

Appendix B

Details of Data Processing Metrics in the Reviewed Registries

Data Processing Metrics	Registry		
	NCDR	MIG	EHS-PCI (CARDS)
Calculation of the frequency of CathPCI performed in different circumstances	✓	✓	✓
Total PCI procedures	✓	✓	✓
Total diagnostic catheterization and PCI procedures during same lab visit	✓	–	✓
Total number of patients	✓	✓	✓
Total non-ST-segment elevation myocardial infarction (non-STEMI) PCI procedures performed	✓	✓	✓
Total STEMI PCI procedures performed	✓	✓	✓
Count of procedures with arterial access site = femoral or brachial or radial	✓	✓	✓
Processing related to CathPCI procedure outcomes	✓	✓	✓
Proportion of patients with post-procedure revascularization	–	–	✓
Proportion of patients with post-procedure myocardial infarction (when routinely collecting post-PCI biomarkers)	✓	✓	✓
Proportion of patients with post procedure myocardial infarction (when not routinely collecting post-PCI biomarkers)	✓	✓	–
Proportion of diagnostic catheterization procedures with vascular access site injury requiring treatment or major bleeding	✓	✓	✓
Proportion of patients with post-procedure cardiac tamponade	–	–	✓
Proportion of patients with post-procedure hemorrhagic bleeding	–	✓	✓
Proportion of patients with post-procedure stroke	✓	✓	✓
Proportion of CathPCI procedures with transfusion of whole blood or red blood cells	✓	✓	✓
Proportion of patients with emergency coronary artery bypass graft	✓	✓	✓
PCI in-hospital observed/expected mortality ratio	✓	✓	–
PCI in-hospital observed mortality ratio (patients with STEMI)	✓	✓	–
PCI in-hospital expected mortality ratio (patients with STEMI)	✓	–	–

PCI in-hospital observed/expected mortality ratio (patients without STEMI)	✓	-	-
PCI in-hospital observed rate of bleeding events	✓	✓	✓
PCI in-hospital expected rate of bleeding events	✓	-	-
Processing related to enhancement of diagnostic and therapeutic approaches	✓	✓	✓
Count of diagnostic catheterization procedures with all native coronary artery territories <50%	✓	-	-
Proportion of elective PCIs with prior positive stress or imaging study	✓	-	-
Proportion of PCI procedures with creatinine assessed pre- and post-PCI procedure	✓	✓	✓
Proportion of patients with aspirin prescribed at discharge	✓	✓	✓
Proportion of patients with statins prescribed at discharge	✓	✓	✓
Proportion of patients with a P2Y12 inhibitor prescribed at discharge (patients with stents)	✓	✓	✓
Proportion of evaluated PCI procedures that were inappropriate according to Appropriate Use Criteria guidelines	✓	-	-
Proportion of evaluated PCI procedures that were appropriate according to Appropriate Use Criteria guidelines	✓	-	-
Proportion of PCI procedures not classifiable for Appropriate Use Criteria reporting	✓	-	-
Processing related to improvement of the devices	✓	✓	✓
Proportion of CathPCI with vascular closure devices	✓	-	-
Proportion of PCI with stent	✓	✓	✓
Proportion of PCI with drug-eluting stent	-	✓	✓
Proportion of PCI with closed-cell stent	-	-	✓
Proportion of PCI with open-cell stent	-	-	✓
Proportion of PCI with only balloon	-	✓	-
Proportion of PCI with rotational atherectomy	-	✓	-
Processing related to quality of the services	✓	✓	✓
Median time to immediate PCI for STEMI patients (in minutes)	✓	✓	-
Median time from emergency department arrival at STEMI transferring facility to emergency department arrival at STEMI receiving facility among transferred patients	✓	✓	✓
Median time from emergency department arrival at STEMI transferring facility to immediate PCI at STEMI receiving facility among transferred patients (in minutes)	✓	-	✓
Median Fluoroscope time for CathPCI procedures	✓	✓	-

Median post-procedure length of stay (in days) for PCI patients with STEMI	✓	-	-
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Abbreviations: CathPCI, catheterization and percutaneous coronary intervention; National Cardiovascular Data Registry (NCDR); EHS-PCI (CARDS), Euro Heart Survey of PCI with Cardiology Audit and Registration Data Standards; MIG, Melbourne Interventional Group; PCI, percutaneous coronary intervention.