

- 1 Premium IQ defined as increased SNR and speed and improved fat-free and motion-free imaging obtained on dStream with dS SENSE, mDIXON and MultiVane XD compared to Achieva with SENSE, Dixon and Propeller.
- 2 Premium Fat-free defined as mDIXON fat-free compared to DIXON fat-free (3-echo, fixed TE). Premium Motion-free defined as MultiVane XD compared to Propeller correction (Pipe et al. A Revised Motion Estimation Algorithm for PROPELLER MRI, MRM August, 2014).
- 3 Compared to Achieva, data on file.
- 4 Premium SNR defined as SNR obtained with dStream compared to Achieva.
- 5 Digital Clarity and Speed defined as SNR obtained with Ingenia or SmartPath to dStream compared to Philips Achieva.
- 6 Premium speed defined as dS SENSE speed compared to SENSE.
- 7 Only for use with MR Safe or MR Conditional Implants.
- 8 Increased patient comfort with the patient in-bore solution compared to without, faster workflow compared to Philips Achieva.
- 9 White paper: Improving MR workflow. Results from case studies are not predictive of results in other cases. Results in other cases may vary.

**PHILIPS**

Ingenia 1.5T S

MR systems

Expect  
nothing less

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**How to reach us**  
Please visit [www.philips.com/healthcare](http://www.philips.com/healthcare)  
[www.philips.us/Ingenia15TS](http://www.philips.us/Ingenia15TS)  
[healthcare@philips.com](mailto:healthcare@philips.com)

\* Increased patient comfort with the patient in-bore solution compared to without, faster workflow compared to Philips Achieva.

**Designed for first-time-right imaging and increased patient comfort for a faster workflow\*.**



# Innovation that matters to you

From the very beginning, we have always had one thing at the heart of our company – our mission to improve people’s lives through meaningful innovation. This mission inspires us to work with you to find the shortest path to the best care at the lowest cost. It drives us to create technology that makes a difference – to those who run our MR systems, those who read the images, and those patients who benefit from confident diagnoses.

We are dedicated to improving and saving lives through innovation that we develop together with clinicians and customers. Your patients can have better, more personalized care, while you make the best use of time and budget. Together, we can drive clinical performance, enhance patient and user experience, and ensure economic value, within and beyond the walls of your enterprise.

## Drive clinical performance

Our technical advances in image quality and anatomical intelligence are focused on clinical reality. We innovate to make a difference in people’s health.

## Enhance patient and user experience

We deliver patient comfort by reducing examination times and creating soothing environments. We provide patient-centric imaging to support first-time-right imaging results.

## Ensure economic value

To help you maximize your MR investment, we design our systems to pay off quickly and return dividends for a long time, through upgrade programs, extensive service offerings, and low operating costs.



# Designed to meet **your needs**

## First-time-right imaging

Sometimes the need to rescan a patient is caught immediately. Perhaps a technologist spots movement artifacts, and after taking the time to reassure the patient, tries again. Or perhaps the technologist sees poor fat suppression or a foldover artifact, and rescanning is the only way to get the image quality you require. In the worst cases, the patient is sent home, and has to be called back – or you have to diagnose with less-than-ideal images.

Whatever the reason, it can turn a productive day upside-down.

### Fast, fat-free, motion-free imaging

That's why every Ingenia 1.5T S comes standard with our Premium IQ Pack, which includes automatic fat and motion suppression and dStream digital imaging for premium image quality<sup>1</sup>. Fast, fat-free, and motion-free: Ingenia 1.5T S is designed for first-time-right imaging<sup>2</sup>.

### Enhanced patient experience

Many patients are anxious and concerned about their MR exams. To help you provide patients with a positive experience, the Ingenia 1.5T S includes technologies that decrease acoustic noise by up to 80%, comfortable, patient-conforming coils, a 70 cm bore, and automated patient instructions. You can even choose an immersive video experience to put patients at ease.

Robust, fat-free and motion-free imaging, a remarkable patient experience are combined with a fast patient set up that can increase throughput by 30%<sup>3</sup>.

### dStream digital broadband MR

The established digital broadband MR platform, dStream enables you to get more information, more consistently in the same time by delivering premium image quality with digital clarity and speed<sup>1</sup>. Our premium SNR expands your imaging options<sup>4</sup>.



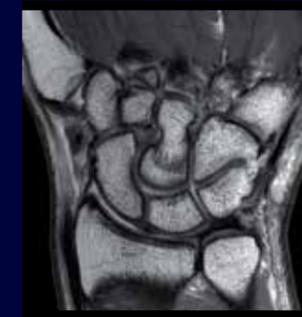
# Drive clinical performance

## Digital clarity and speed<sup>5</sup>

Despite many changes in the imaging business, people still remain at the heart of care. And while the industry calls some types of imaging routine, you know that even the most common MR study is really an opportunity to provide your patients with outstanding care.

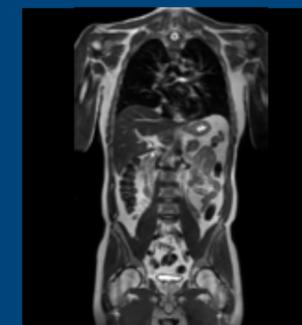
The Ingenia 1.5T S helps you maximize diagnostic information, every time, within the available time slot, by bringing high clinical performance to imaging procedures such as brain, spine and musculoskeletal imaging. Digital, broadband dStream technology delivers high SNR, while industry-leading dS SENSE acceleration and the Premium IQ Pack enable fast, robust imaging and superb motion and fat suppression in almost all procedures, designed for first-time-right imaging.

Premium IQ Pack  
Achieve new level of clinical performance by solving the common MR challenges of speed, fat suppression, and motion control.



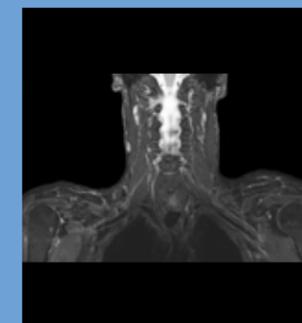
### Premium SNR with dStream<sup>3</sup>

dStream digitizes the signal in the coil, eliminating noise influences typical of analog pathways to capture the MR signal where it is at its purest. The fiber-optic connection from the coil to the image reconstructor enables lossless broadband data transmission. This results in SNR gains of up to 40%.



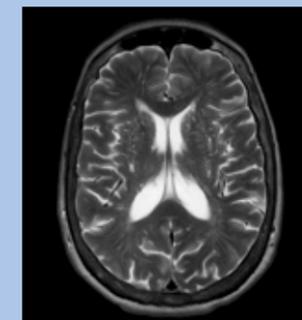
### Premium speed with dS SENSE<sup>5</sup>

Suddenly, traditional parallel imaging seems leisurely in its pace. Because dS SENSE makes nearly every exam faster, you can image with fewer or shorter breathholds, drastically cut imaging time, or even add more slices if you need more information. dS SENSE also includes quick, fully integrated reference scans that are planned automatically.



### Premium fat-free with mDIXON XD<sup>2</sup>

Inconsistent fat suppression can lead to inconclusive exams, second guessing, rescans and retakes. So Philips developed mDIXON XD, a fat suppression innovation that is both consistent and fast. A Philips exclusive, mDIXON XD provides improved fat suppression when compared to standard spectral fat suppression techniques (e.g. SPIR). Furthermore, our mDIXON TSE fat-free technology is 30% faster and up to 30% sharper (less blurring) than traditional 3-echo based DIXON TSE techniques.



### Premium motion-free with MultiVane XD<sup>1</sup>

Sometimes making innovation matter to you means expanding its use. MultiVane, which has intrinsically reduced sensitivity to motion, was originally developed for use in the brain. Now, it reduces motion artifacts in livers as well, giving you an elegant solution to the vexing problem of in-plane motion.

# Access to trending applications



## Key benefits

- Premium SNR with dStream<sup>4</sup>
- Premium speed with dS SENSE<sup>6</sup>
- Premium IQ Pack (standard with premium fat-free and premium motion free applications<sup>2</sup>)
- Access to Trending applications

Just as every patient is different, so is every community. Your community may have specific imaging needs, and you need an MR system that can adapt to those needs. Ingenia 1.5T S allows you to provide a wide range of services, including imaging in neuro, cardiac, and oncology in children, elderly, and obese patients.



## IntelliSpace Portal brings brilliant focus to your screen from any source

Working where you want doesn't mean you have to lose functionality, or deal with limited access to images and information. IntelliSpace Portal provides access to images and processing from almost any PC – in the department, in your office, and even in your home. With advanced visualization and analytics at your fingertips, you can review and diagnose efficiently and with confidence, efficiently communicate with referring physicians, and view images from multiple modalities to get a complete picture of your patients' health – boosting productivity no matter where you are.

## Ready for the mainstream

Offering advanced diagnostic capabilities is good for patients, who benefit from access to the latest tools, and good for your practice, as it gains a reputation among referrers as the place to turn to, to tackle diagnostic challenges. Our imaging solutions deliver capabilities that are ready for mainstream practice, providing information that aids clinicians dealing with a wide range of patients by providing routine and advanced neuro imaging, cardiac imaging, and oncology imaging.

## Leverage intelligence, integration, and interpretation on every case

IntelliSpace Portal contains a powerful combination of intelligence, integration, and interpretation in a secure, real-time, and collaborative platform, so you can access, create, and disseminate actionable information throughout your enterprise.

This multimodality advanced visualization and analysis solution gives you capabilities to support diagnostic objectiveness and consistency. It supports MR, CT, molecular imaging, and ultrasound images, so you can view images that are relevant to a diagnosis.

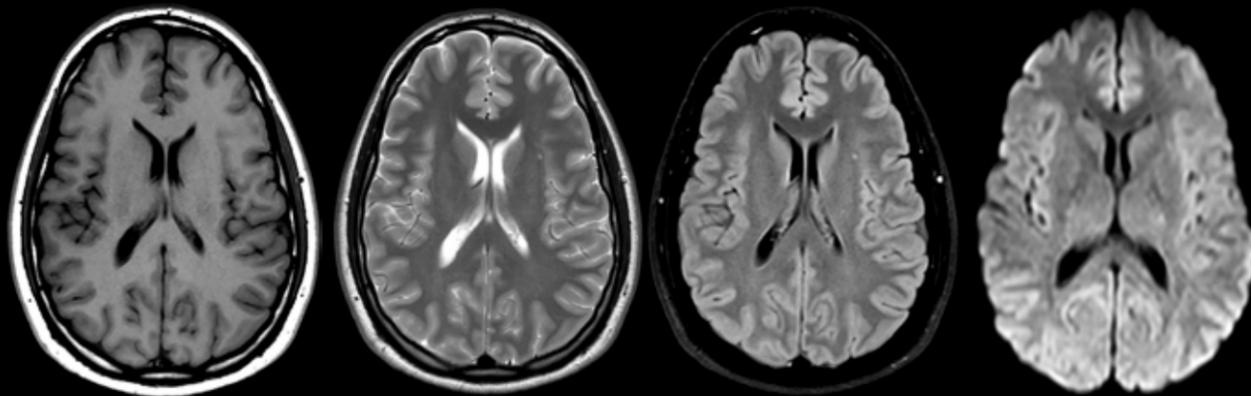
Clinical applications include:

- Calculating MR diffusion
- Assessing MR T1 perfusion
- Assessing MR neuro perfusion
- Calculating MR subtraction
- Calculating MR echo accumulation
- Full FOV MR images with MobiView
- Assessing cartilage quality

# Broad range of clinical capabilities

The sequences and techniques you need come standard with Ingenia 1.5T S

View and download ExamCards of the images in this section at [www.philips.us/ingenia15ts-examcards](http://www.philips.us/ingenia15ts-examcards) or scan the QR code.

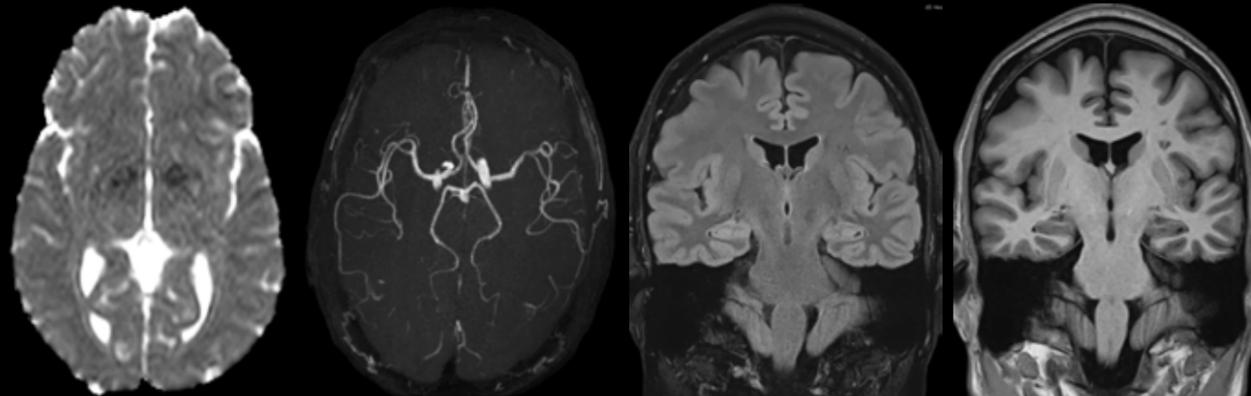


T1W SE with ComforTone in 3:35 minutes

T2W TSE with ComforTone in 2:45 minutes

Flair with ComforTone in 5:08 minutes

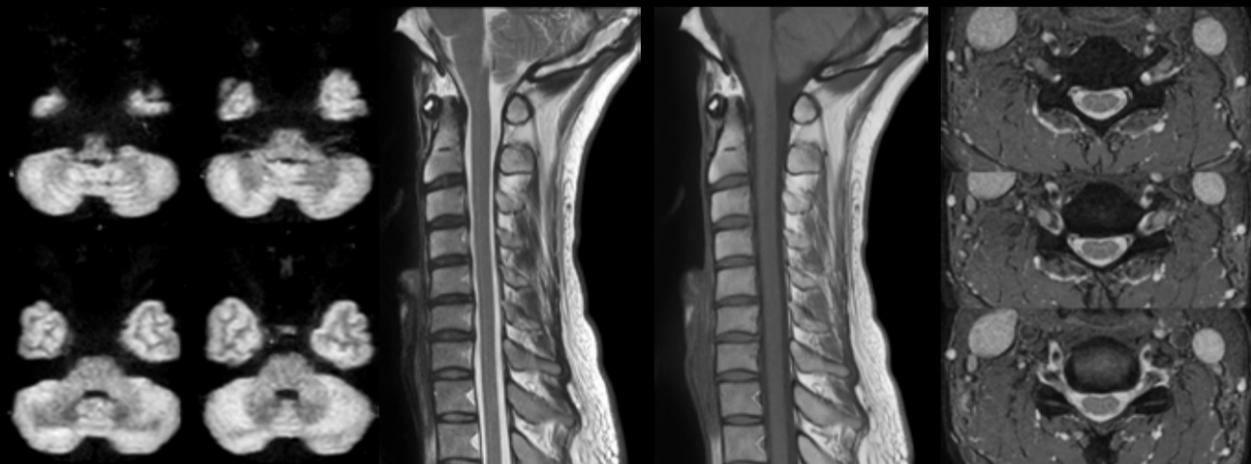
DWI (b1000) with ComforTone in 0:38 minutes



ADC map with ComforTone

Time of Flight with ComforTone in 2:07 minutes

High resolution Hippocampus, FLAIR 0.7x0.7x2.5mm in 5:41 minutes, T1W TFE 0.7x0.7x2.5mm in 4:45 minutes

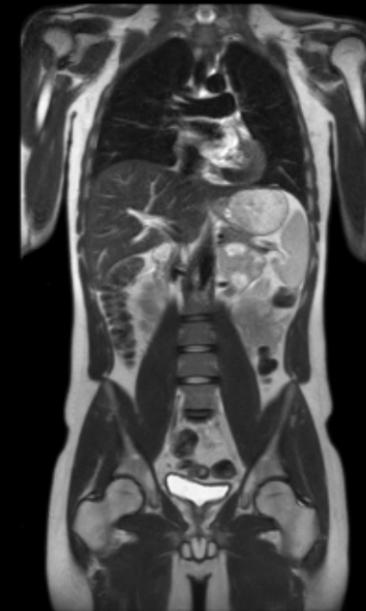


Diffusion of the inner ear with DWI TSE in 4:57 minutes

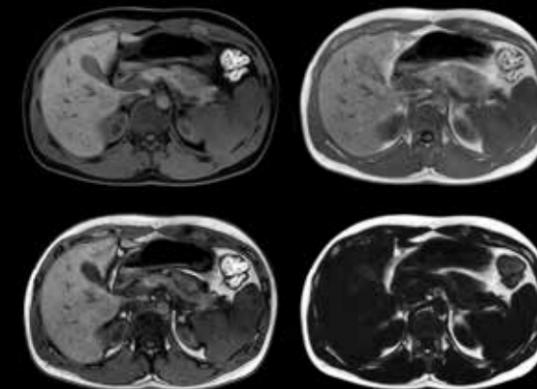
T2W TSE, 0.5x0.8x3.0mm in 3:42 minutes

T1W TSE, 0.6x0.9x3.0mm in 3:40 minutes

mFFE, 0.8x0.8x3.0mm in 3:09 minutes



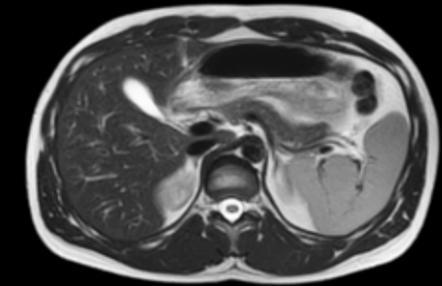
Two Station total Torso coverage with single dSTorso coil, T2W TSE in 2:30 minutes



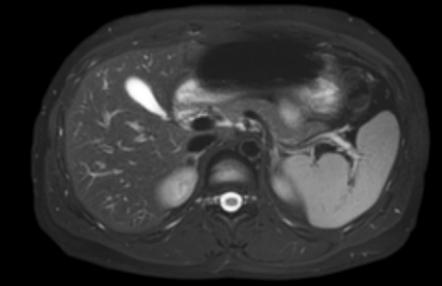
mDIXON All, 4 contrast in one breathhold, 1.3x1.5x2.5mm in 0:16 minutes



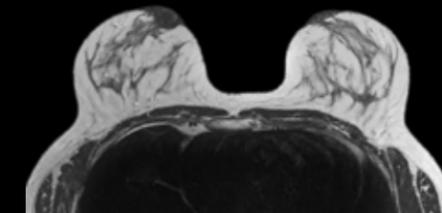
MultiVane XD, high resolution motion-free imaging, T2W TSE 0.8x0.8x3.0mm in 3:14 minutes



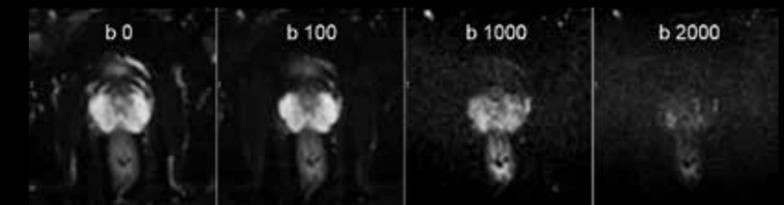
MultiVane XD, high resolution motion-free imaging, T2W TSE 1.5x1.5x5.0mm in 1:03 minutes



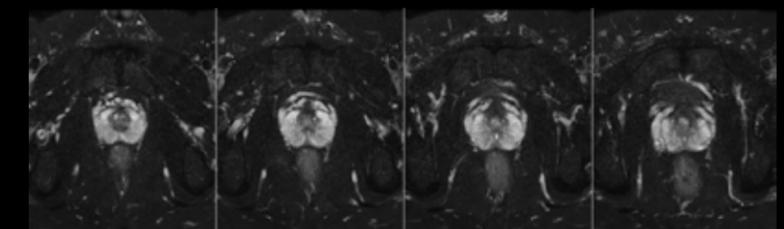
MultiVane XD, high resolution motion-free imaging, T2W SPIR TSE 1.5x1.5x5.0mm in 1:03 minutes



High resolution T2W 1.0x1.1x3.0 mm in 3:16 minutes

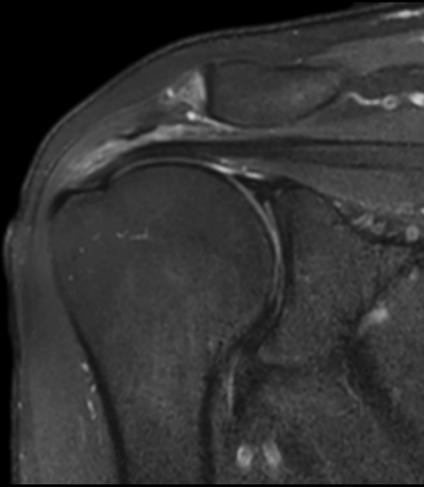


Small Field of View DWI of the prostate, 2.3x2.4x5mm in 2:39 minutes

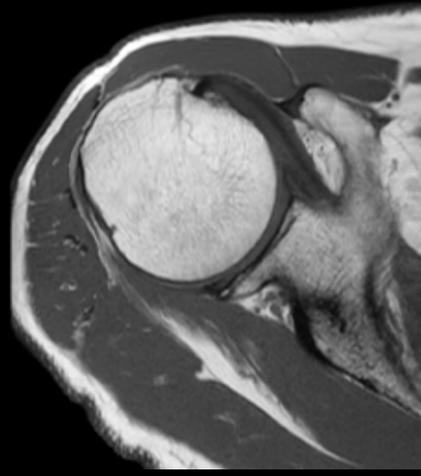


T2W SPAIR of the prostate, 0.7x0.9x3.0mm in 3:42 minutes

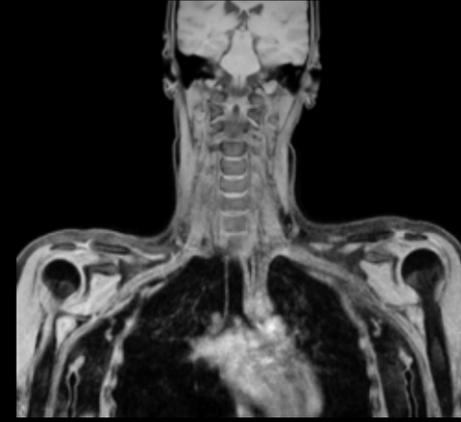
T2W SPAIR with ComforTone  
0.6x0.7x3.0mm in 4:30 minutes



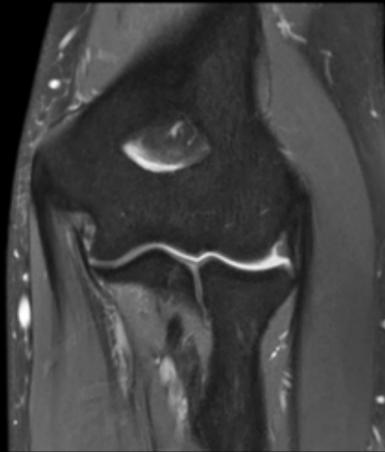
T1W TSE with ComforTone  
0.5x0.7x3.0mm in 3:33 minutes



mDIXON XD FFE, robust and fat-free imaging for large Field of View and sub-millimeter resolution. Left: MPR fat-free image, Right: MPR Opposed Phase image, 0.9x0.9x0.8mm in 3:26 minutes



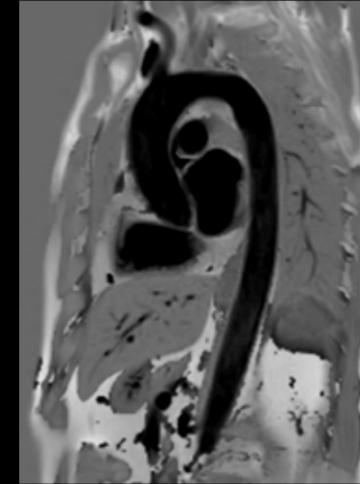
Imaging by the side, PDW SPAIR  
0.4x0.5x3.0mm in 4:05 minutes



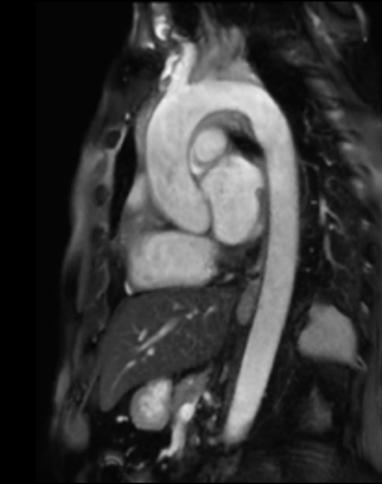
Imaging by the side, T1W TSE  
0.3x0.4x3.0mm in 3:19 minutes



PSIR, Black blood imaging, 1.5x1.9x8.0mm in 0:02 minute/slice



Respiratory triggered bright blood imaging with B-TFE, 1.6x1.3x6.0mm in 1:45 minutes



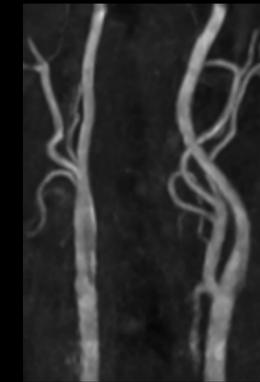
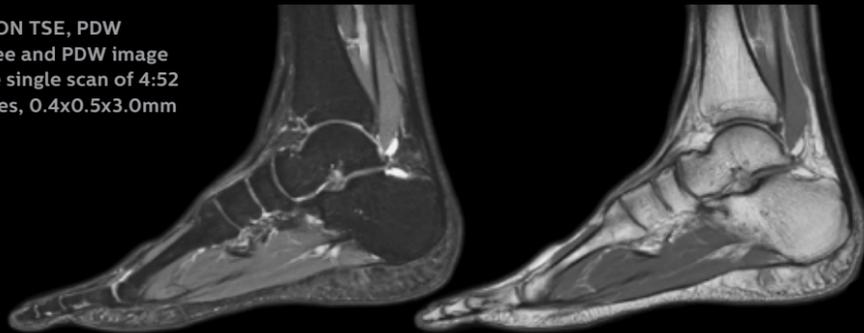
Imaging by the side, T2W SPAIR  
0.3x0.6x2.5mm in 3:54 minutes



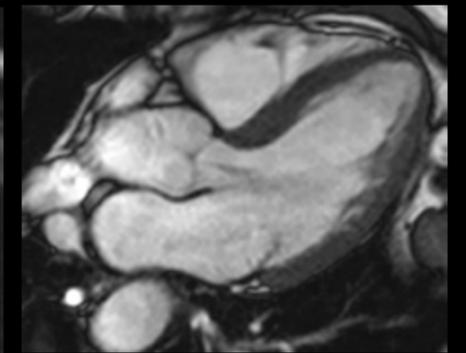
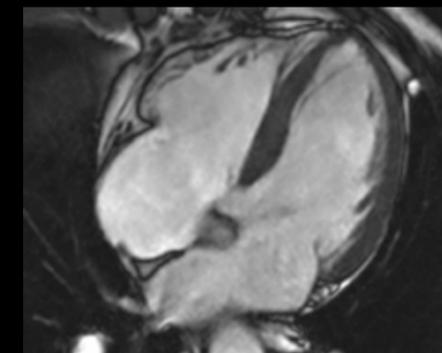
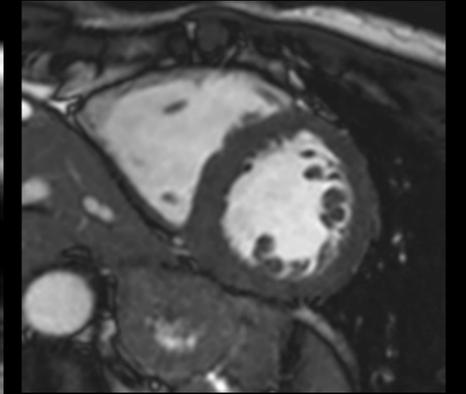
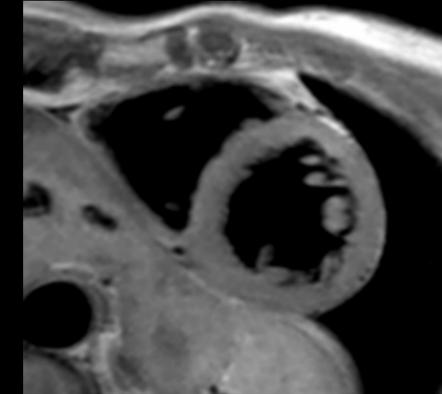
0-MAR<sup>2</sup>, Orthopedic Metal Artifact Reduction, 0.9x1.1x4.0mm in 1:17 minutes



mDIXON TSE, PDW fat-free and PDW image in one single scan of 4:52 minutes, 0.4x0.5x3.0mm



Carotid Time Of Flight, 2 MIP reconstructions, 0.6x1.0x0.6mm in 5:35 minutes

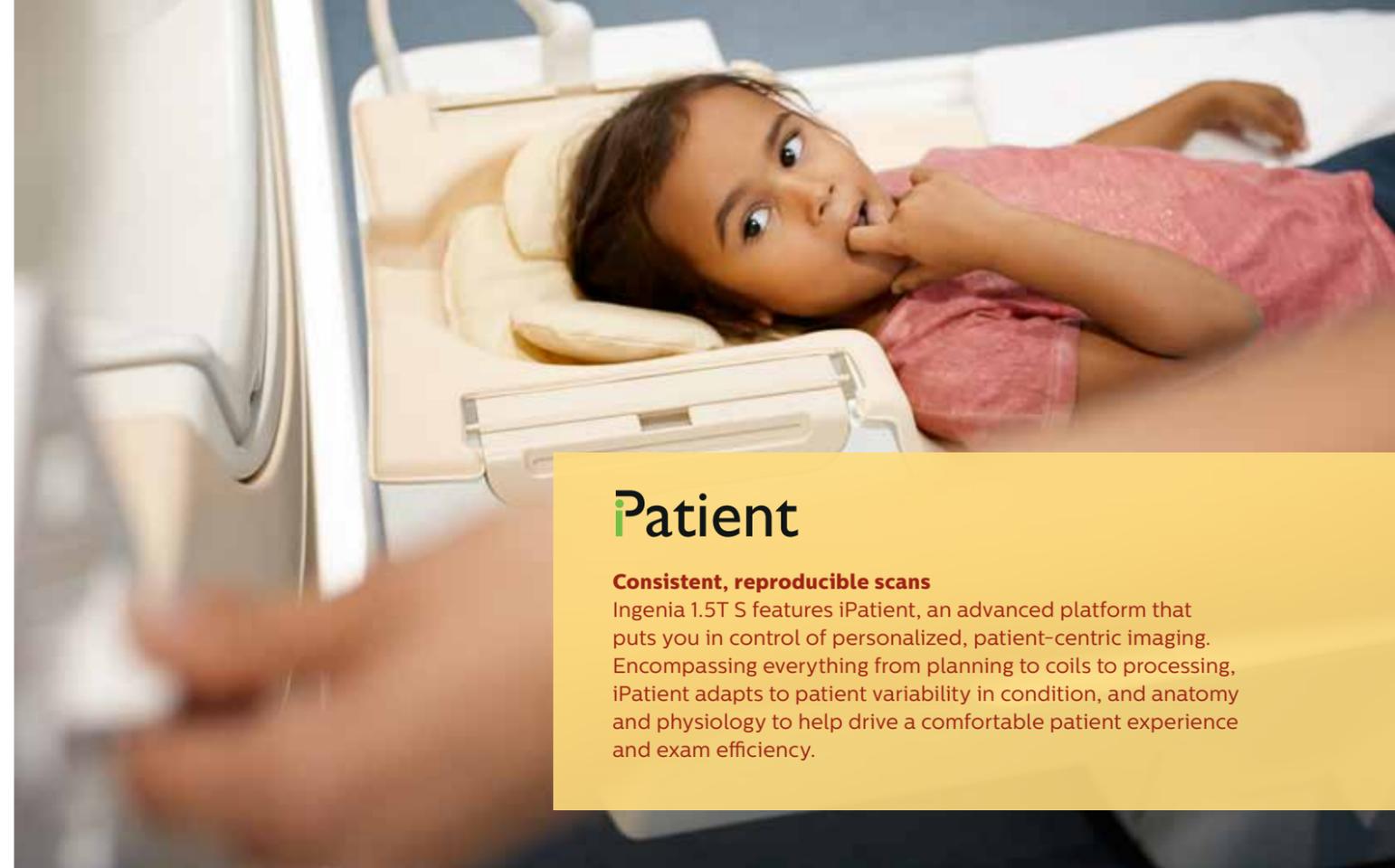


Blackblood and cine imaging, Blackblood 0:17 minutes, cines: 0:12 minutes

# Enhance patient and user experience

## In control of personalized patient-centric imaging

When your patients have a positive scanning experience, you benefit from a reputation as a patient-friendly MRI provider. When your system is easy to use, productivity soars. The Ingenia 1.5T S delivers on both counts, with considerate features that enhance both the patient and user experience.



## iPatient

### Consistent, reproducible scans

Ingenia 1.5T S features iPatient, an advanced platform that puts you in control of personalized, patient-centric imaging. Encompassing everything from planning to coils to processing, iPatient adapts to patient variability in condition, and anatomy and physiology to help drive a comfortable patient experience and exam efficiency.



### Putting patients at ease

For many patients, gradient noise is one of the most uncomfortable parts of an MRI exam. Ingenia 1.5T S features ComforTone, which automatically reduces gradient noise by up to 80% within the same time and with virtually the same image quality and contrast. To keep patients relaxed and to promote compliance, AutoVoice guides patients through breathholds, announces table movements, and indicates scan duration. The ambient light ring on the magnet façade and adjustable, in-bore lighting also enhance scanning comfort.

### Immerse patients in relaxation

If you choose the in-bore experience, you can offer your patients something that they never expected from an imaging study. You can create an atmosphere that transports them out of the imaging suite and into a relaxing environment of their choice. Through an immersive video experience that distracts and entertains patients while they are in the bore, you can enhance patient cooperation and workflow, and deliver an experience that elevates patient comfort.

### In control of patient comfort

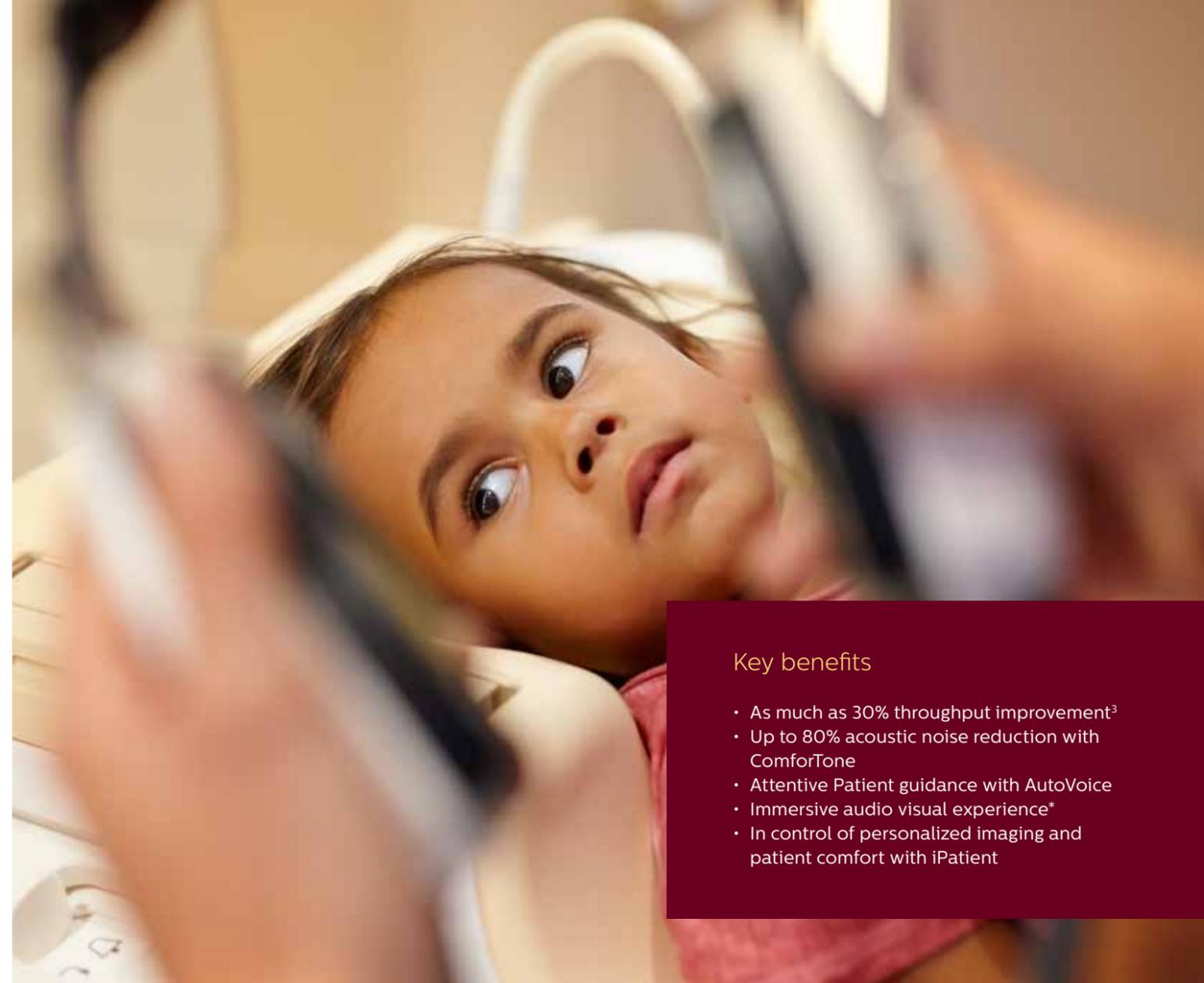
Ingenia 1.5T S system's iPatient includes optional accessories and hardware that are designed for specific patient types, to increase patient comfort. Digital coil design greatly reduces coil weight, and many coils are adjustable for a custom coil fit. iPatient enables imaging with fewer coils, and reduces coil positioning and set-up time. An integrated posterior coil is all you need for 60% of routine exams. When combined with the anterior coil, you can easily image anatomies from above the shoulder to the toe. All coils can be connected with just one hand. We also offer pediatric accessories to make scanning comfortable for your small patients, and a table that can accommodate patients up to 250 kg (550 lbs.) for your larger patients.

# In control of **personalized imaging**

Patient variability has a significant effect on the robustness of imaging techniques. Patient condition, and anatomical and physiological variations can disrupt an otherwise highly efficient MR department. iPatient helps you deliver consistent imaging excellence, regardless of patient challenges. It controls patient variability, delivering patient-adaptive imaging and improving throughput by up to 30%<sup>3</sup>.

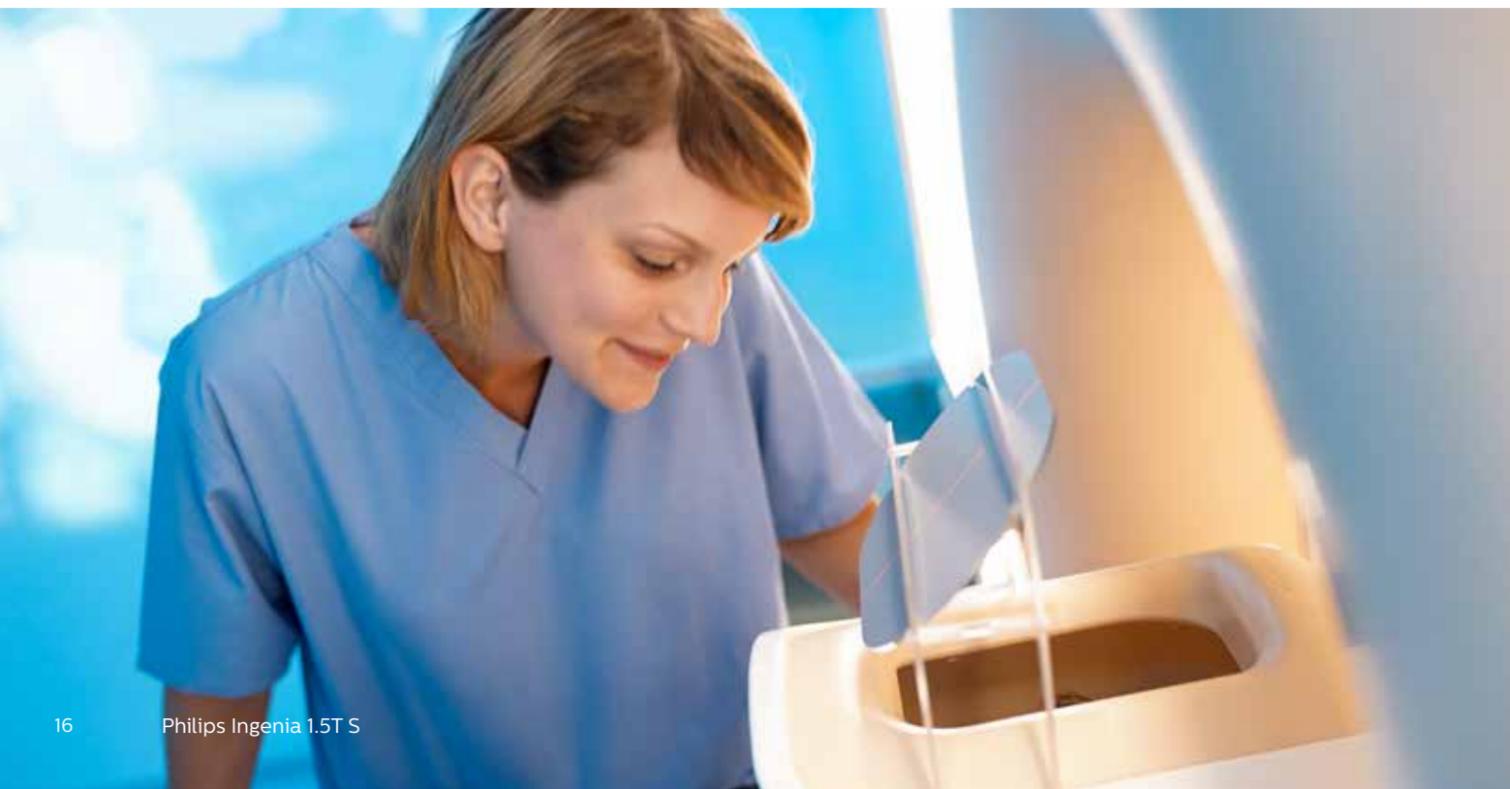
You can personalize imaging by selecting the ExamCard that best matches the patient condition. You can create your own ExamCards, or choose one shared by other Philips MR customers.

In addition to driving clinical performance, mDIXON XD and MultiVane XD also help you personalize imaging for certain patient conditions. mDIXON XD enables fat-free imaging for most anatomies, and MultiVane XD helps you achieve high quality images even for patients who can't stay still or hold their breath. Additional techniques for personalized imaging are metal artifact reduction sequences, whose low sensitivity to metal artifacts can help you image patients with metal prostheses or implants<sup>7</sup>, and time -efficient 3D imaging, which allows reconstruction in any direction so that imaging outcome is virtually independent of patient/anatomy variability.



## Key benefits

- As much as 30% throughput improvement<sup>3</sup>
- Up to 80% acoustic noise reduction with ComforTone
- Attentive Patient guidance with AutoVoice
- Immersive audio visual experience\*
- In control of personalized imaging and patient comfort with iPatient



FlexCaddy coil storage cart\*



FlexTrak dockable patient transport system\*



Table with integrated posterior coil

\* Optional

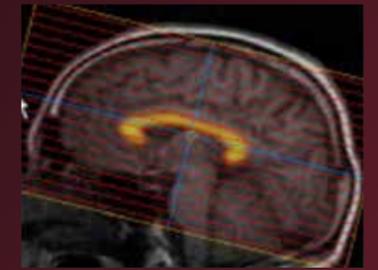
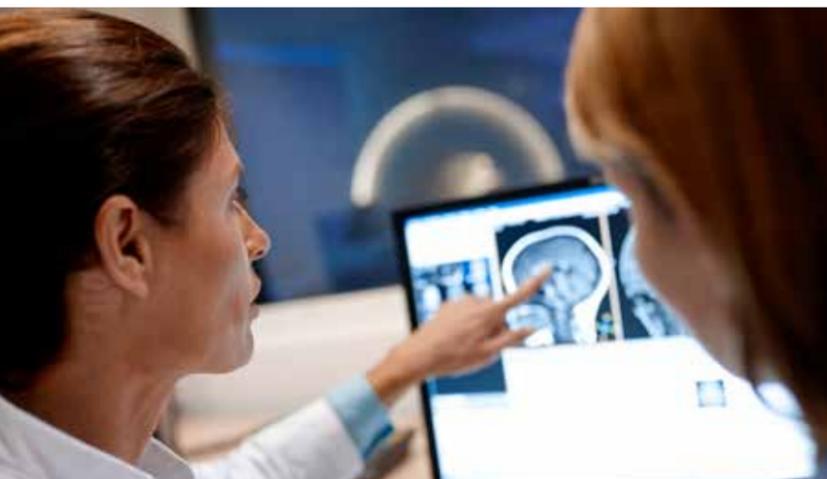
## In control of image quality

Image quality is at the core of everything you offer to patients and referring physicians. To make MR imaging predictable and reproducible, iPatient automates repetitive tasks and incorporates best practices into ExamCards. In fact, SmartExam<sup>8</sup> automation assists in delivering reproducible planning results in more than 70% of procedures.

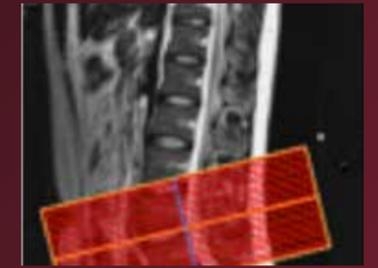
### Imaging workflow eliminates repetitive tasks

iPatient eliminates up to 50% of repetitive tasks<sup>3</sup>. At the touch of a button, the table moves to the isocenter and the system starts the exam. The SmartSelect feature automatically determines which coils and elements should be activated to produce the highest SNR for the selected field-of-view. Then, the SmartExam feature positions slices on the target anatomy, reducing operator input to as little as a single mouse click.

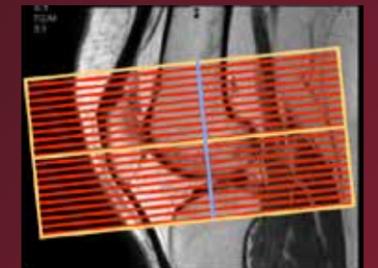
While images are being acquired, iPatient saves time by performing intelligent background processing (such as volume view, diffusion, perfusion etc.) of multiple image datasets. In addition, it simplifies the planning, viewing and processing of multi-sequence, multistation exams, treating multi-station exams as one volume.



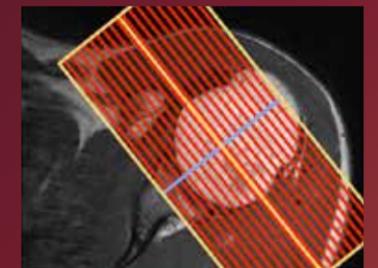
SmartExam Brain



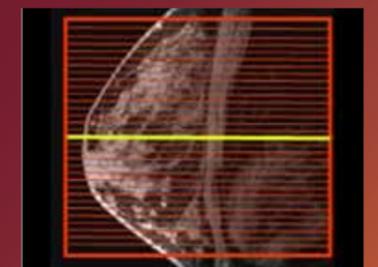
SmartExam Spine



SmartExam Knee



SmartExam Shoulder



SmartExam Breast

# Ensure economic value

## Key benefits

- No channel upgrades needed anymore with Channel independency
- Tailored education, services and financing options
- Reduce power consumption and save money with PowerSave technology

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 educational, service, and financing options.

## Expandability and channel independence

With Ingenia 1.5T S, you never have to worry about upgrading your RF receive channels to keep up with advances in coil technology. Because digitization occurs in the RF coil, the channels available are determined by the coils, rather than the system. This enables plug and-play expansion of clinical capabilities without major hardware upgrades, resulting in lower lifecycle costs and improved economic value.

## PowerSave

PowerSave technology adapts gradient energy consumption to the system status to reduce power consumption, and saving money. PowerSave is one result of Philips' continuous drive to improve the sustainability of its products.

## Utilization services

Philips Utilization Services provides you with actionable insights into your department's operations and workflow. Rapid workflow improvement consultancy projects based on insights from Philips Utilization Services have shown stunning results with initial customers, with productivity increases of 10% or more, drastically reducing waiting lists and improving patient services and staff satisfaction<sup>9</sup>.

## First-rate care

Our global network of skilled personnel and worldwide spare parts availability helps maintain high uptime that supports you in delivering reliable imaging services to your patients. Recent independent reports ranked Philips MR as best-in-class in medical equipment and infrastructure in composite user satisfaction ratings.

## Count on us as your patients count on you

Staying on top of today's complex and ever changing healthcare environment is challenging enough. The last thing you need to be concerned with is keeping your care systems up and running smoothly.

At Philips, we work as one with your teams. We share their dedication to solve issues before they start and their drive to keep going day and night until the job is done. With us taking care of your systems you can focus on what really matters – delivering better care, to more people, at lower cost. Together we can create a healthier future.



dStream

Ingenia 1.5T S with dStream is designed for first-time-right imaging and better patient comfort for faster workflow,<sup>8</sup> and allows access to Philips education and skilled service personnel.

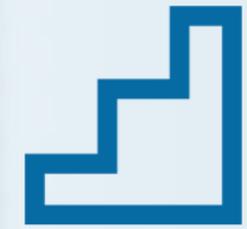




## Partnering with Philips to enhance your investment and expand your capabilities



Optimize



Enhance



Transform



Trade-In

We collaborate with you in the long-range planning of your medical imaging needs. With Philips SmartPath you can optimize, enhance, or transform your existing equipment so you have “like new” functionality throughout the whole lifecycle. You gain the most advanced enhancements in workflow, clinical capabilities and imaging quality with the equipment you already own.

Philips SmartPath is a partnership program that also helps you extend the life of your equipment. You can get the latest technology for a fraction of the cost or disruption of buying and installing new. If you prefer to replace your equipment with a new system, you can choose to trade in your current system at attractive terms. And you can conserve capex budget by selecting a financing option that suits your business need.

For more information check [www.philips.com/smartpath](http://www.philips.com/smartpath)