

MRI Newsletter

Staying at the forefront of innovation with Philips MRI

Summer edition 2016/2017

In this issue:

- 1. Ingenia MRI with In-Bore Ambient Experience Discover how Sound Radiology are offering an exceptional patient experience with their latest system
- 2. dStream SmartPath Upgrade Explore how Trinity MRI transformed their ageing equipment with a seamless upgrade
- 3. Clinical Case Studies Find out how mDIXON TSE creates diagnostic confidence in the clinical setting
- **4. MRI User Group Meetings** Join us, share your skills, learn from your peers and WIN!

What can you achieve with Ingenia MRI?

Patient experience is a huge piece of the MRI scanning puzzle. Put simply, a comfortable, more confident patient is easier to treat and the Philips Ingenia MRI with In-Bore Ambient Experience makes for an exceptional scanning experience. It's a purposefully designed, interactive healthcare environment that integrates architecture, specialist design and enabling technologies to boost patient cooperation and ease of examination.

Sound Radiology is the first MRI provider in South Australia to install this ground breaking technology.

Building an exceptional patient experience

In September 2015, Sound Radiology wanted to update their MRI facilities in line with the latest in imaging innovations.

Since installing the Ingenia 1.5T MRI, Sound Radiology is now delivering the best that MR has to offer. The technology has improved their workflow by minimising scan times and reducing patient anxiety and they're receiving more positive patient feedback than ever before.

To learn more about the Philips In-Bore Ambient Experience, please visit our website www.philips.com.au/healthcare



"We couldn't be happier with our MRI solution. We are hearing fabulous feedback on our imaging. Our patients particularly enjoy the ease of coming to us for MRI and have noted that the experience is like nothing they've ever seen before. Our staff also love how seamless it's been providing the best in MRI imaging without the lengthy scan times from before. Philips is the only provider who has invested in designing and installing a non-intrusive clinical suite which has enabled us to be an MRI leader in our state." — Cara Miller, CEO Sound Radiology

Upgrade with the latest in dStream technology

Find out why Trinity MRI took advantage of the SmartPath upgrade program

As imaging equipment ages, its ability to keep up with increased expectations declines. With a seamless upgrade to dStream digital broadband architecture, physicians can access a new level of image quality at remarkable speed and enjoy up to 40% more Signal to Noise ratio (SNR)*.

Trinity MRI in Auckland wanted to breathe new life into their 8 year old Achieva 3T TX system. Ensuring their facility was up to date with the latest technology available was crucial.

Transforming ageing equipment

Trinity MRI completed their dStream SmartPath upgrade in just two weeks.

Thanks to the increased SNR following the upgrade, the MR team are producing diagnostic images of greater quality and within shorter scan times. The new coil designs are also lighter and quicker to transfer, which has reduced idle time between patients.

* With dStream digital broadband compared to Achieva, a non dStream system



Philips Achieva 3T TX before dStream upgrade



Following dStream SmartPath upgrade



Philips Achieva 3T TX before dStream upgrade

Following dStream SmartPath upgrade

To find out more information about our SmartPath to dStream upgrade, please visit our website www.philips.com.au/healthcare or contact your local Philips representative.

"The advancements Philips has made are excellent. The addition of multivane XD, mDIXON, SWIp, pCASL, and Smart breast has enabled us to improve image quality as well as scan and diagnose pathologies faster. Philips' new workstation, the IntelliSpace Portal, is another wonderful step forward. The multimodality tumour tracking is extremely accurate and provides quicker post processing of perfusion sequences and reconstructions. This platform is a pleasure to use."

- Jeremy Morrison, Charge Magnetic Resonance Technologist, Trinity MRI

"We've seen significant improvements since our recent dStream upgrade. In particular, our new 32-channel head coil has enhanced brain imaging, and the T2 mDIXON has improved spine image quality and osseous and soft tissue pathology evaluations. The head and neck coil affords a much wider field of view, which is particularly helpful in brachial plexus imaging. Our ISP workstation allows rapid post-processing of perfusion and other data. The upgrade only took around 2 weeks and had a minimal impact on workflow. We are most happy with our decision to move to this platform."

- Maurice Moriarty, Neuroradiologist, Trinity MRI

Find out how mDIXON TSE creates diagnostic confidence in the clinical setting

For more than 30 years, researchers and clinicians have demonstrated the clinical value of fat suppression in MR imaging. More recently, robust fat-free imaging with the Philips mDIXON family of imaging methods has shown to be a useful clinical tool for a variety of clinical applications. This key benefit of homogenous fat suppression provides clinical confidence for reporting radiologists.

Another key benefit of mDIXON TSE is related to total imaging time. mDIXON TSE maintains equivalent scan times as traditional methods of fat suppression (SPIR, SPAIR) but has the added benefit of producing multiple image types in the one acquisition. This gives the ability to obtain images with and without fat suppression simultaneously.

Find out how Perth Radiological Clinic used mDIXON TSE to provide a more accurate clinical diagnosis in the following cases.

Case 1

Patient presented for routine follow up MR imaging post spinal surgery.

The standard sequences for this particular clinic are T1 and T2 Sagittal and Axial images with post gadolinium acquisition T1 FS Sagittal and T1 axial scans.

It can be seen that in the routine conventional post gad T1 SPIR Sagittal spine the metal screws hinder the routine spectral fat suppression and prevent the surrounding area to be visualised. The site then performed a T1 mDIXON TSE Sagittal in the same position. Due to the robust nature of the mDIXON fat suppression method the artefact is significantly reduced through the central canal, meaning the relevant anatomy can be visualised and in turn a more accurate diagnosis can be formulated.

Case 2

Patient presents with ongoing ankle pain for routine MR imaging.

Even with excellent homogeneity there are still some areas that are clinically challenging to produce reliable robust fat suppression. One of these areas is the foot/ankle.

In this particular case, there is clinical suspicion of bone bruising (bony oedema) in the medial malleolus. Due to the nature of the area and the potential for uneven fat suppression, the clinical suspicion is unconfirmed utilising conventional SPAIR fat suppression. This site ran a T2 mDIXON TSE Sagittal providing greater confidence in confirming the clinical suspicion of bone bruising in the medial malleolus.

To learn more about the clinical benefits of mDIXON TSE, please visit our website www.philips.com.au/healthcare or contact your local Philips representative.



Figure 1: Routine conventional post gadolinium T1 TSE SPIR Sagittal (A) compared with T1 mDIXON TSE Sagittal (B) of the lumbar spine performed on an Ingenia 1.5T



Figure 2: T2 TSE SPAIR Axial (A) and Sagittal (B) images of the ankle performed on an Ingenia 3.0T



Figure 3: T2 mDIXON TSE Sagittal acquisition confirming the presence of bony oedema in the medial malleolus performed on an Ingenia 3.0T

MRI user group meetings

In 2016, Philips hosted ten MRI User Group Meetings (UGMs) across Australia and New Zealand. It's been great to see our MRI users come together to share their clinical best practice knowledge and learning experiences.

Our UGMs are complimentary and cover a variety of clinical topics. In addition to learning from experts and your peers, our UGMs are designed to keep attendees up to date with the latest Philips innovations and advanced scanning techniques.

New - Clinical case study competition

At the most recent meeting in Melbourne, we introduced a clinical case study competition. This year's winner is **Kylie Rigby, Senior MRI Radiographer at Regional Imaging, Albury**. Congratulations Kylie!

Kylie submitted a case on Pelvic Congestion Syndrome & Ovarian Vein Imaging. Kylie developed a Time Resolved mDIXON MRA sequence on the Philips Achieva TX 3.0T to demonstrate Arterial and Venous flow.

As the winner, Kylie is taking home a Philips Sonicare DiamondClean electronic toothbrush.

Do you have an interesting case study or scanning technique you would like to share with your MRI peers? We are on the lookout for speakers in 2017! If you would like to share your story, please email us at **MRIapps@philips.com**.

Come along to our User Group Meetings in 2017

We are excited to once again be hosting a series of MRI User Group Meetings across ANZ in 2017. Be sure to come along to one in your capital city.

To find out more information and to register, please visit our website **www.philips.com.au/education**

2017 MRI User Group Meetings

11 February	Melbourne
25 February	Sydney
8 April	Brisbane
13 May	Perth
10 June	Auckland
26 August	Melbourne
14 October	Auckland
10 November	Sydney





Philips

65 Epping Road North Ryde NSW 2113 Tel: 1800 251 400 (Australia) Tel: 0800 251 400 (New Zealand)

www.philips.com.au/healthcare © 2016 Koninklijke Philips NV. All rights reserved. Specifications are subject to change without notice. Trademarks are the property of Koninklijke Philips NV. (Royal Philips) or their respective owners.

