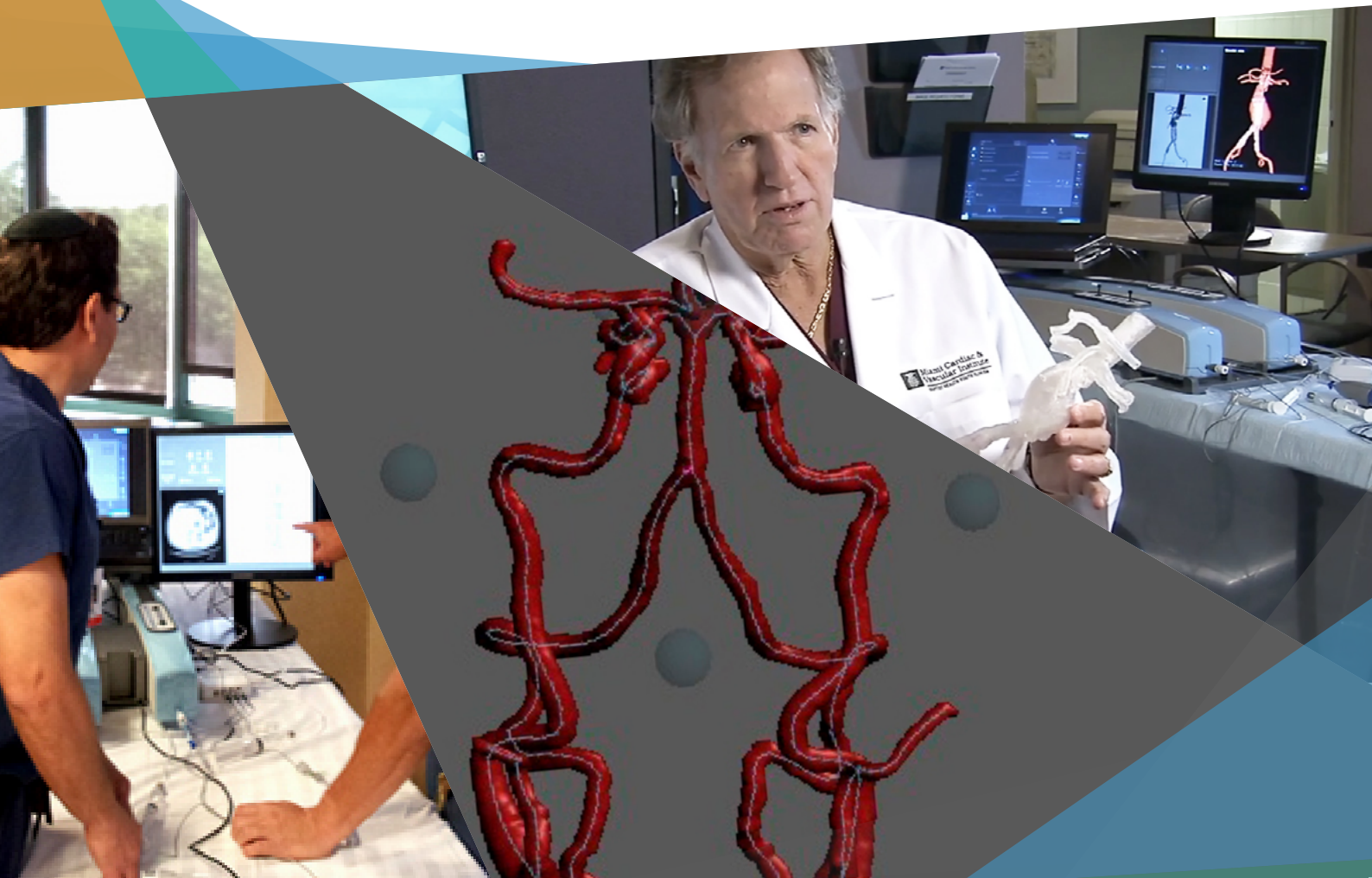




PROcedure Rehearsal Studio™





A New Level of Preparedness for Endovascular Procedures

PROcedure Rehearsal Studio unique capabilities create a bridge between the world of imaging and medical devices. The unique FDA cleared software allows clinicians to create a patient specific 3D digital model based on a patient's CT.

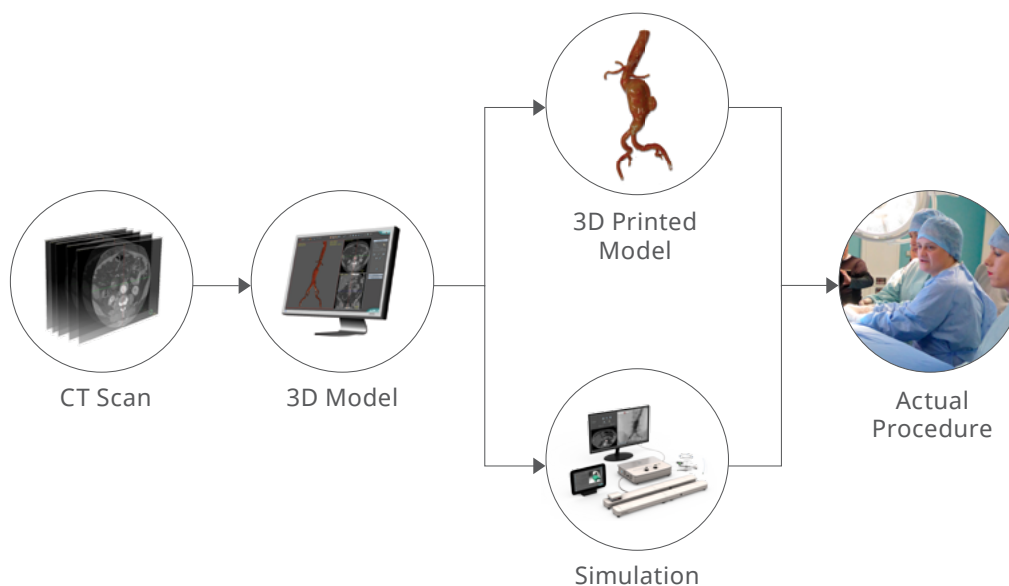
3D digital models can be exported to a virtual simulation environment or in the form of STL* (stereolithography) files for use in wide variety of applications, including 3D printing and CAD software for the purpose of pre-operative surgical planning.

VASCULAR SEGMENTATION

Innovative technology provides quick automatic segmentation of relevant vasculature with all the standard functionality of vascular imaging and analysis workstations.

HANDS-ON

Patient specific 3D digital models can be exported to a virtual simulation environment. The simulation environment, together with tactile sensation and realistic device handles, help provide clinicians with the ultimate hands-on experience of endovascular procedures.



The PROcedure Rehearsal Studio™ (PRS) allows clinicians to create a patient specific 3D digital anatomical model based on a patient's CT for the purpose of pre-operative surgical planning.

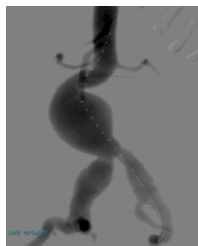
One Platform - Multiple Benefits

- Provides efficient platform for pre and postoperative debriefing.
- Simplifies procedure planning.
- Increases confidence when performing real procedures.
- May reduce procedure time and patient exposure to risks.
- May decrease amount of contrast and tools used.
- Enhances intra-staff collaboration.
- Improves communication with patients and their families.
- Expands library of training cases.
- Enables easy introduction of new tools and technology by medical device manufacturers.

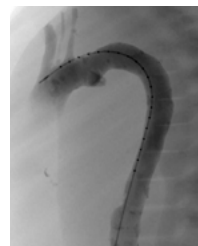
Available Applications



Carotid Intervention



Endovascular Aneurysm Repair (EVAR)



Thoracic Endovascular Aneurysm Repair (TEVAR)



Cerebral Intervention

"PRS before EVAR can be used in different hospital settings by teams with various EVAR experience. It reduces perioperative errors and the number of angiograms required to deploy the stent graft, thereby reducing delays. Ultimately, it may improve patient safety and procedural efficiency."

Desender, Van Herzele, Lachat, Rancic, et al. "Patient-specific Rehearsal Before EVAR- Influence on Technical and Nontechnical Operative Performance. A Randomized Controlled Trial." *Ann Surg*. 2016 Nov; 264(5): 703-709



"The PROcedure Rehearsal Studio provides a platform to practice and optimize procedures using personalized patient data in advance of performing live cases, assuring an unparalleled opportunity to streamline all aspects of the actual procedure, improve patient safety, and reduce the use of additional costly devices that are often needed when procedures are unable to be rehearsed."

John H. Rundback, MD, FAHA, FSVM, FSIR
Medical Director, Interventional Institute
Holy Name Medical Center, Teaneck, NJ

Healthcare Solutions

3D Systems is a pioneer for healthcare solutions that improve outcomes which benefit both patients and surgeons. Our global team works with customers to help navigate technologies and provide support for surgical planning, training, device design, personalized medical technologies and 3D printing. We are dedicated to helping medical professionals train for, plan and practice complex medical procedures.

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