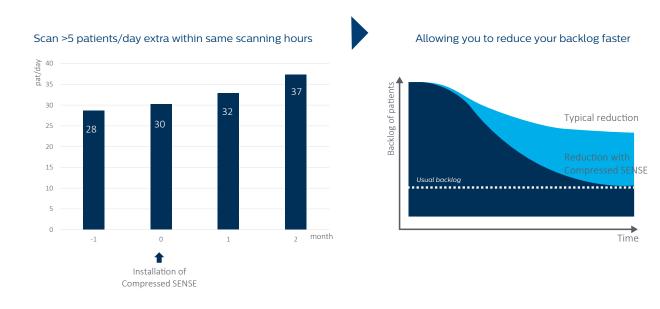
 T2w TSE ax
 0.4 x 0.4 x 1.5 mm
 1:52 r

 T1w TSE cor
 0.4 x 0.4 x 1.5 mm
 1:13 n

 PDw SPAIR cor
 0.4 x 0.5 x 2.5 mm
 1:49 r

Add extra patient slots to your daily MRI schedule

Many radiology departments and imaging centers are looking for ways to increase the utilization of their MR equipment to meet the rising demand for MRI services. A full MRI exam performed with Compressed SENSE, for example, can save minutes compared to a conventional MRI exam. This could free up one or two extra exam slots in your daily schedule, which can result in much higher productivity and shorter waitlists without adding more operator hours.



Radiologie Dr Wagner in Gottingen, Germany can accommodate > 5 more patients per day, within the same scanning hours, after the introduction of Compressed SENSE.

Results from case studies are not predictive of results in other cases. Results in other cases may vary.

Easily fit in unplanned patients

Do unscheduled patients disrupt your daily schedule and put extra stress on your staff? With Compressed SENSE you can create a buffer to easily handle emergency cases or urgent patients that are referred on the same day. This extra capacity can help you serve patients and referring physicians faster and make daily workflow go smoother.

We can now provide a more flexible and faster MRI service to our patients and referring physicians. For instance, when a referring physician is requesting it, we can now quite smoothly insert an additional MRI examination without previous appointment on the same day."

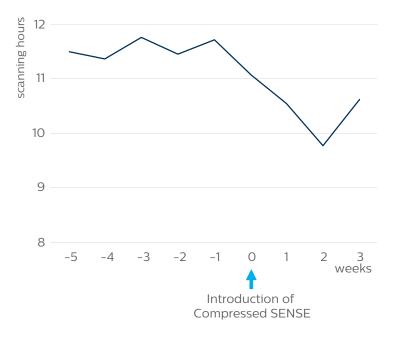
Hideki Koyasu, MD, Neurosurgical Clinic in Kanagawa, Japan

Easily fit in unplanned patients

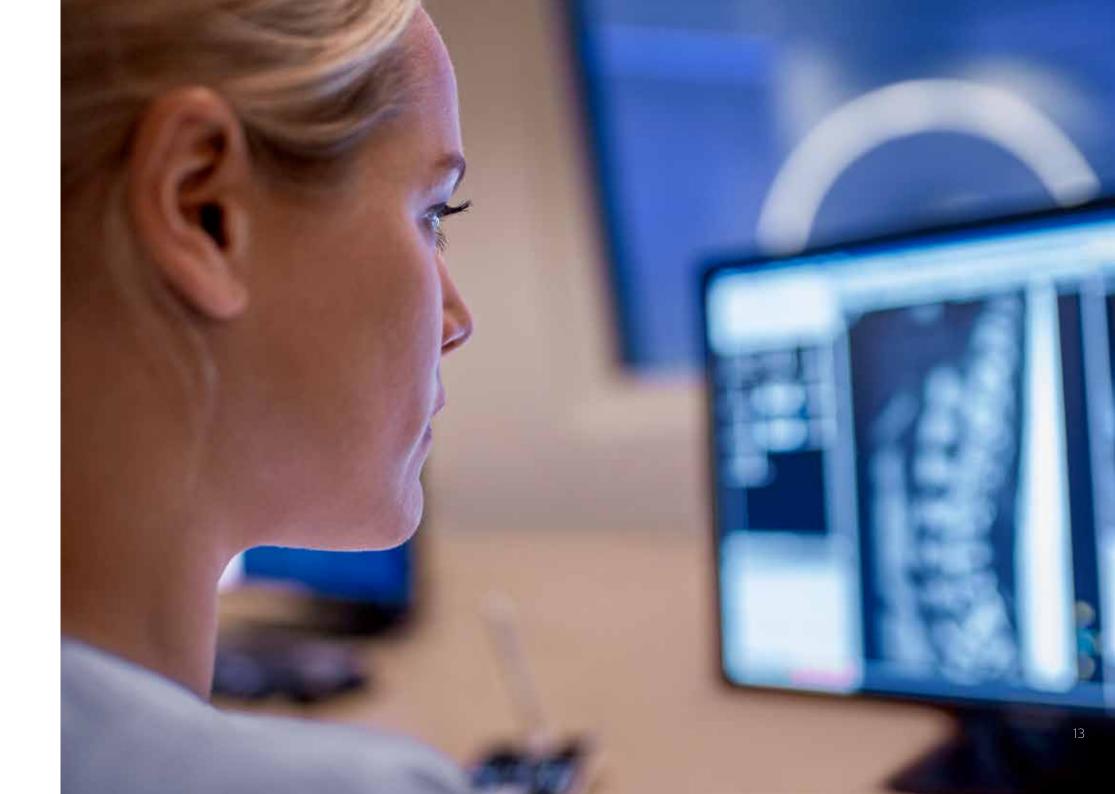


Reduction in overtime, while maintaining same patient throughput per day Having to work overtime is a recurring issue for many radiology departments

Having to work overtime is a recurring issue for many radiology departments and imaging centers that can impact staff satisfaction and run-up operational costs. The stress caused by heavy workloads and overtime hours greatly contribute to burnout among radiology technologists, not to mention long-term mental and physical health issues. By reducing MRI scan times and improving scheduling flexibility, Compressed SENSE helps patients and staff to get home on time. This can improve the experience for all involved.



ComputerTomography Institut in Innsbruck, Austria has been able to reduce overtime by more than one hour, keeping the same patient throughput per day, after the introduction of Compressed SENSE.



Patient-centered productivity

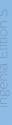
SmartWorkflow solutions include VitalScreen and VitalEye. Both are optional on Ingenia Elition S.

With a growth in the elderly population and constant demands to do more with less, the pressure on healthcare providers is immense. This pressure is also evident in radiology departments and imaging centers. The increasing use of MR to diagnose a variety of conditions and illnesses has led to demands for greater efficiency, even as departments try to manage a shortage of MR operators and variability in staff expertise. Too often, it seems that productivity is at odds with giving patients the time and attention they desire.

With SmartWorkflow, you can achieve high productivity while enabling your staff to focus on patients. It reduces and simplifies the number of steps needed in a conventional MR exam workflow, using technology to guide and coach where required, and automate where possible. An end-to-end workflow solution that directly boosts efficiency through reduced variability and task automation, while supporting a better patient and staff experience, resulting in patient-centered productivity.



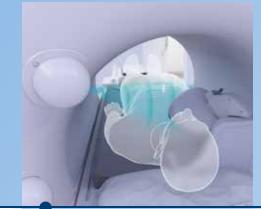






Guided exam set-up

Auto patient centering



In-room exam start





SmartWorkflow in

the exam room

Guided exam set-up and automation, to increase productivity and free up time to focus on the patient

In the exam room, SmartWorkflow provides guided exam set-up and automation, to increase productivity and free up time to focus on the patient. Even new operators who have never worked with the scanner can proceed with confidence. Allow your staff to focus less on technology, and fully engage with patients. Enjoy reduced variability in patient positioning and quality of respiratory triggering, supporting consistent, high-quality studies. SmartWorkflow decreases patient set-up to less than a minute³, and allows operators to initiate the start of the exam with a single touch directly at the MR scanner, starting immediately after closing the door.

⁶⁶ The entire workflow is smooth: Patient positioning and setup; launching the scan as soon as we leave the exam room; the intuitive touchscreen on the gantry; Touchless patient sensing... All of these things are much better than on our old system."

Lauro Barlow, RTMR, MRI Technologist Supervisor at the University of British Columbia

¹ Compared to respiratory belt based signal. Requires an unobstructed line-of-sight.

² With VitalScreen, initiating the exam at the patient side.

Ingenia Elition S

SmartWorkflow in

the control room

Reduce operator workload, with standardized results and increased throughput

In the control room, SmartWorkflow automates exam planning, scanning and processing, improving staff experience and driving efficiency by freeing time to check imaging results or prepare for the next exam. Decreased exam variability results in imaging excellence supporting confident diagnoses while automated patient coaching enhances patient experience. Furthermore, with SmartWorkflow you can confidently offer imaging to patients with MR Conditional implants. The guided and automated workflow supports the staff, which gives them more time for the patient, resulting in patient-centered productivity.

We don't have to manually direct the patient to breathing and not breathing. We can go ahead and let the machine do the work of the breathing instructions while we continue our planning of the exam."

Carlos Avila, RT, technologist at Miami Cardiac & Vascular Institute



Automated patient coaching

Reduce your workload while patients are put at ease and guided through the exam



Confidence for MR Conditional implants

Increase efficiency while providing access to patients with MR Conditional implant



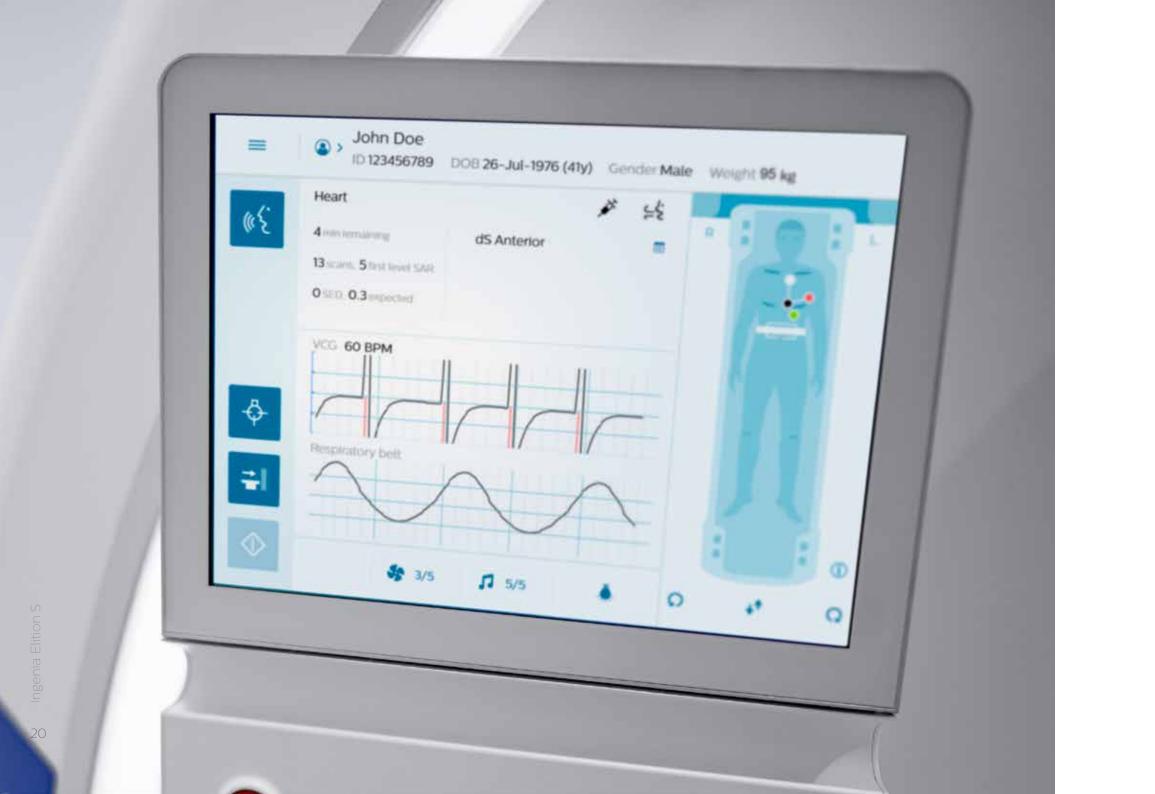
reduced variability and increased efficiency¹



post-processing

repetitive post-processing to support increased throughput¹





A virtual coach guiding exam set-up

Increase staff confidence and speed up patient set-up through automated real-time guidance and insights on the details of the current patient study. Achieve high quality results, independent from staff's expertise level. VitalScreen provides guidance at your staff's fingertips. Two 12-inch interactive touchscreens on the scanner provide coaching and visual guidance on recommended patient position, study laterality, coil and accessory placement. Moreover, feedback is provided on important exam details, including physiology signals (both VCG and respiratory) and – if applicable– contrast usage and breath– hold guidance.

Put your patients at ease, while manual steps in the workflow are automated

Free up your staff from monotonous, manual steps and enable them to focus on the patient through automatic placement of the region of interest in the scanner iso-center. The manual use of a laser light visor for iso-center positioning has become obsolete. VitalScreen automatically detects landmarks for selected anatomies and places the region of interest in the iso-center of the magnet. Once the patient is positioned on the table, only the push of a button is required to position the patient in the center of the bore.

Increase productivity and free up time for other tasks

Start exams as soon as possible, eliminating extra steps for your staff and decreasing the time the patient has to spent in the magnet, resulting in a more positive patient experience. VitalScreen allows staff to initiate the exam with a single touch of a button at the patient side. The exam starts immediately after the operator has closed the exam room door, so no time is wasted.

Continuous and robust respiratory signal providing superior image quality

Relieve your staff from the burden of positioning – and re-positioning – a respiratory belt. Positioning a belt shifts the operator's focus from the patient to the technology at a moment when it is critical that the patient is comfortable and reassured. Enjoy optical sensing and Al¹ to automatically detect patient respiratory patterns. VitalEye touchless patient sensing provides a fast detection of patient's breathing without any operator interaction. With VitalEye, the technologist no longer needs to set up an old-fashioned respiratory belt but receives a continuous and robust respiratory signal without any interaction. This revolution in touchless patient sensing helps your staff to keep a caring eye on your patient. The quality of the physiology signal detected by VitalEye is better than a belt-based approach providing superior image quality, for a broad range of patient sizes.

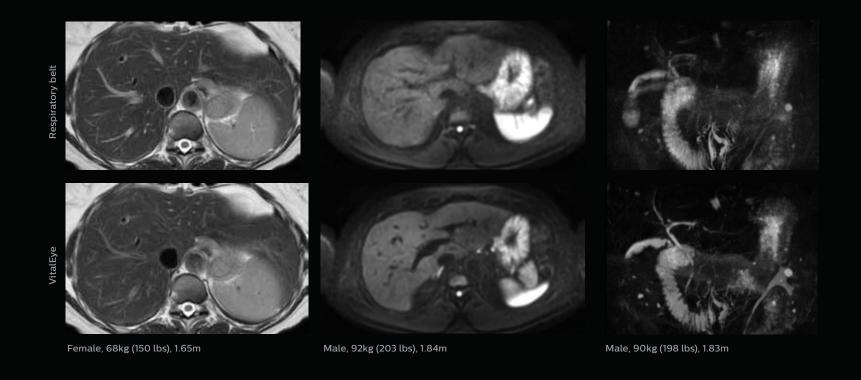
⁶⁶It always works, and it's always there."

MR operator, University of Bonn, Germany



Touchless patient sensing

Superior image quality with VitalEye¹, consistently



The confidence of 3.0T

The Ingenia Elition S provides leading 3.0T image quality. Thanks to redesign of gradient and RF subsystems, enhanced by proven digital performance and easy-to-operate tools, there is no need for extensive 3.0T experience. With the Ingenia Elition S, you can achieve 3.0T image quality in default 3.0T scan-time slots.

Innovating on all fronts has enabled rich functions and features that support confident diagnosis. In addition to the high-fidelity gradient and RF design, the system combines innovative solutions such as Compressed SENSE and 3D APT to help you reach new levels of precision in anatomical and functional clinical imaging. This helps you diagnose even the most challenging clinical indications and answer more referral questions.

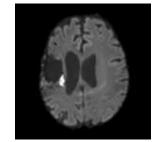
The redesign of gradient and RF subsystems is a result of more than 15 years' experience in short-magnet, wide-bore 3.0T MRI. 3.0T scanning has become routine because of innovations that were first introduced by Philips. These include B1 homogeneity with MultiTransmit, automated planning with SmartExam1 and enhancing clarity for patients with MR Conditional implants thanks to ScanWise Implant.

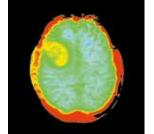
Up to 60% higher resolution

Fully redesigned gradients combined with Compressed SENSE acceleration technology allow up to 60% higher spatial resolution¹ in the same scan time, revealing more details. For example, acclerating isotropic 3D MSK imaging enables a switch from multi-orientation 2D imaging to a single high-resolution 3D efficient scan.

Enhanced diagnostic confidence in neuro oncology

3D APT (Amide Proton Transfer) is a unique, contrast-free, brain MR imaging method that addresses the need for more confident diagnosis in neuro oncology. 3D APT uses the presence of endogenous cellular proteins to produce an MR signal that directly correlates with cell proliferation, an indicator of tumoral activity. 3D APT can support trained medical professionals in differentiating low grade from high grade brain gliomas and in differentiating tumor progression from treatment efffect.²







The basis of 3.0T image quality – Multi-Transmit RF

Philips was the first company to introduce Multi-Transmit RF to 3.0T imaging in 2008. MultiTransmit, with two different RF amplifiers, is standard for Philips 3.0T imaging. This stems from our belief that it is essential to support 3.0T image quality throughout the body.

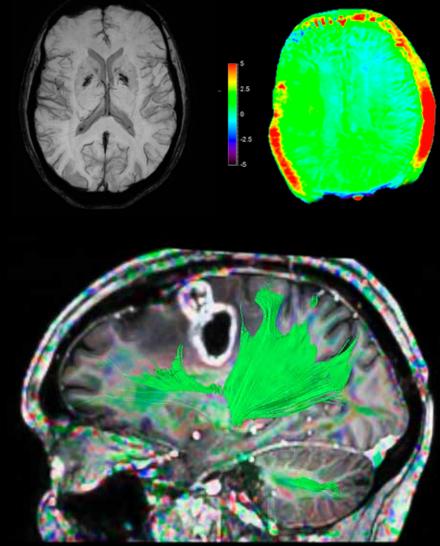
A key to confidence with MR Conditional implants

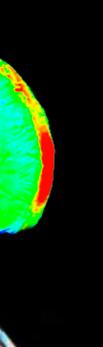
ScanWise Implant³ software helps you confidently scan patients within the MR Conditional limits by providing step-by-step guidance to enter the condition values of the implant manufacturer. Your MR system then automatically applies these values for the entire examination, helping you simplify the scanning process for patients with MR Conditional implants. With ScanWise Implant, you can increase referrals of patients with MR Conditional implants to your institution by confidently offering exams for this growing patient population.

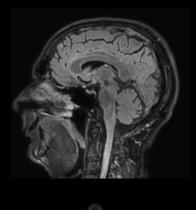
One processing platform, one fully integrated solution to make your diagnosis

The comprehensive 3.0T imaging capabilities on the Ingenia Elition S increase the need for advanced processing. IntelliSpace Portal offers a comprehensive set of over 70 clinical applications in multiple clinical domains, including neurology, cardiology, vascular, oncology, and more. This all-round workstation provides you with the right processing tools when you need them.



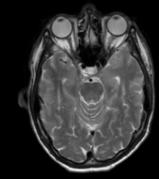


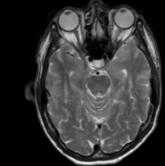


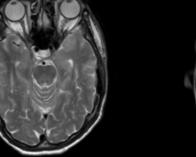


Without Compressed SENSE

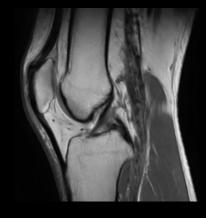
With Compressed SENSE



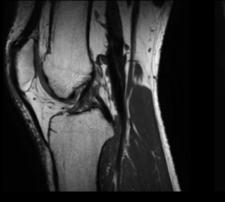


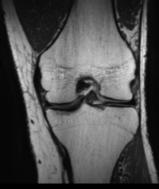


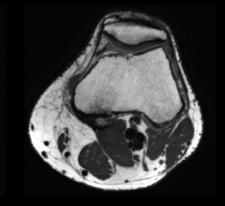
Sagittal 3D T1w TFE, $1.0 \times 1.0 \times 1.0$ mm, 5.29 min / 3.02 min (45% acceleration) Sagittal 3D BrainVIEW FLAIR, $1.12 \times 1.12 \times 1.12$ mm, 4.34 min / 3.17 min (28% acceleration) Axial 2D T2w TSE, $0.55 \times 0.73 \times 4.0$ mm, 1.48 min / 0.54 min (50% acceleration)

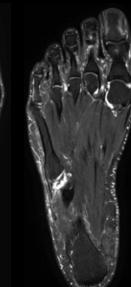






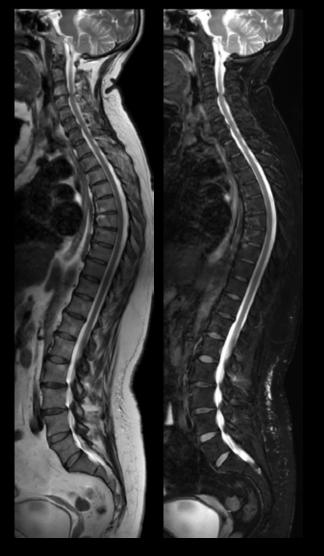




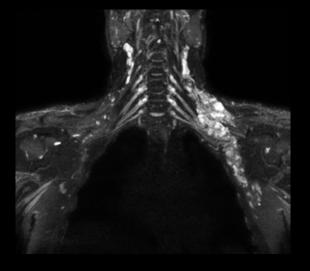




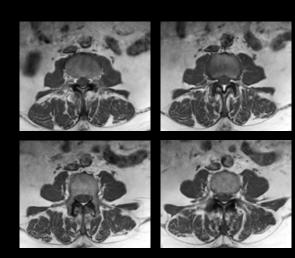
Sagittal 2D T1w TSE Compressed SENSE 0.80 x 0.98 x 4.0 mn 3:26 min /stack



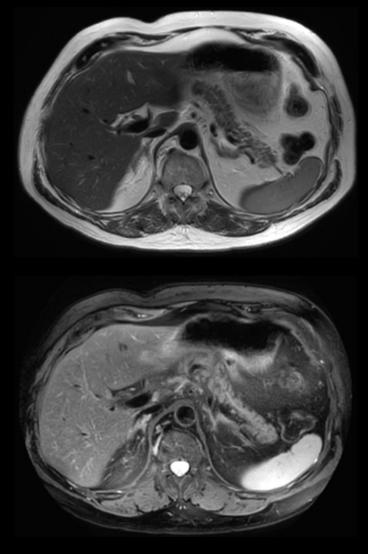
Sagittal 2D T2w mDIXON XD T Compressed SENSE 0.90 x 1.08 x 4.0 mm



Coronal 3D NerveVIEW, Compressed SENSE 1.20 x 1.20 x 8.0 mm, 3:29 min



Axial 2D T1w TSE, Compressed SENS



Axial T2w MultiVane XD, 1.50 x 1.50 x 5.0 mm, 2:15 min
Axial T2w SPAIR MultiVane XD, 1.49 x 1.49 x 5.0 mm, 2:48 min



Coronal T2w TSE – Two stations 1.4 x 1.6 x 5.0 mm. 1:48 min /station



Dramatically improve the patient experience

Your patients are at the heart of Ingenia Elition – which includes an MR experience that enhances comfort and compliance. With up to 80% acoustic noise reduction1, voice guidance, Immersive in-bore visuals and a comfortable table mattress, Ingenia Elition helps your patients feel at ease, resulting in smooth, fast exams.

Lompared to scanning without Comfortone.

Provide an immersive visual experience

Your patients' scanning experience is significantly enhanced with Ingenia Elition. Designed to offer a relaxing sensory experience, Ambient Experience provides positive distractions for patients by incorporating dynamic lighting, projection and sound, contributing to a positive, engaging environment to benefit quality of care. From the moment a patient is moved into the scanner (the point at which people report the most stress), through completion of the scan, the In-Bore Connect solution can help patients to relax, follow directions and minimize motion. In a study, conducted using our in-bore solution, Herlev Gentofte University Hospital in Denmark managed to reduce the number of rescans by up to 70%¹. A case study at Radiologisches Zentrum am Kaufhof, Lübeck, Germany showed that the number of patients needing sedation was reduced by 80%2.

We've had a lot of patients provide compliments on the environment. We have the Ambient solution in there that creates a soothing environment."

Carol Melvin, MD, Miami Cardiac and Vascular Institute



¹ Compared to the average of the other 5 Philips Ingenia MR scanners without Ambient Experience and In-Bore Connect. Results from case studies are not predictive of results in

² Results from case studies are not predictive of results in other cases. Results in other cases may vary. *The tranquilizer referred to is a valium-based derivative called "Diazepam".



Comfort in every detail

Because no detail is too small when it comes to helping your patients feel comfortable, Ingenia Elition includes the ComfortPlus mattress. On average, 90% of patients in severe discomfort find it easy to lie still on the ComfortPlus mattress. Overall comfort for this group of patients can increase by up to 36%.

expect through automated, consistent instructions, relieving some of the anxiety of an MR exam. AutoVoice supports exam compliance by guiding your patients through the MR examination. Including automatically announcing scan duration and table movements in your choice of 30 languages and dialects. In addition, providing breath hold instructions, with either manual timing or timing synchronized to fit the patient's respiratory cycle.

Put your patients at ease and guide

Be confident that your patients know what to do and what to

them through the examination

The most frequent comment we are getting from our technologists, is that for patients who have had scans on other Philips scanners, this new mattress is really significantly more comfortable."

Dr. Oswood, Hennepin County Medical Center

AutoVoice enables us to shift our focus from having to manually give the breathing instructions to the patient to now planning the

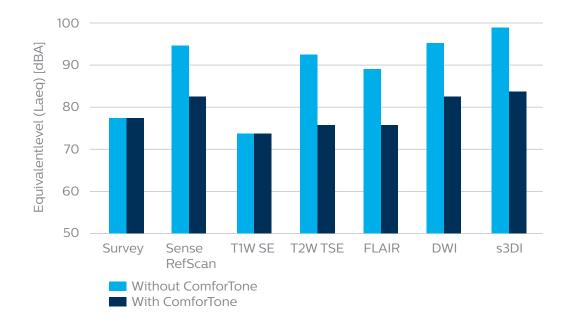
Carlos Avila, RT, Miami Cardiac and Vascular Institute, USA

1 Compared to using a standard mattress.

exam."

Reduce acoustic noise for your patient

No matter how short the exam, a noisy MR scanner can make it seem unbearably long. The Philips unique ComforTone solution achieves up to 80% reduction in acoustic noise¹ with similar image quality and contrast within the same time slot. You can use ComforTone in routine exams such as brain, spine and MSK. Thanks to our ready-to-use ExamCard protocols, ComforTone is simple to implement and use, requiring just a few clicks to get started.

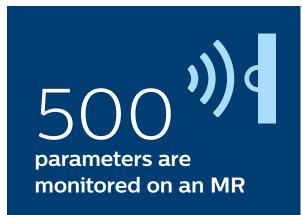




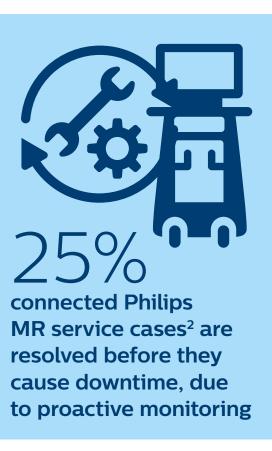
Enhance the value of your MR investment

Imaging is both a clinical and an economic challenge. You need to manage a host of financial obligations and opportunities, all while keeping your focus on your patients. We can help, by putting together a package of offerings that keep total cost of ownership in check while providing you with tailored solutions for maintenance, fleet management, cybersecurity, education and financing.

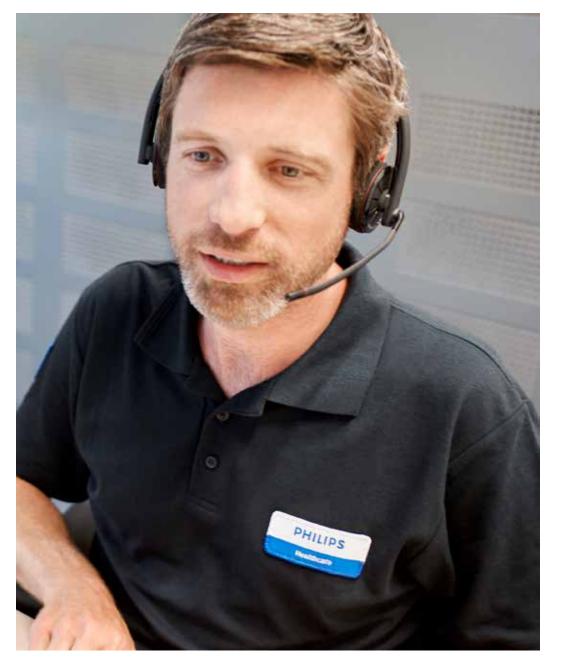




remote connections across healthcare facilities in countries³



of MR service cases are resolved remotely¹



Prevent issues before they occur

Scanner downtime can disrupt your schedule and delay patient care. We offer maintenance agreements that are suited to your needs, enabled by the latest service innovations and including an uptime guarantee. We prevent issues before they occur through proactive remote monitoring, remote diagnostics and remote and field service support. With e-Alerts and other remote data, we monitor more than 500 parameters of your MR system from a distance, detecting and resolving issues without impacting your department's operations. In fact, more than 50% of MR service cases are resolved remotely. Our Philips-qualified service experts can also proactively resolve issues on-site, fix your system before it causes any disruption, and provide reliable and knowledgeable support.2

Protecting your MR equipment from patient data breaches and cyber-attacks

Protecting patient health information requires constant vigilance. To keep health information and medical devices secure, we employ best practices in medical device security. Our multi-layered defense barriers include security policies, procedures, access controls, technical measures, training, and risk assessments. The Technology Maximizer Plus subscription program conveniently keeps your MR systems up-to-date through access to the latest cybersecurity patches and mandatory safety fixes via regular and ongoing software upgrades and hardware refreshes.

Standardize your MR fleet at a fixed annual cost

If you own more than one Philips scanner, standardizing under the same software release can enhance efficiency through one user interface for operators to learn and use the same ExamCards across multiple scanners. The Ingenia Elition is delivered with the latest available software release, providing a perfect opportunity to upgrade your fleet to this release and enter into a Technology Maximizer Plus subscription program.¹ Under the program, your Ingenia Elition and the rest of your fleet will receive software updates whenever available, giving you the benefits of software improvements and cyber-security advances while maintaining all your MR systems on the same level.

It was consistently a challenge to plan for annual upgrades and predict their costs. Thanks to Technology Maximizer, we can now continue to have the latest versions of software for all of our MRI systems."

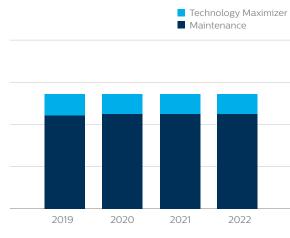
> Eliseo Vañó Galván, , MD, Cardiovascular radiologist, Chairman of the CT & MR Department at Hospital Nuestra Senora del Rosario, Madrid, Spain

Cost of maintenance and upgrades in **previous years**



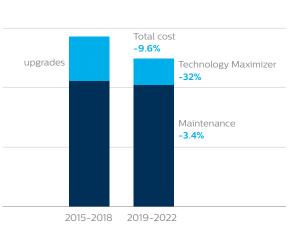
- Large variation in annual cost
- · Upgrading once in 4 years

Cost of maintenance and upgrades with **Technology Maximizer prgram**



Fixed annual cost Yearly updating

Reduction in accumulated cost of maintenance and upgrades over 4 years Before vs with Technology Maximizer



✓ Technology Maximizer saves cost and provides more frequent updates

Achieve excellence through ongoing education

Delivering consistent healthcare day-in and day-out is a challenge, particularly when faced with staff shortages and the need to cross-train department personnel. Our Philips MR Healthcare Education can help unlock the full potential of your staff, technology, and organization through innovative and meaningful healthcare education, delivered on-site or as e-Learning. For example, the Philips MR Technologist Development Program at Burjeel Hospital for Advanced Surgery (BHAS), a leading orthopedic and joint care center in Dubai, UAE, resulted in an average of 30% improvement in image quality across all procedures. Team knowledge increased 30-40% in the key areas of patient care, imaging procedures, data acquisition and physics of image formation. The comprehensive, clinicallyrelevant courses, programs, and learning paths are designed to support clinical excellence, enhance operational efficiency and provide high-quality patient care.

Tailored financing solutions in line with your cash flow needs, budgets, and business strategy

Providing access to best-in-class healthcare is a leading priority for facilities like yours around the globe. At the same time, financial security and protecting your assets over time are also high on the agenda. To manage your financial challenges, you need to know whether your healthcare investments are sustainable - and how to get the most from your equipment. Financing your Ingenia Elition helps you exchange variability and unpredictability for visibility and certainty. This helps you avoid the burden and risk of upfront expenditures and benefit from transparent, predictable cost structures. As a result, you can manage and plan budgets more efficiently and free up capital that would otherwise be tied up in fixed assets.





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