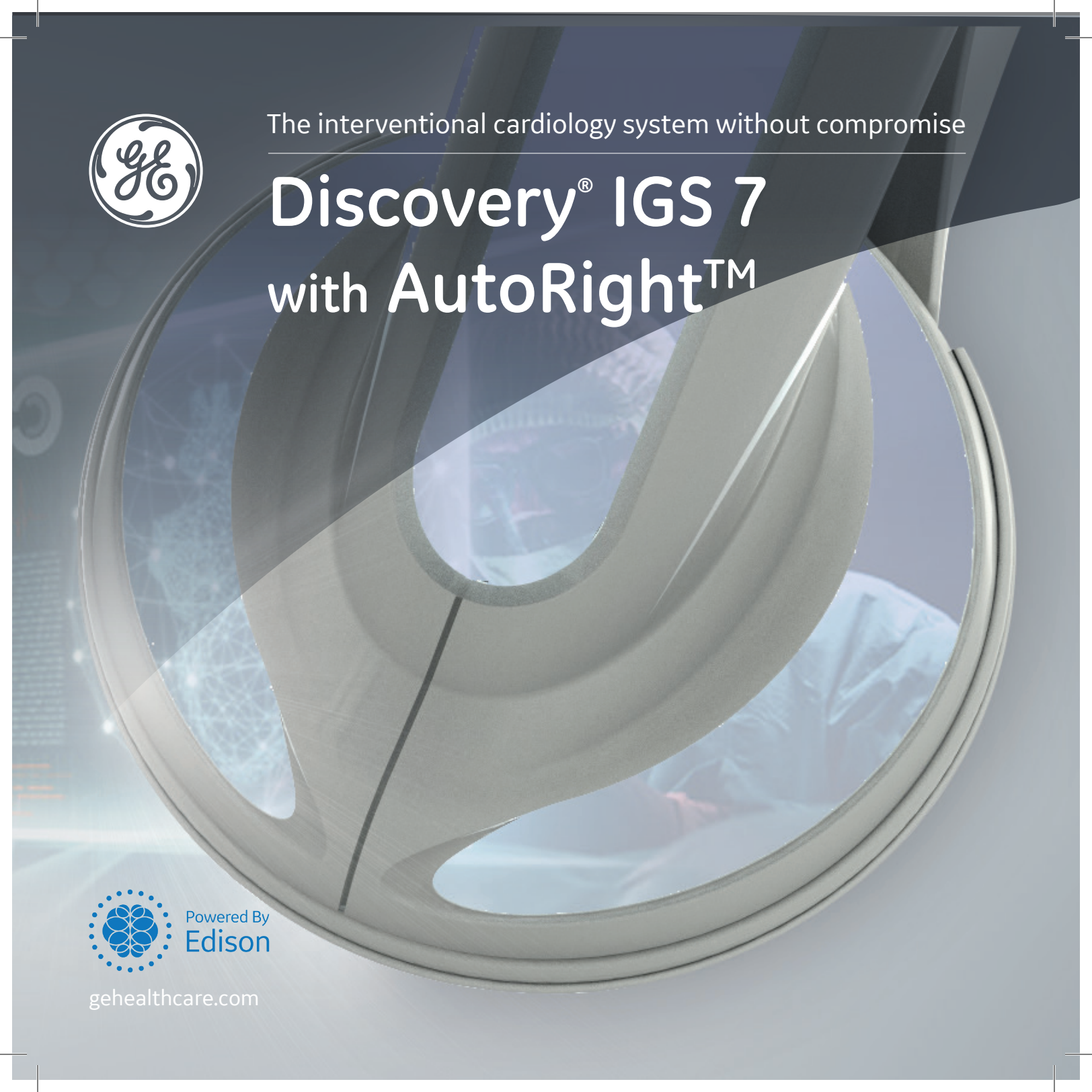

The interventional cardiology system without compromise
Discovery® IGS 7
with AutoRight™
Powered By
Edison
gehealthcare.com


STOP
AutoRight™
GE Healthc

Discovery IGS 7: The imaging technology designed for the challenges of today and the promise of tomorrow.

The Discovery IGS 7 mobile robotic gantry brings intuitive image guidance and complete workspace freedom to the cath lab, providing unparalleled flexibility in one space for cardiovascular interventions ranging from routine diagnostic catheterizations to complex structural heart procedures.

With Discovery IGS 7, you no longer have to choose between simple and complex. Freedom has arrived.

The Cath Lab Without Compromise.

Disruptive Design

- Improved patient access
- Greater operator comfort
- Fast workflow



Exceptional Coverage

- Steep angulations[1] without compromising coverage

Outcome-driven Advanced Applications for Diagnostic and PCI Procedures

- Quantitative analysis package with the OneTouch QA tool
- PCI ASSIST[4] for improved visibility and stent deployment

Outcome-driven Advanced Applications for Structural Heart Procedures

- Valve ASSIST 2[8] to simplify CT planning and help reduce X-Ray dose and volume of contrast media[9, 10]

Optimized Dose and Image Quality

- Revolution digital flat panel detector with up to 84% DQE[2]
- The lowest possible dose with extraordinary image quality

Integrated Lab

- Providing expertise and solutions so information can flow across the healthcare system

Reliability

- Proactive monitoring, 24/7 remote access, and unparalleled technological expertise minimize down time


STOP
AutoRight™

Disruptive Design

No tradeoffs. No compromises. Just unparalleled flexibility.







Enhanced Patient Access

Discovery IGS 7's unique laser-guided, mobile robotic gantry unleashes the full potential of the imaging suite. Its offset C-arm allows 180-degree patient access, including radial, apical, jugular and femoral entrance; providing more space at the patient's head; and eliminating awkward operator positioning, thus improving workflow.

Room for Multidisciplinary Teams

Discovery IGS 7 is the only robotic gantry on wheels, the only one that is not floor or ceiling mounted. Not only does this eliminate the need for costly ceiling installation, but it enables multidisciplinary teams to complete procedures with unobstructed access. This is critical in today's complex cardiovascular procedures, which require larger, multidisciplinary teams such as echocardiography and anesthesiology, each with their own monitoring equipment.

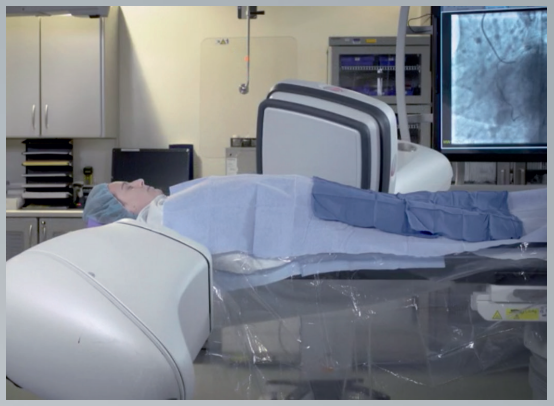
Peripheral Coverage

With head-to-toe imaging capability and the use of left and right customizable parking locations for patient access, the Discovery IGS 7 is designed to accommodate any procedure, providing the freedom for optimal monitor positioning without compromise.


STOP
AutoRight

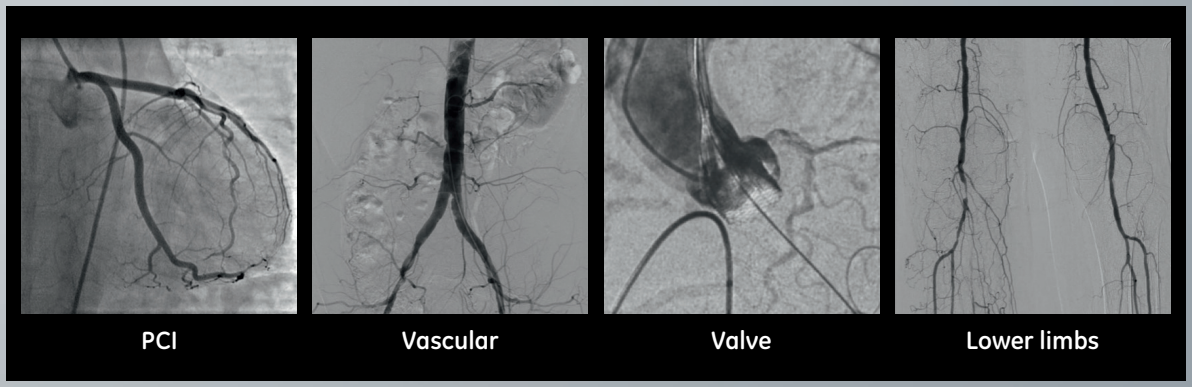
Exceptional Coverage

Steep cardiac angulations provide unlimited flexibility.

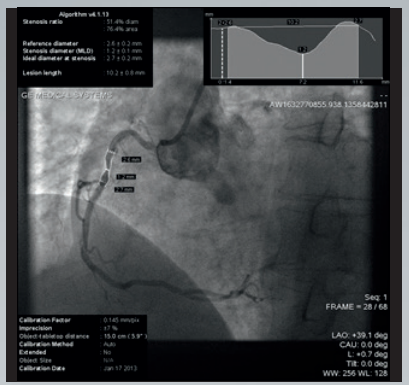


Wide bore C-Arm

The 31 x 31 cm (12.2 in) detector with its wide-bore design allows steep angulations, such as the spider view for PCI, without compromising coverage for peripheral vascular procedures like bilateral runoffs. It also improves access and visibility for larger patients.

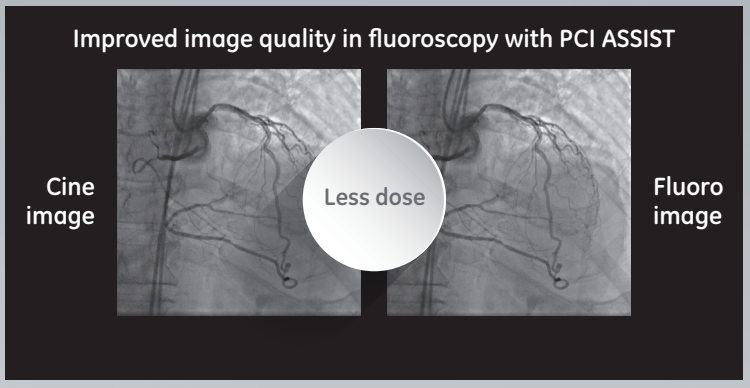


Outcome-Driven Advanced Applications for Diagnostic and PCI Procedures



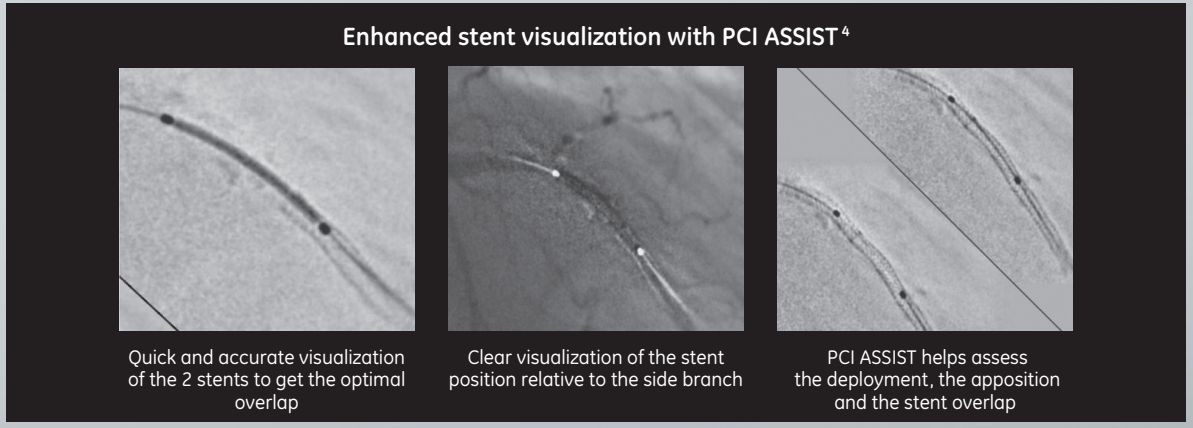
OneTouch QA.

This tool puts quantitative analysis package at your fingertips, assisting with distance measurement and stenosis ratio to help plan the optimal sized stent or device required.



PCI ASSIST.

This application combines several solutions that can help improve visualization of stent deployment as well as anatomical visibility by up to 85% in moving arteries at the same dose, and up to 75% in larger patients.[3,4]



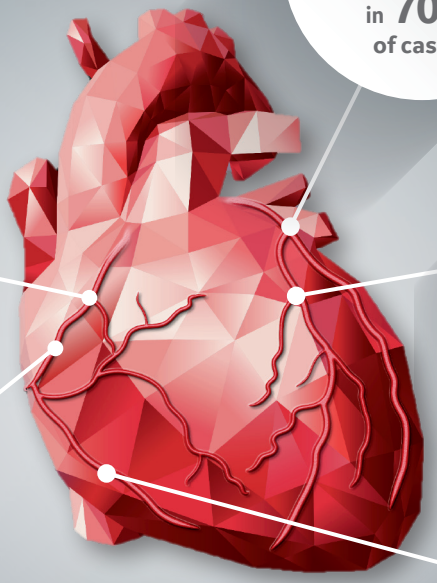
Demonstrated Outcomes in Coronary Angiography and PCI

Stent enhancement tools help improve clinical outcomes [5]

-7.1pts restenosis [5]

-5.3pts Total Length restenois [5]

-7.2pts TLR-MACE [5]



PCI ASSIST improves visualization of the relation of the stent to the vessel in **70%** of cases [6]

PCI ASSIST helped decide the course of intervention in **40%** of cases [6]

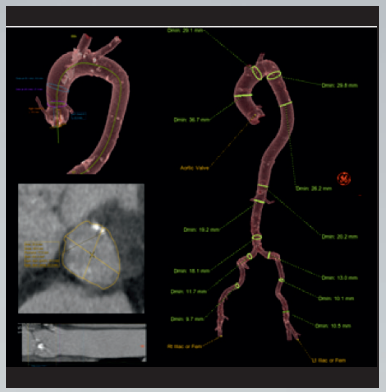
Up to **+85%** IQ improvement [3] with PCI assist at same dose

Centricity cardio workflow helped reduce the time to report by **60%** [7]

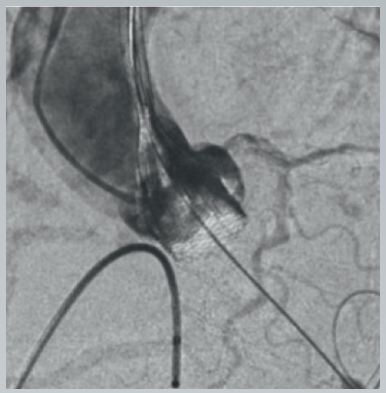
Outcome-Driven Advanced Applications for Structural Heart Procedures

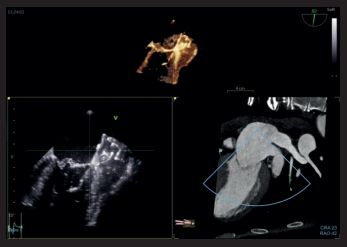
Valve ASSIST 2 [8].

Helps simplify CT planning and improve outcomes with increased device sizing accuracy and the ability to assess regurgitations due to valve mispositioning, all while helping reducing x-ray dose and contrast media volume. [9, 10, 11]





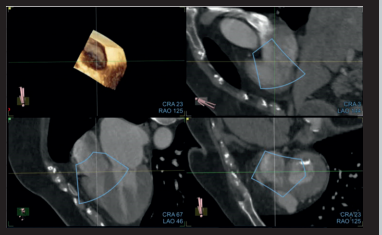




Left Atrial Appendage closure



Mitral Valve Repair / Replacement

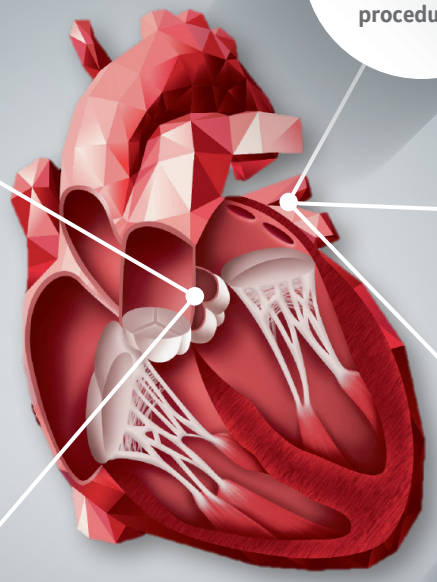


Tricusid Valve therapies

Valve ASSIST 2 and CT Fusion,[12] complementary for complex Structural Heart interventions.

Fusion of CT images together with live X-ray and echo images help see both the anatomy in a large field of view and region of interest at the same time. Common reference helps simplify transeptal puncture and device navigation.

Demonstrated Outcomes in Structural Heart Interventions with Valve ASSIST 2



-33%
Volume of contrast media in TAVI procedures[9]

-78%
Volume of contrast media in LAAC procedures[11]

-28%
Procedure time in LAAC procedures[11]

-25%
fluoroscopy time in LAAC procedures[11]

-33%
X-Ray dose in TAVI procedures[10]


Discovery
Output = V2 + M2
kVp
mA
ms
Focal spot
Spectral filter
Detector Dose

AutoRight™,*
Intelligence inside. Right Image. Right Dose. Automatically optimized.



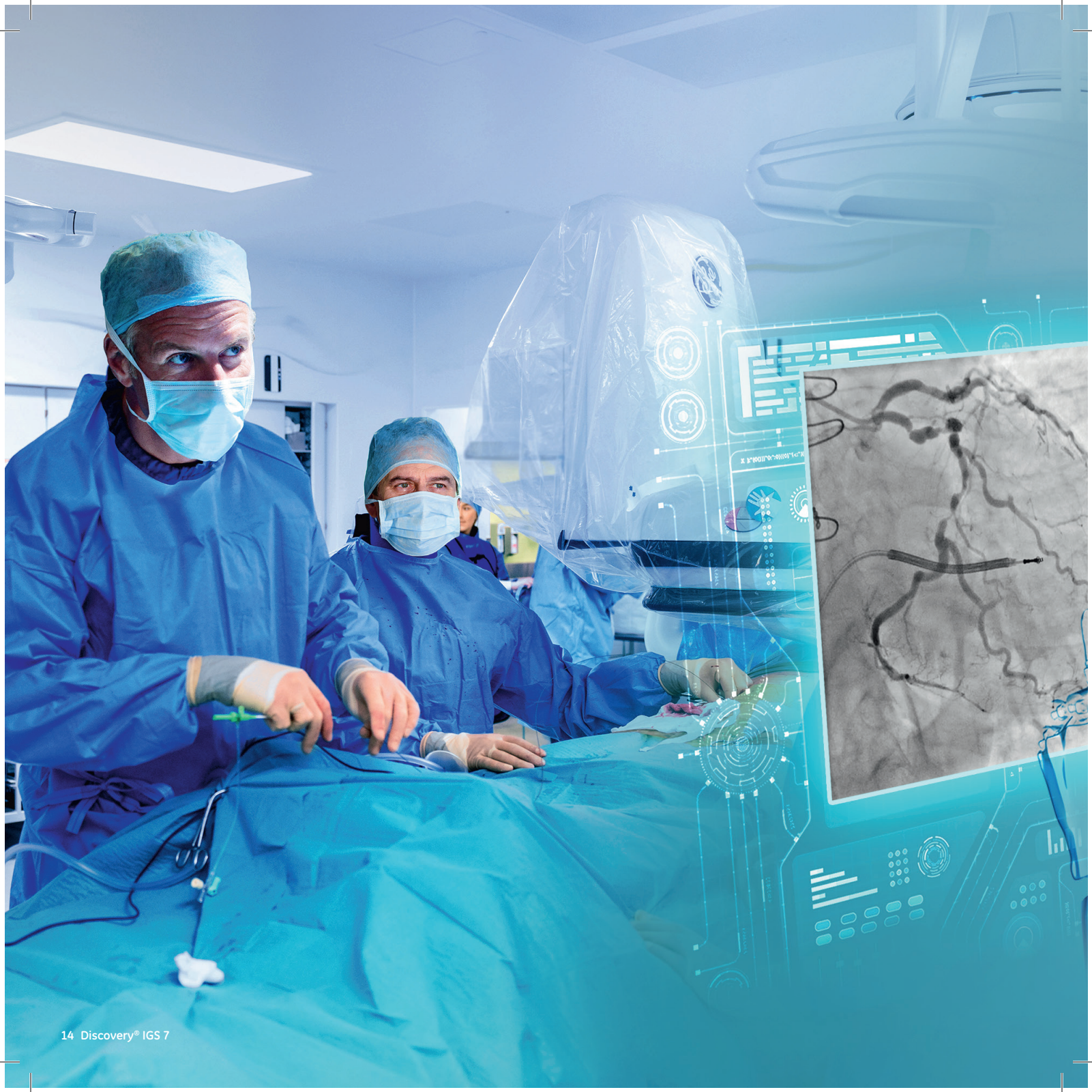
AutoRight, 1st interventional intelligent image chain

AutoRight[13] is the industry's first AI-driven[14] , neural network-based image chain powered by Edison, that automatically optimizes image quality and dose parameters for you, in real time.

AutoRight is designed to deliver repeatable & fast choices, making image optimization fully automated, dynamically throughout the entire procedure, regardless of patient size, anatomy or C-arm angulations.

- Less manual adjustment means more time for operators and better support for the interventionalist to treat patients.
- Automation makes IQ/dose optimization faster, more accurate & repeatable, helping reduce trade-offs.

* Product may not be availabe in all markets.
Refer to your sales representative for more information.



AutoRight™,*
Artificial Intelligence that assists you.



AutoRight makes the machine an integral part of the team, capable of relieving clinicians and technologists of most of the tedious yet complex task of optimizing image quality and dose, helping them focus their attention on the procedure, leveraging every second to bring their clinical expertise to what matters most: saving patients' lives.

* Product may not be available in all markets.
Refer to your sales representative for more information.



Optimized Dose and Image Quality

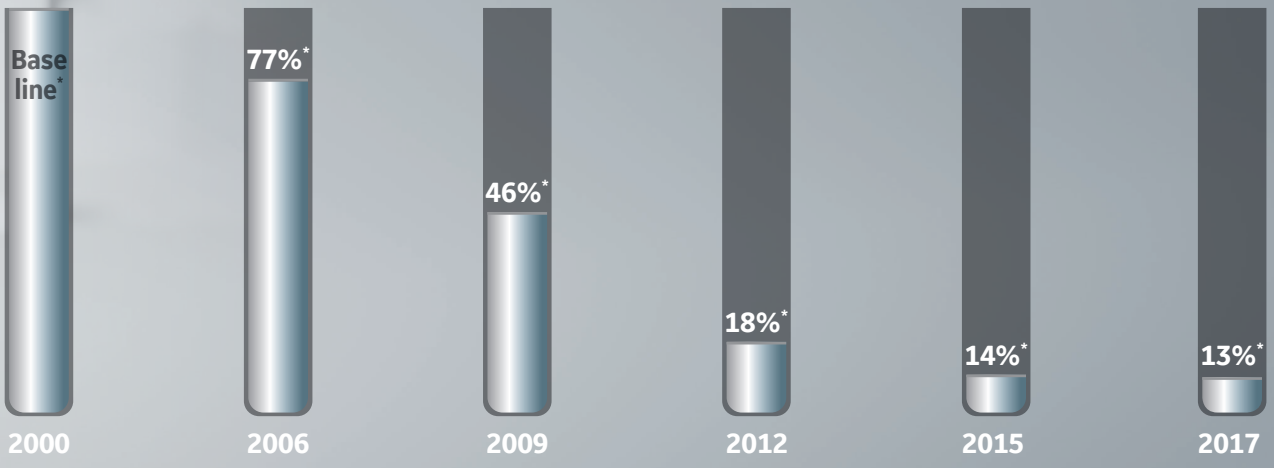
Lowest possible dose; best possible image quality.

The Discovery IGS 7 is designed to provide the best image quality at the lowest possible dose, a central component of the GE Healthcare philosophy. Our goal is to create the safest possible environment for staff and patients. Through our innovation, we have slashed the radiation dose by up to 87% since 2000.

EFFICIENT

Up to
87%
Dose reduction since Innova 2000

* Dose rate Fluoro FOV 20cm Reference Point distance

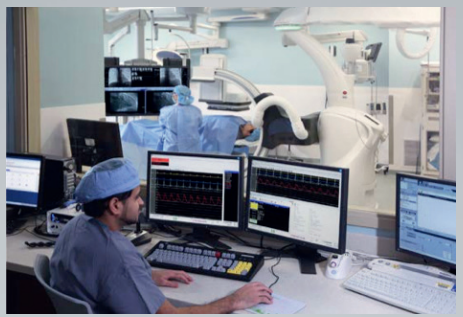


Year of platorm introduction

The Integrated Lab

Helping Information flow across the health care system.

From data collected at the point of care and third-party imaging integration through DICOM structured reporting, the integrated lab provides expertise and solutions so information can flow across your healthcare system.



Hemodynamic Recording

Mac-Lab, with its tableside, touchscreen controls, provides the central convergence point for images, waveforms, and data from multiple sources, helping drive clinical throughput in high-speed, high-volume labs.



Open architecture

We deliberately developed Discovery IGS 7 with an open architecture foundation to accommodate images, data, and video sources from multiple vendors and allow co-registration.



Multi-modality approach

IINTERACT View X[15] for connected care with echocardiography in the cath lab enables the display of CT/X-ray images on the echo screen to help improve communication between the heart team members. Now the echo team and cath team can see the same X-ray and echo image at the same time on their respective equipment. This improved workflow can help speed up the procedure.

Centricity Cardio Workflow
Helped reduce reporting time by **60%** saving about **15 mins** per patient [7]

Reliability

Minimizing downtime, increasing productivity.

The Discovery IGS 7 is built to maximize productivity and minimize downtime, no matter how busy your cath lab is. With our OnWatch™ predictive monitoring, we can anticipate potential issues before they arise. If anything does happen, our 24/7 InSite™ remote service allows lightning-fast diagnostic and repair to get you up and running again. If we need to come on site, we can arrive in less than two hours thanks to our speedy and knowledgeable technicians.*

That's why we can guarantee up to 99% continual operating time.*



Remote resolution

24/7 InSite™ remote service for faster diagnostics and repair.



Predict

Anticipate potential issues with OnWatch™ proactive monitoring.

-70%
reduced onsite repair time thanks to Insite™ remote assistance**



Expertise

Up to **99%*** uptime guarantee.
Historic uptime of IGS 7 Series install base is **99.87%****.

-38%
downtime reduction thanks to OnWatch™ proactive monitoring**



It's all about speed

As low as **2 hours*** maximum onsite intervention time guaranteed.

* Service offering may vary according to the chosen contract and the region.
** Data from GE Healthcare internal validated documentation.

About GE Healthcare
GE Healthcare provides transformational medical technologies and services to meet the demand for increased access, enhanced quality and more affordable healthcare around the world. GE (NYSE: GE) works on things that matter - great people and technologies taking on tough challenges. From medical imaging, software & IT, patient monitoring and diagnostics to drug discovery, biopharmaceutical manufacturing technologies and performance improvement solutions, GE Healthcare helps medical professionals deliver great healthcare to their patients.

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GE Healthcare Asia Pacific
Tokyo, Japan

GE Healthcare ASEAN
Singapore

GE Healthcare China
Beijing, China

GE Healthcare India
Bangalore, India

Data subject to change.

Marketing Communications GE Medical Systems Société en Commandite Simple au capital de 65.146.245 Euros

283 rue de la Minière – 78530 Buc Cedex France RCS Versailles B 315 013 359 A General Electric company, doing business as GE Healthcare

gehealthcare.com

1. Refers to IGS 730 configuration.
2. DQE stands for Detective Quantum Efficiency. DQE at Record dose (DSA 175 nGy) : 84% and DQE at fluoro dose (8.8 nGy) : 81%. DQE values given are typical at f = 0 cycles/mm with RQA5 conditions as defined by IEC6220-1-3 standards.
3. Improvement vs. same test without PCI ASSIST option. IQ & visibility improvement is measured on Innova IGS530 with phantoms using various Plexiglas Thicknesses, acquisition parameters and the NEMA spoke wheel tool (ref 1), calculating the ratio of the contrast of the moving wires to the background noise level. The amount of IQ improvement related to PCI ASSIST depends on the acquisition parameters, clinical task, patient size, amount of motion in the image, anatomical location, and clinical practice. Ref1: A new tool for benchmarking cardiovascular fluoroscopes; S. Balter, Radiation Protection Dosimetry, Vol. 94, No. 1–2 pp. 161–166 (2001). Applicable to Innova IGS 5 (IGS 520, IGS 530 configurations), Innova IGS 6 (IGS 620, IGS 630 configurations) and Discovery IGS 7 (IGS 730 configuration).
4. PCI ASSIST solution includes StentViz and StentVesselViz, features of Interventional X-ray system Discovery IGS 7.
5. Effect of StentBoost imaging guided percutaneous coronary intervention on mid-term angiographic and clinical outcomes : www.ncbi.nlm.nih.gov/pubmed/23332899.
6. DOC1683165 - Clinical evidence generation study based on Columbia images. The Statements by GE's customers described here are based on results that were achieved in the customer's unique setting. Since there is no " typical " hospital and many variables exist i.e..g. hospital size, case med , there can be no guarantee that other customers will achieve the same results. – Method: Assessment of clinical benefit of StentVesselViz: => - Independent assessment of each sequence by 6 experienced interventional cardiologists; - Assessment done in 2 steps by each reviewer:
   1 - Conventional post-deployment angiogram alone x 11 clinical cases.
   2 - Angio + SVV sequence x 11 same clinical cases. Results are based on - Consensus of 5/6 operators.
7. JB54813XXd – Nuremberg Clinic case study.
8. Valve ASSIST 2 solution includes TAVI Analysis, HeartVision 2 and requires AW workstation with Volume Viewer, Volume Viewer Innova. These applications are sold separately. Refers to features of Innova IGS 5, Innova IGS 6, Discovery IGS 7 and Discovery IGS 7 OR.
9. Shafiq, et al. Effect of a new enhanced fluoroscopy technology (Valve ASSIST 2) on outcomes in patients undergoing trans-catheter aortic valvular replacement. TCT 2017; Abstract.
10. Overtchouk, et al. Advanced image processing with fusion and calcification enhancement in transcatheter aortic valve implantation: impact on radiation exposure. Interactive CardioVascular and Thoracic Surgery (2018) 1–8. doi:10.1093/icvts/ivy136.
11. Roy, et al. Novel Integrated 3D Multi-Detector Computed Tomography and Fluoroscopy Fusion for Left Atrial Appendage Occlusion Procedures . Catheter Cardiovasc Interv 2017; Mar 17, DOI:10.1002/ccd.26998.
12. CT Fusion requires Vivid™ E95 system, sold separately.
13. AutoRight refers to intelligent image chain features of GEHC's Interventional x-ray systems, from image acquition to image processing and display, available on Innova IGS 5, Innova IGS 6, Discovery IGS 7 and Discovery IGS 7 OR.
14. Based on competitive research, among major players in interventional imaging.
15. INTERACT View X is a connection kit to display Interventional images on the GE Ultrasound system display. Requires Vivid E95 systems or Vivid S70N systems sold separately. Requires Interventional X-ray systems Innova IGS 5, Innova IGS 6, Discovery IGS 7 or Discovery IGS 7OR.