

STRUCTURAL HEART PROCEDURAL SR TEMPLATE

WG-01/12

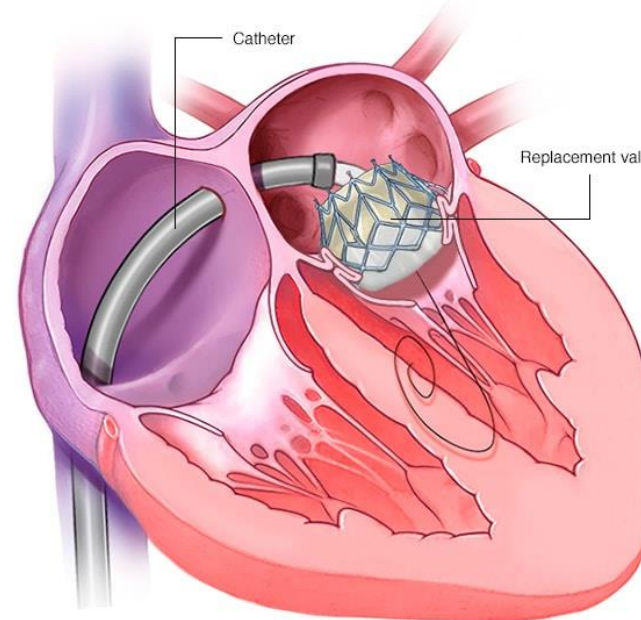
Final Text

24 March 2025

OVERVIEW

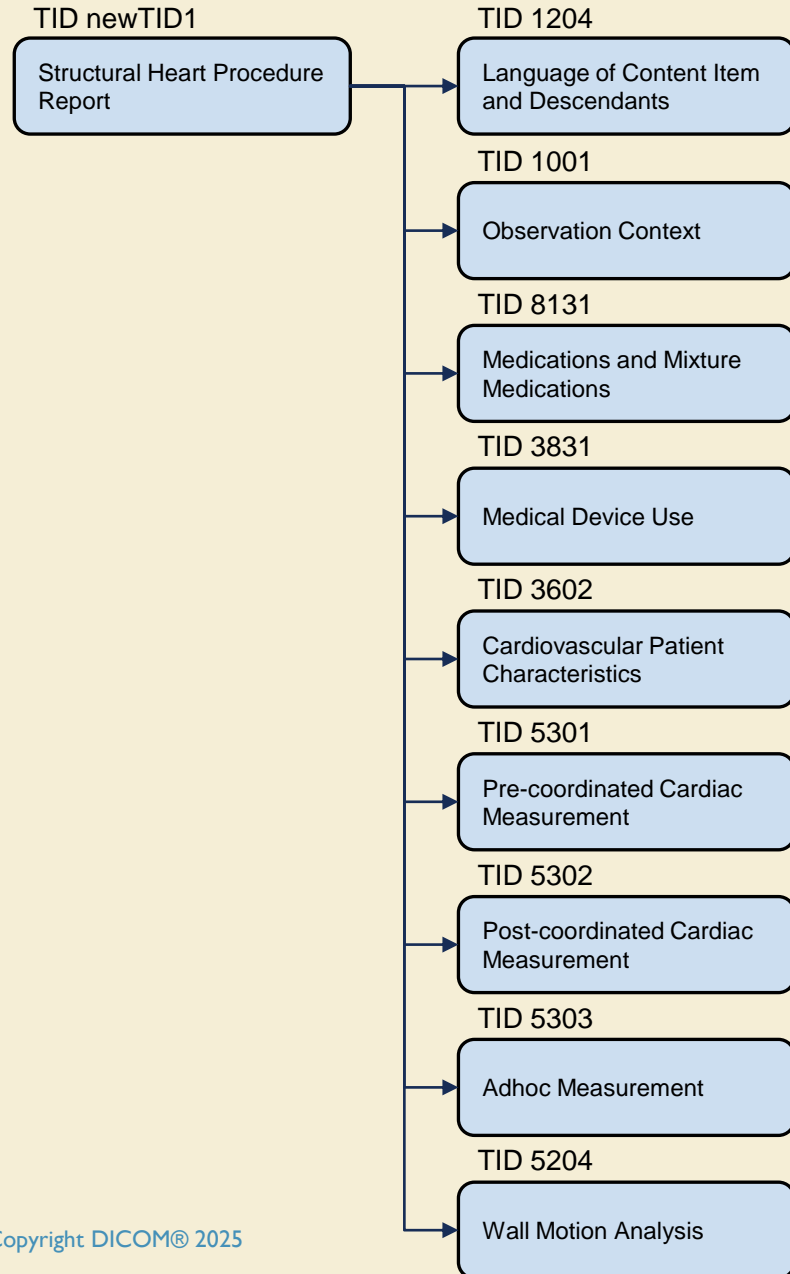
Scope:

- Periprocedural imaging for Structural Heart procedures.
 - Structural Heart procedures are trans-catheter techniques to repair or replace a valve and treat structural abnormalities of the heart.
 - Periprocedural imaging includes pre-operative assessment, intraprocedural assessment, and post-procedural follow-up for Structural Heart Procedures.
- Intended for multimodality use: CT/MRI, and echocardiogram.
- Procedures include:
 - TAVI: Transcatheter Aortic Valve Implantation
 - TAVR: Transcatheter Aortic Valve Replacement
 - TTVr: Transcatheter Tricuspid Valve Replacement
 - TTVR: Transcatheter Tricuspid Valve Repair
 - TEER: Transcatheter Edge-to-Edge Repair
 - TMVR/TMvR: Transcatheter Mitral Valve Replacement
 - LAAO: Left Atrial Appendage Occlusion



BACKGROUND

- Pre-operative assessment: CT and/or echocardiography are commonly used for detailed anatomical assessment of the heart, aiding in the planning of transcatheter approaches and proper sizing of implants.
- Intraprocedural assessment: Echocardiography and fluoroscopy are utilized for continuous monitoring during the procedure, ensuring accurate device deployment, positioning, and function.
- Follow-up evaluation: CT and/or echocardiography are commonly employed for assessing device placement, function, and identifying potential complications such as perivalvular leaks or device migration during post-procedural follow-up.
- Standardized measurements have been established by implant manufacturers, the Society of Thoracic Surgeons (STS) and the American College of Cardiology (ACC) for all three periprocedural phases.



Design Choices

- Used Existing Comprehensive SR SOP class
- Renamed Simplified Echo Procedure sub templates, TIDs 5301, 5302 and 5303 to support multimodality image acquisition.
- Defined pre-coordinated terms

TERMINOLOGY

This supplement introduces a variety of context groups tailored to Structural Heart procedures.

Context Identifier	Context Group Name
newCID14	Structural Heart Measurement Report Document Title
newCID1	Structural Heart Procedures
newCID2	Structural Heart Devices
newCID3	Structural Heart Measurement
newCID4	Structural Heart Aortic Valve Measurement
newCID5	Structural Heart Mitral Valve Measurement
newCID6	Structural Heart Tricuspid Valve Measurement
newCID7	Structural Heart Echo Measurements
newCID8	Left Atrial Appendage Closure Measurement
newCID9	Structural Heart Procedure Anatomic Site
newCID10	Peripheral Access Anatomic Site
newCID11	Indication for Structural Heart Procedure
newCID12	Bradycardiac Agents
newCID13	Transesophageal Echocardiography Scan Planes

Sources:

- Peer review publications
- STS/ACC registry data elements
- ASE guidelines
- Device Inserts (Watchman, Amulet, MitraClip)
- IHE CPN (Cardiac Procedure Note)
- Clinical Applications