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CORE CURRICULUM

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SCAI expert consensus statement on out of hospital cardiac arrest

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1 | INTRODUCTION

Out of hospital cardiac arrest (OHCA) remains a significant public health problem with high mortality and morbidity. (1) The true magnitude of mortality and morbidity from OHCA is unknown due to the lack of mandatory reporting, unified national surveillance systems, difficulty in accounting for cases not attended by emergency medical services (EMS), variability in existing reporting systems and paucity of data regarding long term neurological and functional outcomes (Appendix S1).[1]

Improving survival rates with good neurological outcomes among OHCA patients requires improved response times and quality of care in the "chain of survival" from early activation of EMS and resuscitation to advanced post admission care.[2] Given the high prevalence of coronary artery disease (CAD) as the cause for cardiac arrest in patients with a presenting rhythm of ventricular fibrillation (VF) or pulseless ventricular tachycardia (VT), interventional cardiologists are often consulted to consider emergent coronary angiography (angiography) and possible percutaneous coronary intervention (PCI) in OHCA patients. While emergent angiography and PCI are indicated in selected OHCA patients when the post resuscitation electrocardiogram (ECG) shows ST-segment elevation myocardial infraction (STEMI), there are significant institutional and individual variations in performance and timing for those patients without STEMI on post resuscitation ECG. The role of the cardiac catheterization laboratory encompasses not only angiography and PCI but also hemodynamic assessment and mechanical circulatory support (MCS) device use in patients with concomitant cardiogenic shock (CS). The purpose of this document is to provide an evidence-based and patient-oriented recommendation for the management of these patients.

2 | METHODS

This document has been developed according to SCAI Publications Committee policies for writing group composition, disclosure and management of relationships with industry (RWI), internal and external review, and organizational approval.

