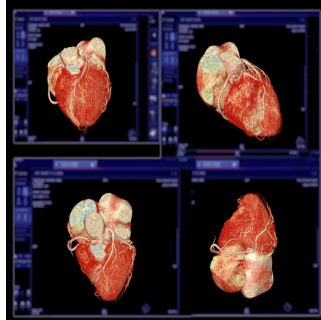

SCAI/SCCT Expert Opinion: CCTA to Guide PCI



A new expert consensus document jointly released by the Society for Cardiovascular Angiography and Interventions (SCAI) and the Society of Cardiovascular Computed Tomography (SCCT) offers a detailed framework for integrating coronary computed tomography angiography (CCTA) into the planning of percutaneous coronary intervention (PCI).

Published in *JSCAI*, the document was developed following a multidisciplinary roundtable in October 2024. It was officially introduced during a joint SCAI/SCCT symposium at the SCAI 2025 Scientific Sessions in Washington, DC.

Many patients already undergo coronary CT as part of their diagnostic workup. The aim of this framework is to leverage existing data to enhance procedural planning, reduce complications, and deliver more precise care. Also, the collaboration across specialties—imagers and interventionalists working side by side can improve outcomes by fully utilising CT data.

The document draws on the expertise of leaders in cardiac imaging, interventional cardiology, and clinical research to address a growing area of interest: using coronary CT not just diagnostically but as a practical tool to guide PCI. While CT is widely used to assess stable chest pain and coronary anatomy, its role in procedural planning has remained underdeveloped. With mounting evidence pointing to benefits like shorter procedures and reduced radiation exposure, the need for structured, actionable guidance has become clear.

A central theme was the importance of closing the gap between imaging and intervention. Unlike diagnostic coronary CT, which is often the domain of imagers alone, CT-guided PCI requires multidisciplinary collaboration to extract both anatomical and physiological insights.

CT has long played a central role in structural heart interventions, where collaboration is built into the workflow. The same mindset can be applied to coronary disease. This guidance summarises current evidence and helps make the field more accessible.

In addition to image acquisition and interpretation, the consensus covers the use of CT-derived fractional flow reserve (FFR_{CT}) and virtual PCI modelling, tools that help predict both anatomical and physiological outcomes of intervention. It also addresses lesion classification, triage, equipment planning, and procedural strategy.

The strength of this document is its practicality. Interventionalists want clarity on how to go from viewing a CT to selecting a stent. This document provides that roadmap while also identifying ongoing needs such as better software, expanded training, and reimbursement policies aligned with value.

The authors emphasised that education and interdisciplinary training will be critical to broader adoption. Many interventionalists still have limited experience with cardiac CT. The roundtable stressed the importance of dedicated educational initiatives, hands-on workshops, and software tools designed for procedural use.

To move forward, it is important to train interventionalists to see [CT not just as a diagnostic tool](#) but as part of their toolkit. This document is intended to serve as the foundation for that shift—whether through in-lab training modules or formal curricula.

Ongoing research, including the international P4 Study, is expected to provide additional randomised data to support CT-guided PCI, especially in complex cases. As evidence builds, the integration of CT into coronary planning is likely to follow the path it has already taken in structural heart interventions.

The collaboration between SCAI and SCCT underscores the growing recognition that both anatomic and physiologic data are essential for optimal PCI planning. Coronary CT offers both—noninvasively and pre-procedurally.

Source: [Society for Cardiovascular Angiography and Interventions](#)

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