

**INNOVATION BY DESIGN** For over 130 years, Toshiba has led the world in developing technology to improve the quality of life. This *Made for Life™* commitment is reflected in our family of leading-edge imaging systems for MRI, CT, ultrasound, cath labs, X-ray and nuclear medicine. From creating our first X-ray tube in 1915 to introducing the first dynamic volume CT scanner in 2007, Toshiba continues to build upon our legacy with technological innovation that improves patient care while providing lasting quality for a lifetime of value.

## A Services Partner You Can Count On

Toshiba has the expertise and resources you need to manage the costs of healthcare without compromising its quality.

### InnerVision® Plus

Remote system diagnostics to catch problems before they interrupt the delivery of care

### InTouch Center™

Centralized, 24x7 applications and services support expertise

### Technical Assistance

Highly trained engineers are ready to service your Toshiba equipment on site

### InTouch Agreements

Services support contracts tailored to your needs

### Parts Support

Delivering quality parts when and where you need them, 24x7, 365 days a year

## Toshiba — A History of Leadership

- 1875 • Founding of Toshiba
- 1915 • First X-ray Tube
- 1989 • First Helical CT Scanner
- 1993 • First One-million-pixel CCD
- 1997 • First Open, Superconducting Magnet
- 1998 • Quietest 1.5T MR System
- 1998 • First generation of non-contrast MRA techniques
- 2000 • First All-digital Multipurpose X-ray System
- 2001 • Second generation of non-contrast MRA techniques
- 2003 • First 64-slice CT Scanner
- 2003 • Ultra-short 1.5T MRI System
- 2005 • Introduced 3rd generation of non-contrast MRA techniques
- 2006 • First 128 element MR system
- 2006 • Fourth generation of non-contrast MR techniques
- 2007 • First Dynamic Volume CT Scanner
- 2007 • First 71 cm aperture in an open, ultra-short bore MR system



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**TOSHIBA**  
Leading Innovation >>>

*Vantage Titan™*  
MR Without Compromise



# Revolutionary open-bore technology without compromise

*With a unique combination of outstanding homogeneity, a 71 cm aperture and a 1.5T ultra-short, open-bore, Vantage Titan™ provides outstanding image quality without compromise. Titan also utilizes powerful gradients (30 mT/m SR 130) to handle your most demanding imaging sequences. For your patients, Toshiba's proprietary Pianissimo™ technology reduces acoustic noise while our integrated coil solution and feet first imaging make Titan the new standard in MR imaging.*

## **Largest**

Image more of your patients with the largest clinical field-of-view (FOV) of any ultra-short, open-bore system (55 x 55 x 50 cm).

## **Flexible**

Powered by Atlas technology: Engineered for ease of use and patient comfort while increasing operational workflow, Atlas coils are lightweight and easy to position.

## **Comfort**

Pianissimo noise reduction, feet first imaging and a 71 cm aperture make Titan extremely patient friendly.

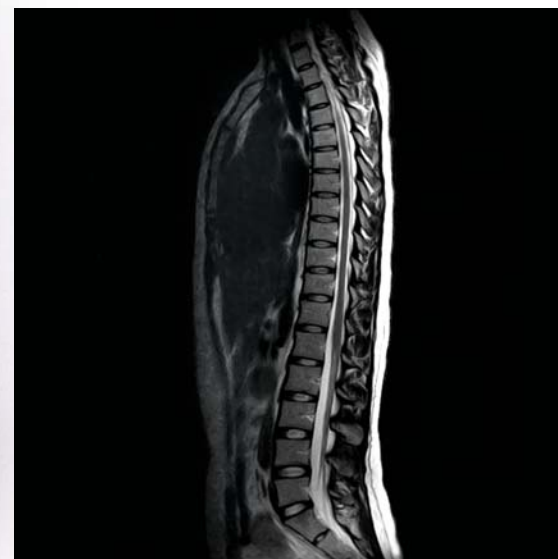
## **Safety**

Four generations of non-contrast techniques are incorporated to capture the best MR Angiography (MRA) images without contrast.

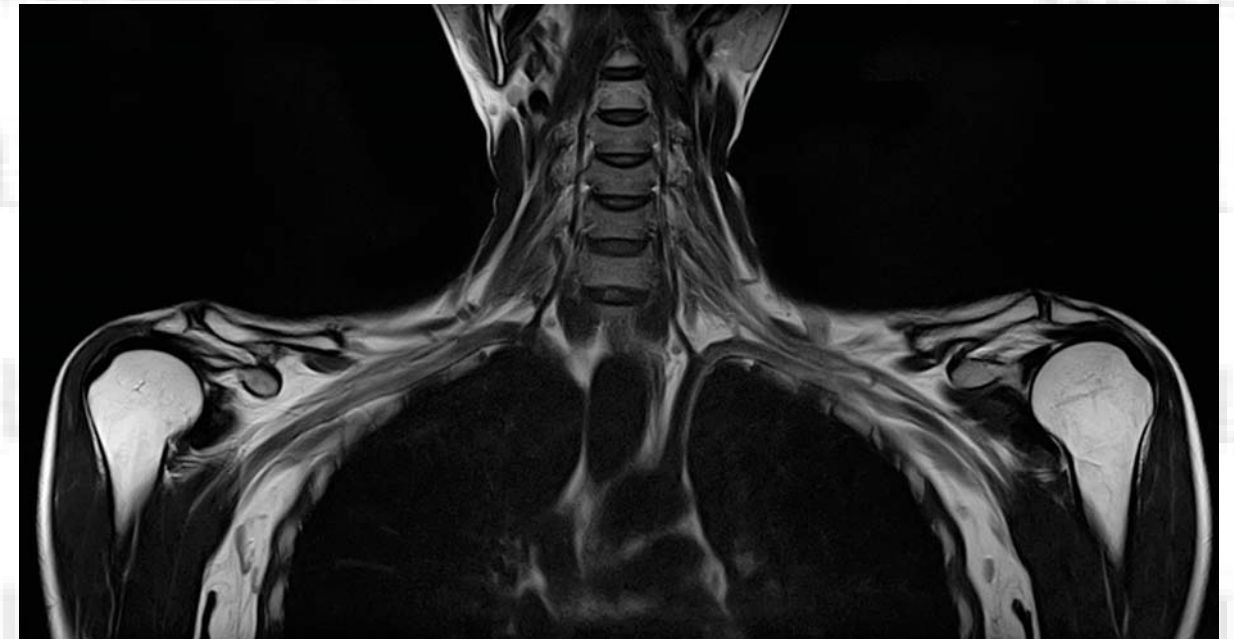


# One exam, one field-of-view

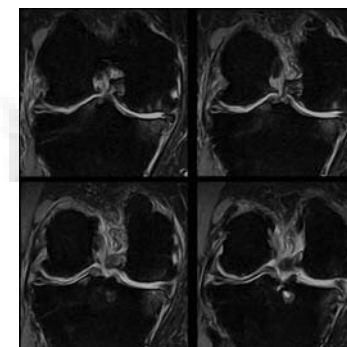
Image more of your patients with the largest clinical field-of-view of any ultra-short, open-bore system (55 x 55 x 50 cm). A compromised field-of-view equates to multiple steps for one exam. With Titan's uncompromised field-of-view, you can image complete anatomies in one easy step.



No Z-axis compromise at 50 cm.



55 cm coverage in both X and Y axes.



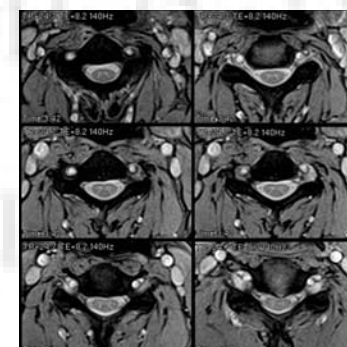
Fat-Free knee.



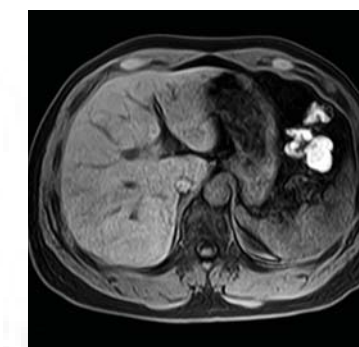
Fresh Blood Imaging (FBI) non-contrast.



Contrast-free Improved Angiography (CIA).



Steady-State Free Precession (SSFP) Cervical.



Fat-Free abdomen.



Time-SLIP renal non-contrast.

# Made for more of your patients

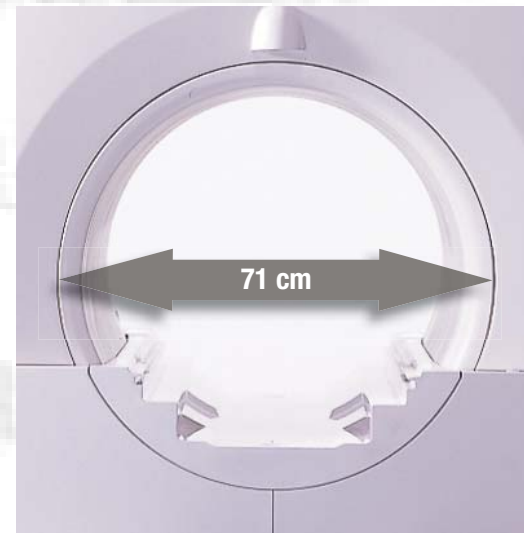
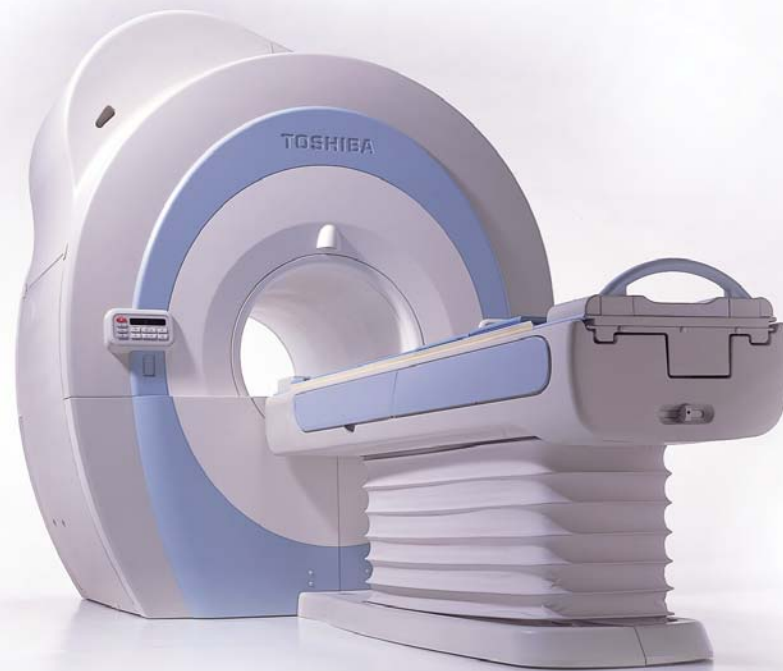
Toshiba designed Titan to maximize patient comfort. The two biggest issues that patients have with MRI are claustrophobia and acoustic noise. Titan's open-bore design gives the patient a feeling of openness, and our patented Pianissimo™ technology quiets the MR environment. With Pianissimo, an MRI scan no longer sounds like a jackhammer; instead the patient hears a quieter sequence as the scanner acquires the image.

## Titan takes three steps to reduce noise:

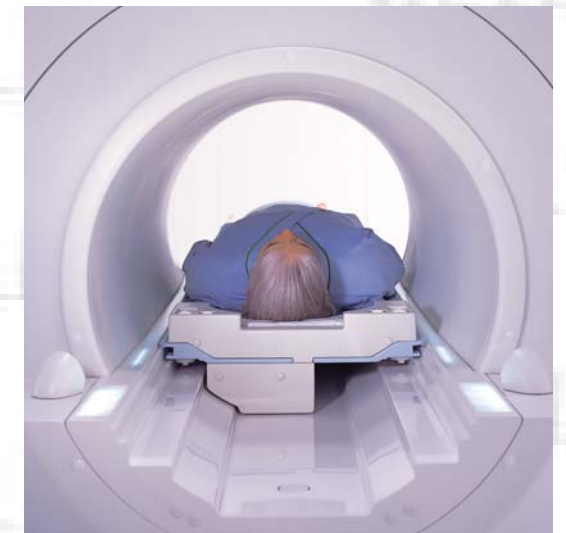
**Vacuum Chamber:** The gradient coil is vacuum-sealed, which reduces acoustic noise.

**Sound-Dampening Material:** Toshiba-patented Pianissimo technology incorporates special insulation between the vacuum vessel and the magnet to dampen sound and minimize the vibrations transmitted to the magnet.

**Silent Pulse Sequences:** Titan also offers special sequences that further reduce gradient noise. These allow even the most sensitive patients to have a pleasant exam experience.



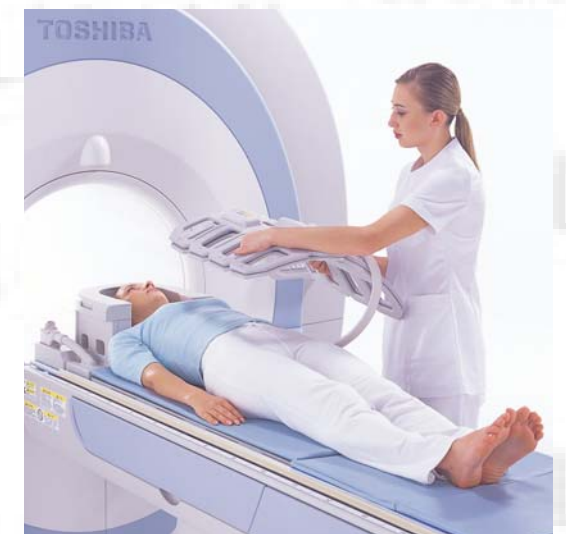
**Large bore:** Claustrophobic and larger patients benefit from the largest MR aperture at 71 cm.



**More room:** Comfortable patient environment and flexible platform for off iso-center imaging.



**Feet-first imaging:** The 32-element Atlas SPEEDER™ Spine Coil is integrated into the patient table and can be positioned at either end. This allows for feet-first orientation when scanning the thoracic spine and other anatomies below the neck, increasing patient comfort and minimizing feelings of claustrophobia.



**Lightweight body coil:** Titan's ultra-lightweight, 16-element Atlas SPEEDER Body Coil covers the entire 55 x 55 x 50 field of view. Because of its flexible and soft structure, this coil provides the maximum in patient comfort.

# Powered by Atlas technology

Engineered for ease of use and patient comfort while increasing operational workflow, Atlas coils are lightweight and easy to position. Compared to conventional coils, Atlas coil design utilizes a unique combination of smaller elements, which deliver a higher signal-to-noise ratio, and larger elements for greater penetration. By simultaneously integrating up to 128 elements, Titan provides better image quality throughout the imaging volume.

## Positioning flexibility

- ▶ Multiple coils can be used simultaneously creating flexibility for operators and comfort for patients
- ▶ Convenient port locations mean that a large segment of exams can be performed feet first
- ▶ 205 cm of table movement (optional) coupled with a sliding spine coil provides maximum flexibility for operators and feet first imaging for patients

## Integrated workflow solution

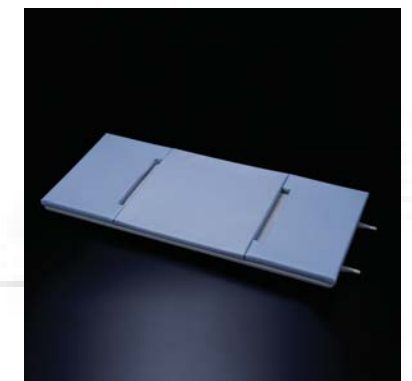
Atlas coils are uniquely designed to improve workflow and patient comfort. Titan easily handles multiple studies by allowing you to position the patient and utilize the coils you need in one easy step.



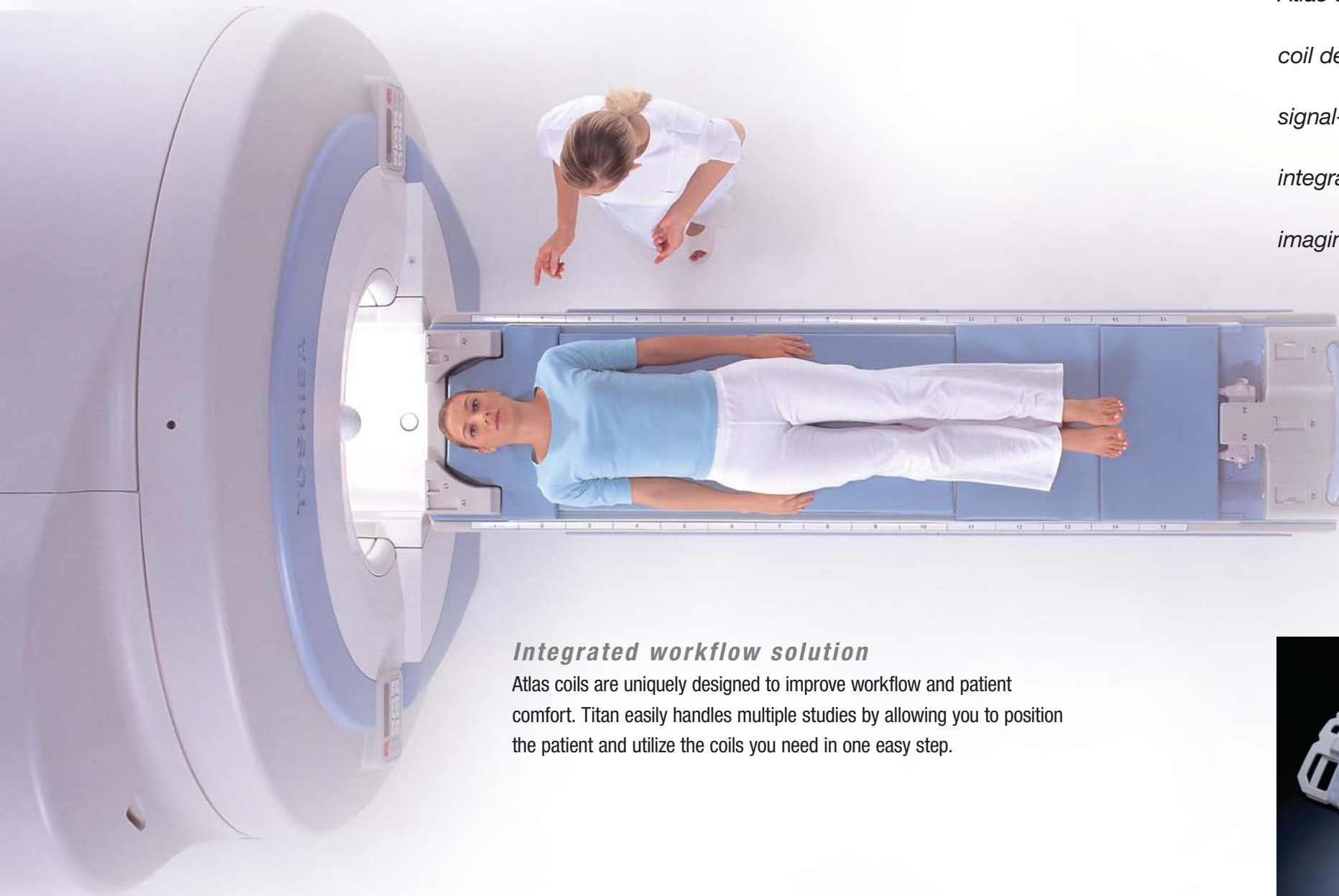
Atlas SPEEDER Body Coil (16 elements).



Atlas SPEEDER Head Coil (14 elements).



Atlas SPEEDER Spine Coil (32 elements).



# Enhance workflow and networking with exceptional performance

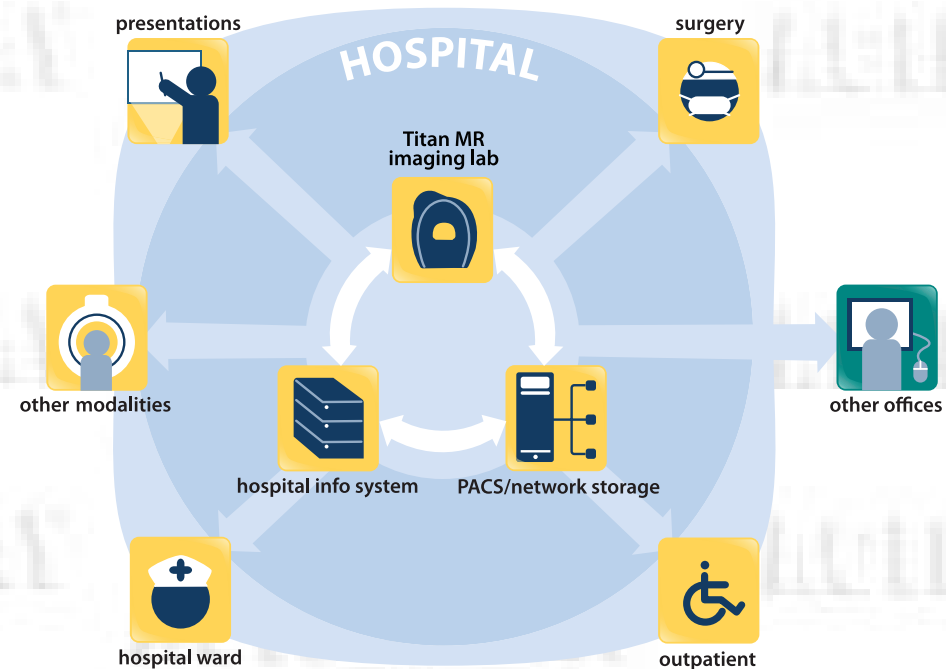
Titan's integrated data management system makes it easy for operators to review, archive and share exams. With a wide range of networking and storage functions, Titan integrates seamlessly into all clinical environments, improving workflow and enhancing ease of use.

## Patient and image management system

Enables efficient printing, storage and network transfer of patient data, still images, clips and structured reports.

## DICOM connectivity

Supports all seven DICOM service classes for connectivity with the broadest range of hospital networks.



## IHE profiles supported

- ▶ Scheduled Workflow
- ▶ Patient Information Reconciliation
- ▶ Portable Data for Imaging
- ▶ Evidence Documents
- ▶ Consistent Presentation of Images
- ▶ Charge Posting
- ▶ Presentation of Grouped Procedures

