

ACTIVE COLLABORATION WITH EMERGENCY MEDICAL SERVICES IN AMI CARE

Evidence Brief

EMERGENCY MEDICAL SERVICES (EMS) are a critical component of the chain of survival for patients with acute myocardial infarction (AMI), particularly in initial identification and treatment of ST-segment elevation myocardial infarction.¹ Guidelines for timely and effective care define protocols and practices for time to treatment, advanced life support and transport.² EMS adherence to guidelines has been shown to improve both processes and outcomes of care for patients with AMI.³⁻⁵ Key functions of EMS in the continuum of care include performing 12-lead ECGs prior to a patient's arrival at the hospital to accelerate the administration of fibrolytic agents or PCI⁶ and activating the cardiac catheterization laboratory.⁷ Early revascularization is associated with reduced patient morbidity and mortality from AMI.^{2, 8-9}

BETTER INTEGRATION OF EMS into "systems of care" has been identified as a national priority by opinion leaders and professional societies.¹⁰ Regionalization models have been shown to be successful for trauma and cardiac arrest and models for AMI are emerging.^{7, 11-14} Integration of EMS is also important at the individual hospital level. Highly collaborative teams drawing on diverse professional backgrounds have been shown to be important in delivering high-quality and safe acute care,^{5, 15-18} including core measures for care of patients with AMI.¹⁸

ACTIVE COLLABORATION BETWEEN HOSPITALS AND EMS SYSTEMS is associated with better performance in care of patients with AMI. Hospitals that met with EMS monthly or more frequently to review AMI cases had significantly lower 30-day risk standardized mortality rates.²⁰⁻²¹ Active collaboration includes specific investment in and attention to EMS through respect for EMS as valued professionals and colleagues, strong communication and coordination with EMS, and active engagement of EMS in hospital AMI quality improvement efforts.²² While respect, communication, collaboration and engagement may be common sense principles, they are not routinely applied in care of patients with AMI, presenting real opportunities for improvement.²³ The table on the following page summarizes specific actions, behaviors and ways to engage EMS used by hospitals with top performance in care of patients with AMI.²²



Table 3. Domains and key strategies used by higher-performing hospitals to engage EMS in the care of patients with AMI.

Domain	Key Strategies
Respect for EMS as valued professionals and colleagues	Value EMS clinical skills and judgment; treat EMS providers as health care professionals, rather than technicians solely responsible for rapid transport Tolerate false activations of the cardiac catheterization laboratory by EMS providers Invest in relationships with EMS by building tight connections with them and making them part of the care team
Strong communication and coordination with EMS	Ensure timely, bidirectional communication between the hospital and EMS (eg, hospitals employ EMS liaisons and meet regularly with EMS agencies) Ensure that EMS providers have up-to-date, evidence-based clinical knowledge base (eg, hospital staff teach EMS continuing education classes and integrate EMS staff into hospital-based educational forums) Cultivate shared, patient-focused mission with EMS providers to improve AMI care and outcomes (eg, review findings on current patients' ECG, allow the EMS providers to observe the angiogram for patients they transported, and share information on previously transported patients' clinical course in the hospital)
Active engagement of EMS in quality improvement	Include EMS representation on hospital AMI quality improvement committees Share AMI performance data with EMS regularly through EMS liaisons and AMI quality improvement committees Encourage EMS participation in creative problem solving and consider piloting EMS process improvement proposals (eg, pilot EMS activation of the cardiac catheterization laboratory without ED confirmation)

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