



Pillar One

ACCEPTABILITY

“Despite strong evidence that intracoronary imaging (ICI) improves outcomes in percutaneous coronary intervention (PCI), it remains underutilized. This white paper, simultaneously published in JSCAI, was the product of a panel of ICI experts who collectively identified key barriers to ICI utilization, followed by recommendations to improve utilization.”

-Factors Contributing to Low Utilization of Intracoronary Imaging in Clinical Practice: A White Paper—Coverage of EuroPCR 2025 | SCAI



What prevents ICs from meaningfully engaging with IVI?

Acceptability captures the pre-use perception of IVI among ICs. The white paper reveals that despite 30+ years of technological maturation, IVI is still viewed by many clinicians as optional, opaque, or even unnecessary. This first barrier is psychological, cultural, and educational. It forms the bedrock upon which all future behaviors rest. Below are some of the key addressable elements discussed in the Acceptability portion of the paper.

I. The core problem: A false sense of PCI success without IVI

Across global practice, most ICs rarely witness long-term complications from their own PCI cases. Because restenosis, stent thrombosis, or late failures occur months or years later—and often outside their direct follow-up—operators are insulated from the consequences of suboptimal angiography-guided PCI.

The paper notes that this **temporal dissociation** reinforces misplaced confidence and erodes motivation to adopt imaging as a quality safeguard.

Further, without IVI systems available, physicians cannot “benchmark” their work. The white paper emphasizes that **angiography visually conceals most stent underexpansion, edge disease, malapposition, and plaque morphology**, leaving the operator unaware of invisible hazards.

II. Insufficient familiarity with the evidence

Although dozens of randomized trials and meta-analyses now show mortality benefit and improved clinical outcomes with IVI-guided PCI, many clinicians remain unaware of this evidence or misinterpret early-era studies from the bare metal stent generation as still relevant.

III. Guidelines awareness gap

Despite ESC and ACC Class IA recommendations supporting IVI use in complex PCI (left main, ACS subsets, ambiguous anatomy), many operators underestimate guideline strength or assume IVI is “recommended but optional.”

IV. Educational structures that dampen, rather than build, Acceptability

The paper highlights several counterproductive educational patterns:

- **Debate-style sessions portraying imaging as controversial**
This creates false equivalence: “Images are interesting but optional.”
- **Live cases that require expert ‘image whisperers’**
This signals that imaging interpretation is an elite skill, not a routine one.
- **Sparse exposure for trainees**
Fellows often complete training without meaningful IVI hands-on experience, embedding an angiography-first mindset for life.

V. Cognitive dissonance: The angiographic comfort zone

Angiography has shaped the IC identity for generations. Introducing IVI forces operators to confront uncomfortable truths:

- “My angiographic result may not be as good as I think.”
- “I may have been overlooking something for years.”

This emotional tension—**cognitive dissonance**—is a powerful but under-addressed barrier.