



Pillar Three

ADOPTION

“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



How can IVI scale to an institutional and national standard?

Once a clinician finds IVI acceptable and beneficial, adoption requires bigger systems—hospitals, payers, national societies—to align. The white paper outlines how fragile this stage is and where high-impact interventions can propel widespread change. Below are some of the key addressable elements discussed in the Adoption portion of the paper.

I. The Achilles heel: Without Acceptability and Acceptance, Adoption cannot occur

Adoption fails when ICs lack:

- ▶ Perceived usefulness
- ▶ Ease of use
- ▶ Institutional support

This creates heterogeneity within the same hospital, where some operators use IVI in 80% of cases, others in 5%.

II. Limited evidence communication around cost-effectiveness

The paper notes that cost-effectiveness data exist but are poorly disseminated and often misunderstood. Administrators may view imaging as costly rather than cost-saving. Future RCTs—including RENOVATE-COMPLEX and IMPROVE—are incorporating economic endpoints, but awareness is low.

III. Reimbursement Uncertainty and systemic barriers

Reimbursement models vary dramatically across countries. Many payers require additional cost-effectiveness justification before approving routine IVI, unlike Japan’s early, flexible adoption framework.

IV. Leadership buy-in: Without administrators, Adoption stalls

Hospital leaders often:

- ▶ Fail to understand clinical benefits
- ▶ Prioritize budget constraints
- ▶ Prefer the status quo

The paper emphasizes the need to equip administrators with **clear return-on-investment narratives**.

V. Nursing and allied professional engagement as a force multiplier

Adoption thrives when:

- ▶ NAPs are well trained
- ▶ Devices are readily accessible in the lab
- ▶ Imaging champions emerge

VI. Reducing cognitive dissonance

The paper emphasizes that education must focus on specific, **actionable insights that angiography cannot detect**—for example, precise vessel measurements identified by IVUS for proper device sizing. This reduces emotional resistance and normalizes imaging as essential rather than optional.

VII. Patient and referring cardiologist empowerment

Public-facing communication—social media, reports with IVI images, transparent procedural documentation—can create external demand. Patients are increasingly aware of procedure quality, and referring physicians may begin asking, “Was this PCI imaging-guided?”