

MISSION: Lifeline™



CAPITAL AREA TRAUMA
REGIONAL ADVISORY COUNCIL

Baseline Assessments: Summary & Key Findings

Prepared by the QI Subgroup
November 2009

QI SubWorkgroup Report

- ➔ Summary
- ➔ Key Questions & Responses
- ➔ Key Findings

Summary

Summary

➔ **Baseline Assessments Completed**

- (17) 911 Transporting EMS Agencies
- (12) Non-PPCI Hospitals
- (10) PPCI Hospitals

100%
Response
Rate

Summary

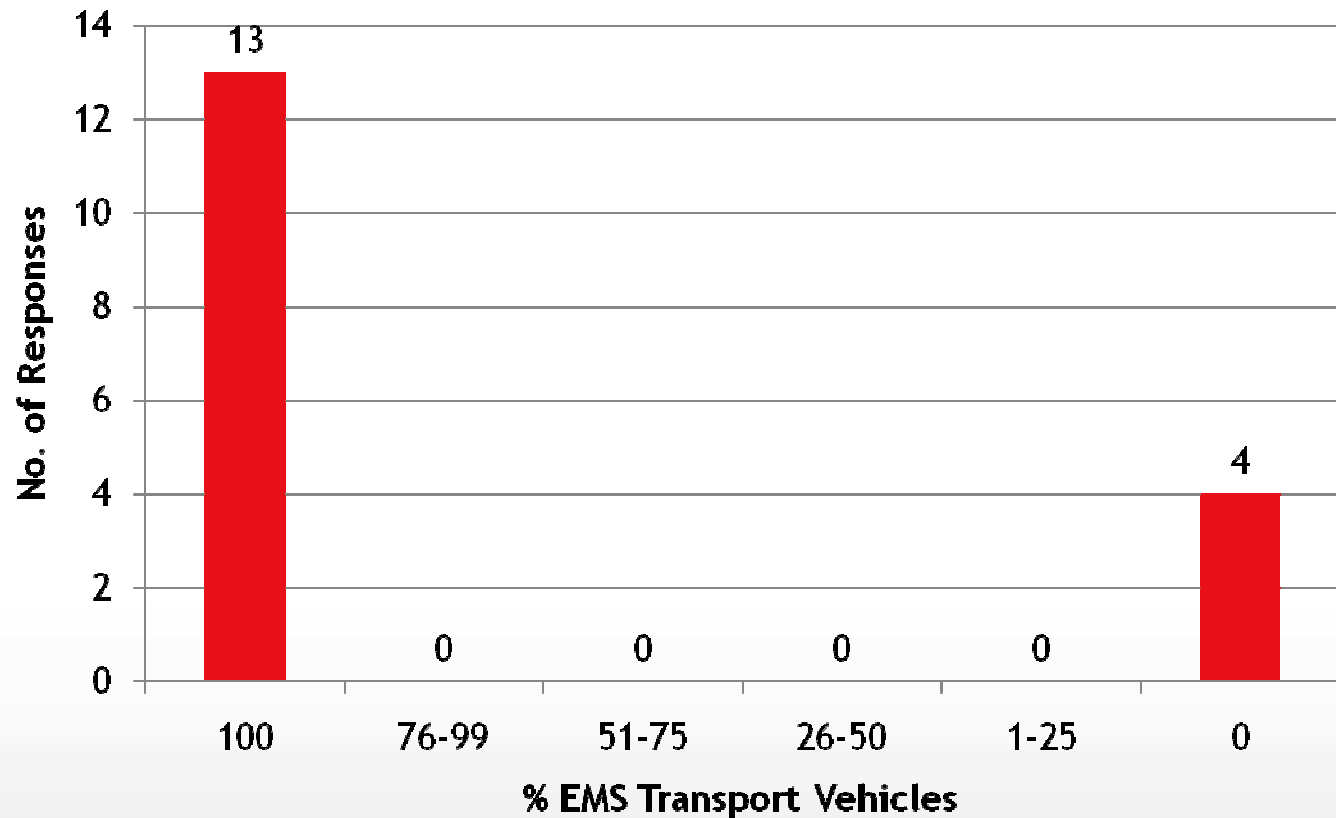
➔ Other Positive Outcomes

- Identified Key Contacts
- Introduced the Mission:Lifeline Initiative

Key Questions & Responses

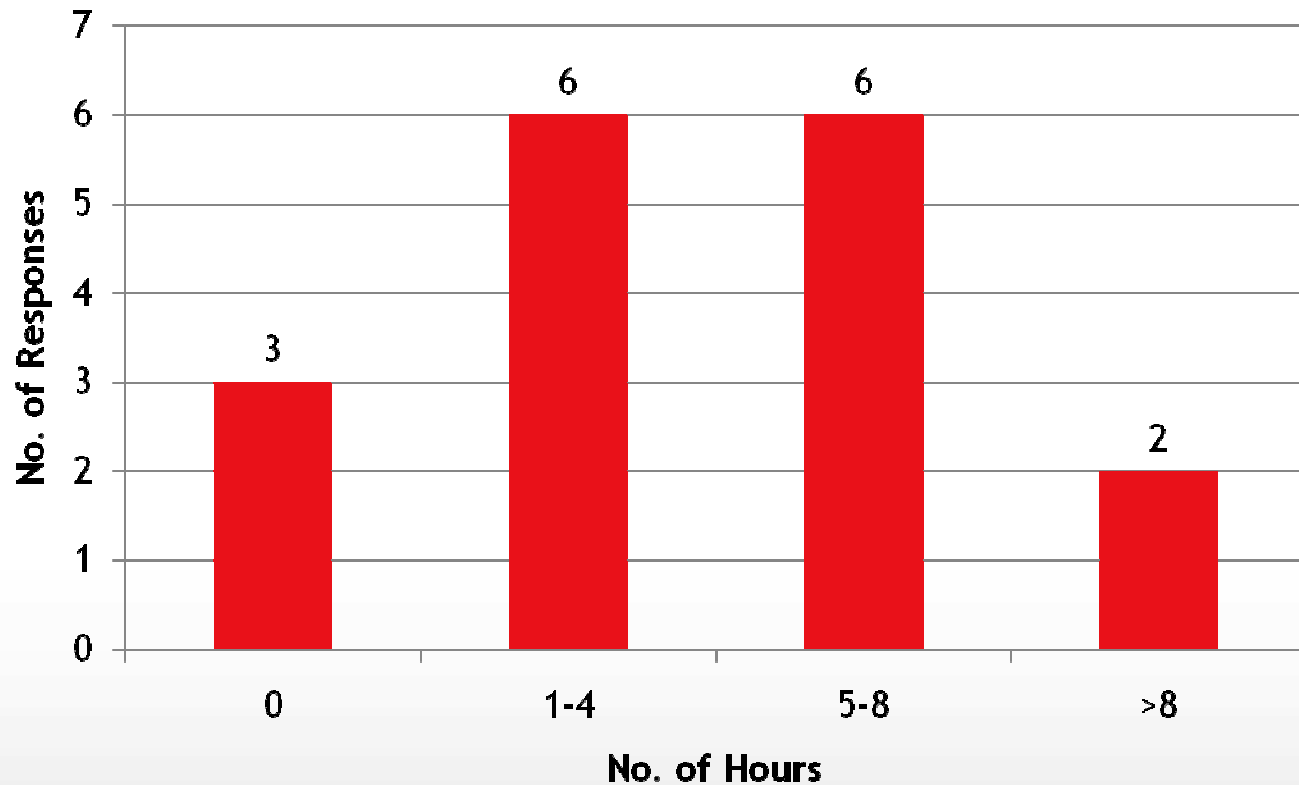
EMS Agency

➔ 2. Approximately what percentage of active (first out) EMS transport vehicles have 12 lead ECG devices?



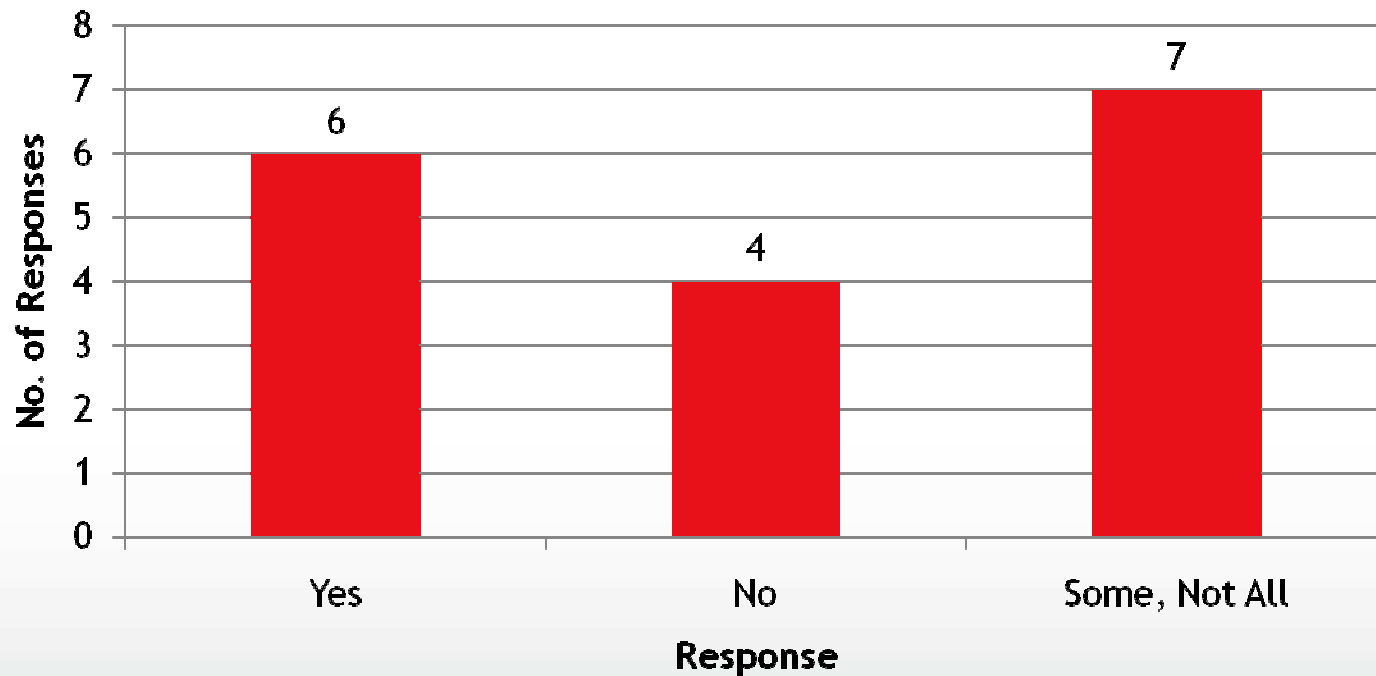
EMS Agency

➔ 3. How many hours of 12 lead ECG interpretation training/education do your staff typically receive per year?



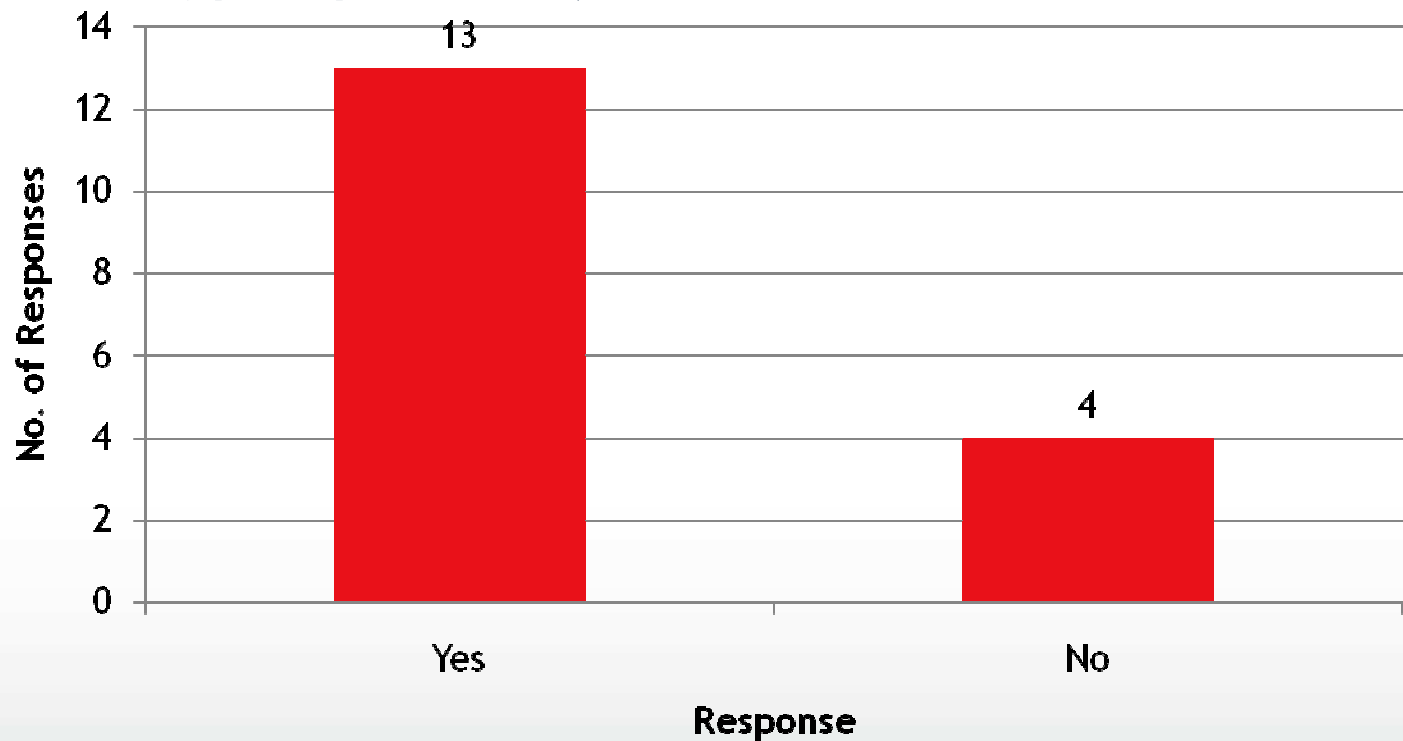
EMS Agency

- ➔ 5. Does your EMS Agency have written AMI/STEMI/chest pain protocols that include “who gets a 12 lead”, 12 lead ECG acquisition, criteria for cardiac cath lab activation, and appropriate communication of ECG findings to receiving hospital and treatments?



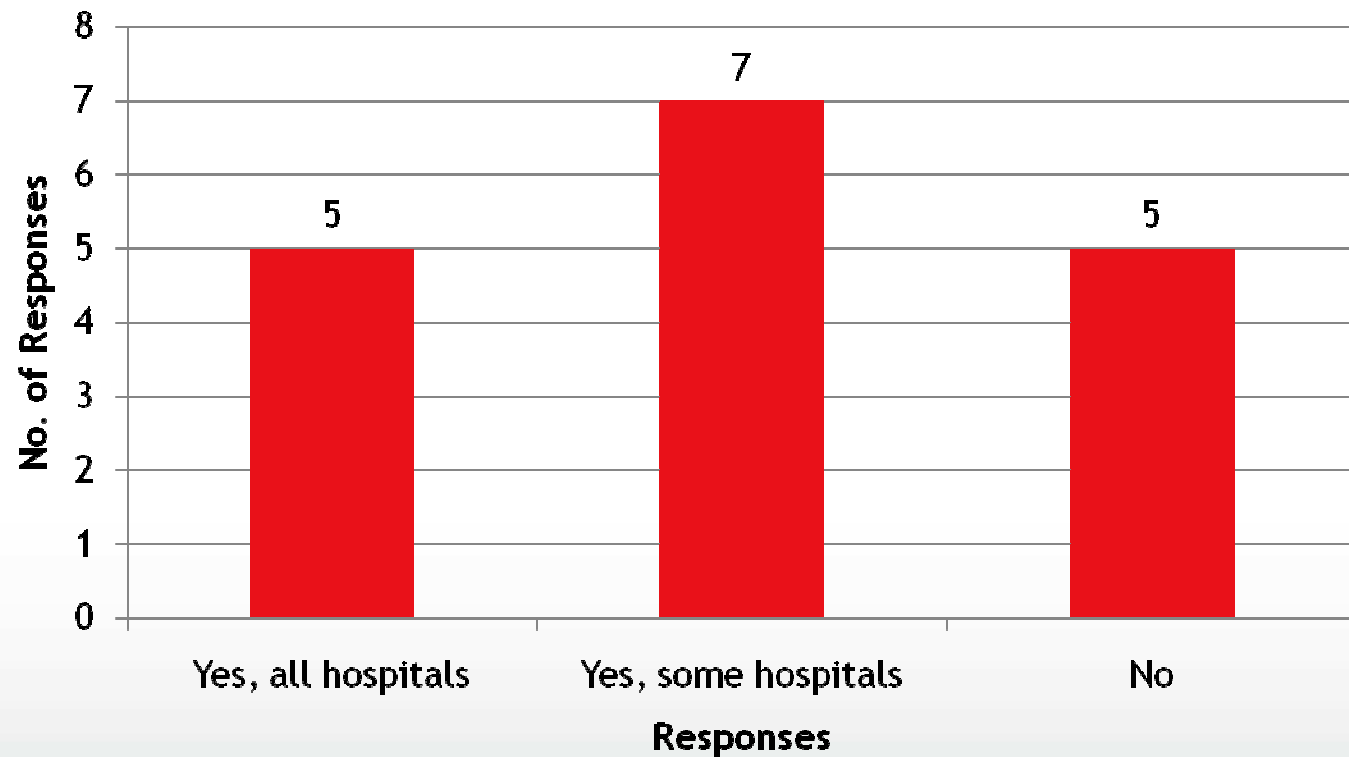
EMS Agency

- ➔ 7. If a STEMI patient is identified by your EMS Agency, is there a plan/protocol in place recommending or requiring that these patients be transported to a hospital that has a cardiac cath lab (“destination or bypass protocol”)?



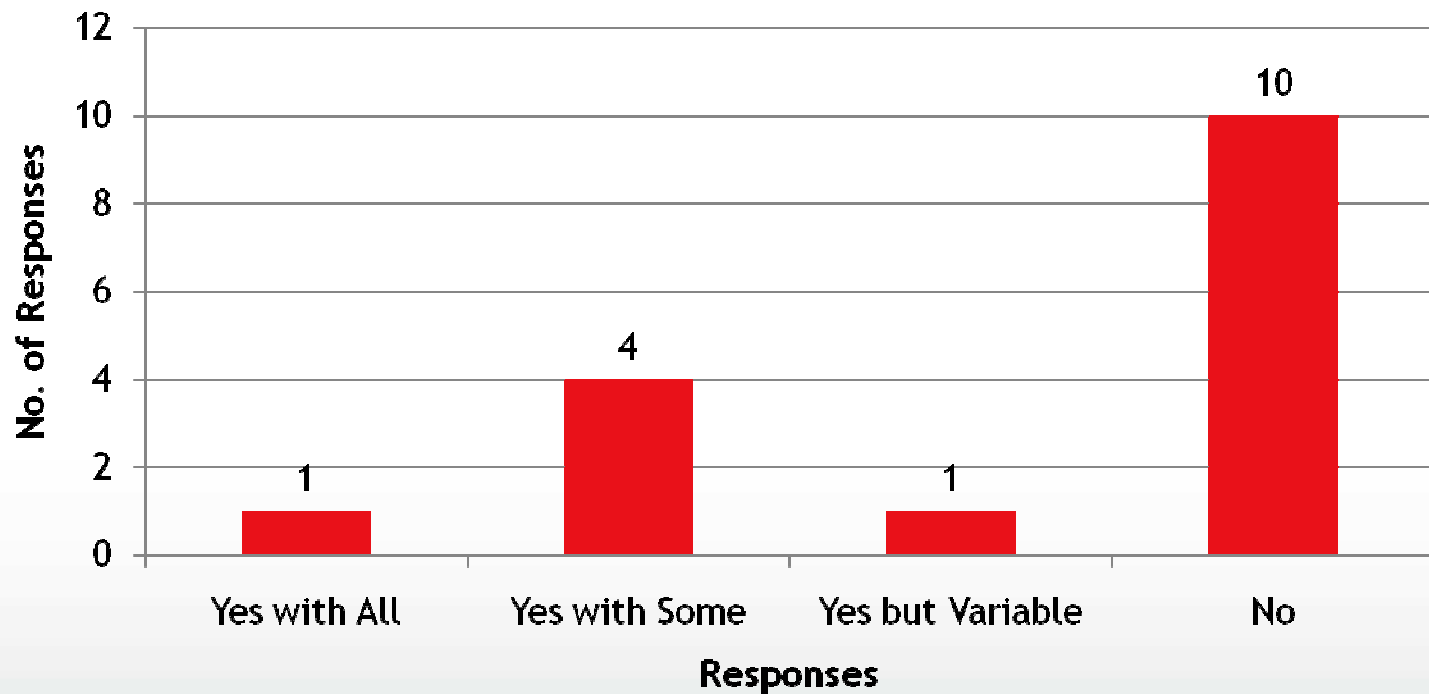
EMS Agency

➔ 11. In your EMS Agency, can EMS personnel activate the cardiac cath lab prior to the patient's arrival at the hospital by communicating the EMS findings?



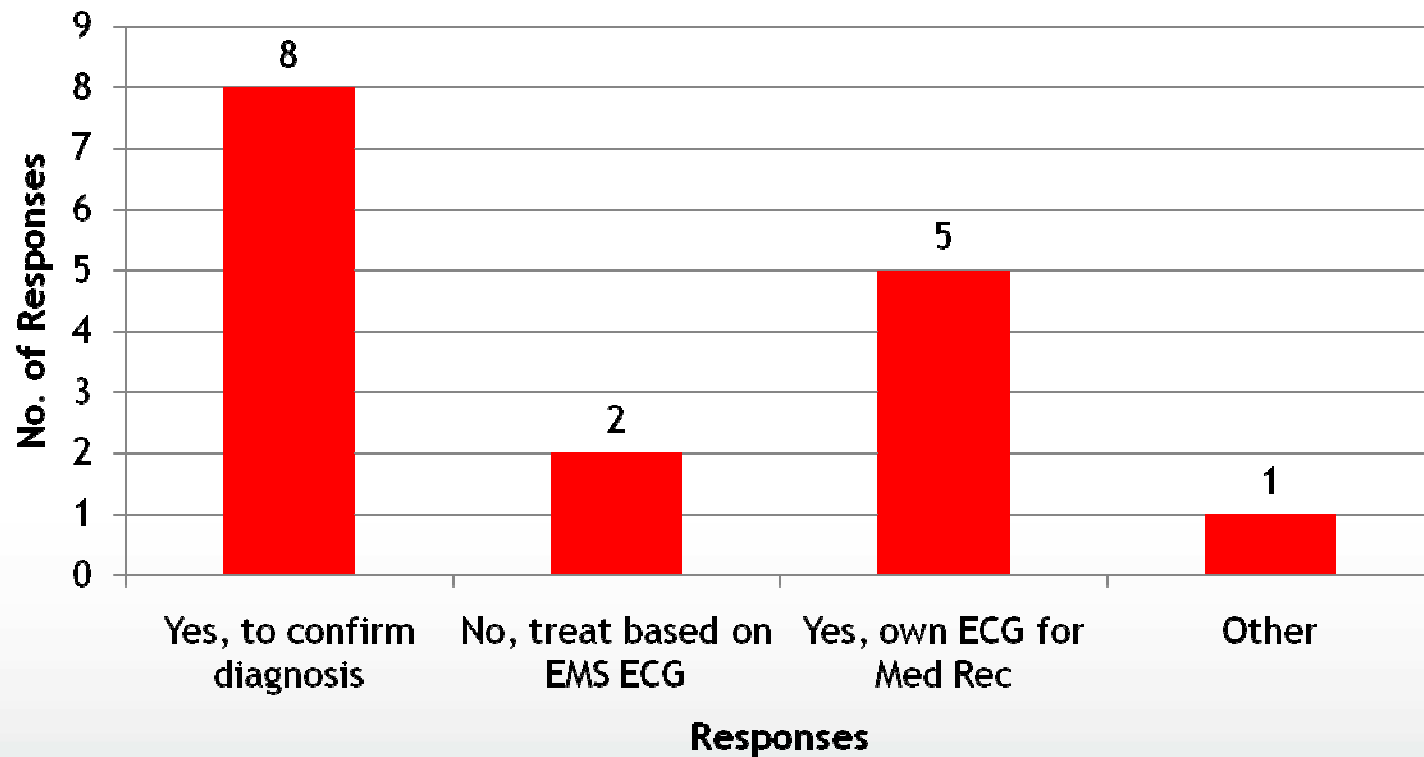
EMS Agency

➔ 19. Does a representative from your Agency regularly participate in the STEMI Receiving Hospital's Quality Improvement review of STEMI cases and outcomes?



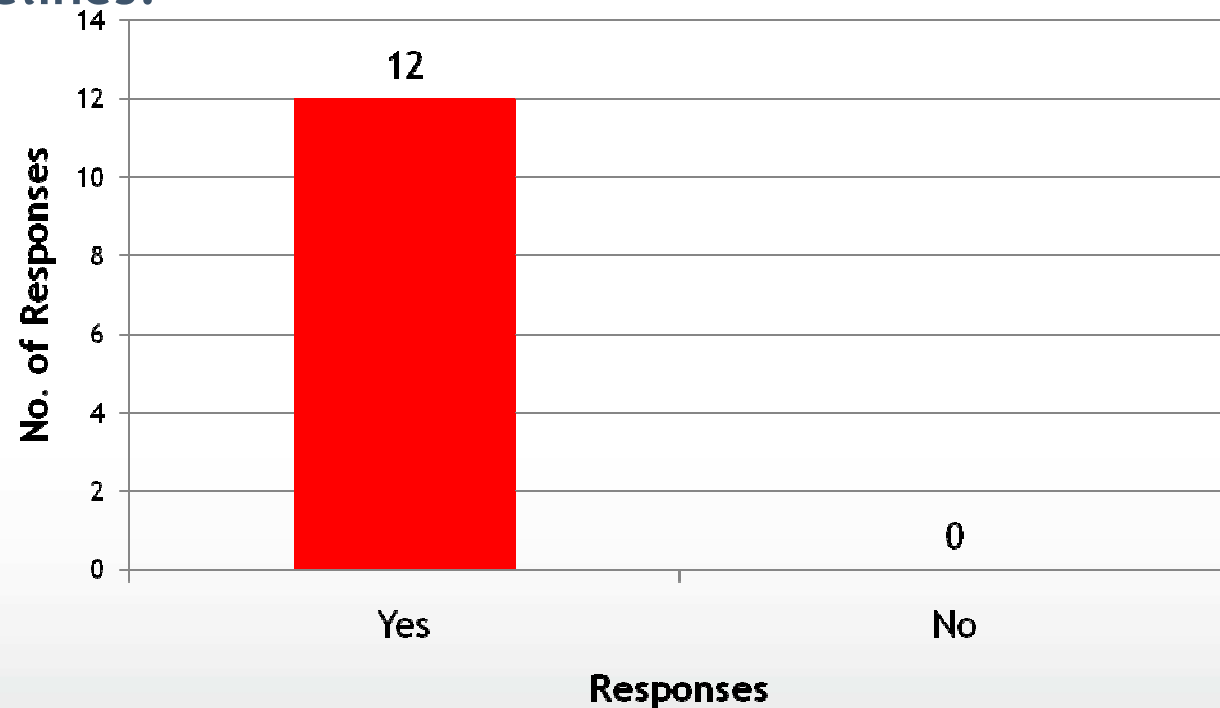
Non-PPCI Hospital

➔ 3. If a patient is brought to your ED by EMS with a prehospital ECG identifying STEMI, do you repeat the ECG? Circle all that apply.



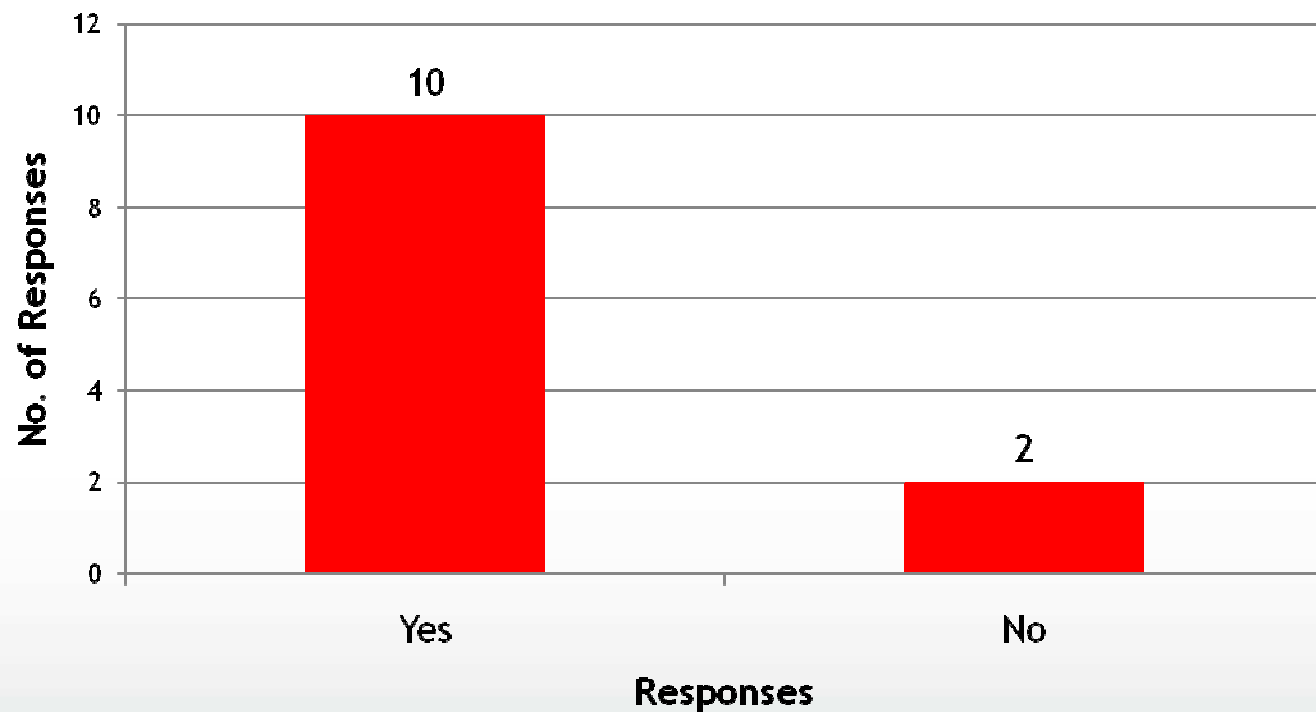
Non-PPCI Hospital

- ➔ 9. Does your ED maintain a standardized reperfusion STEMI care pathway that designates PPCI as the preferred reperfusion strategy if transfer of the patient to a PPCI hospital/STEMI receiving center can be achieved within time consistent with ACC/AHA guidelines?



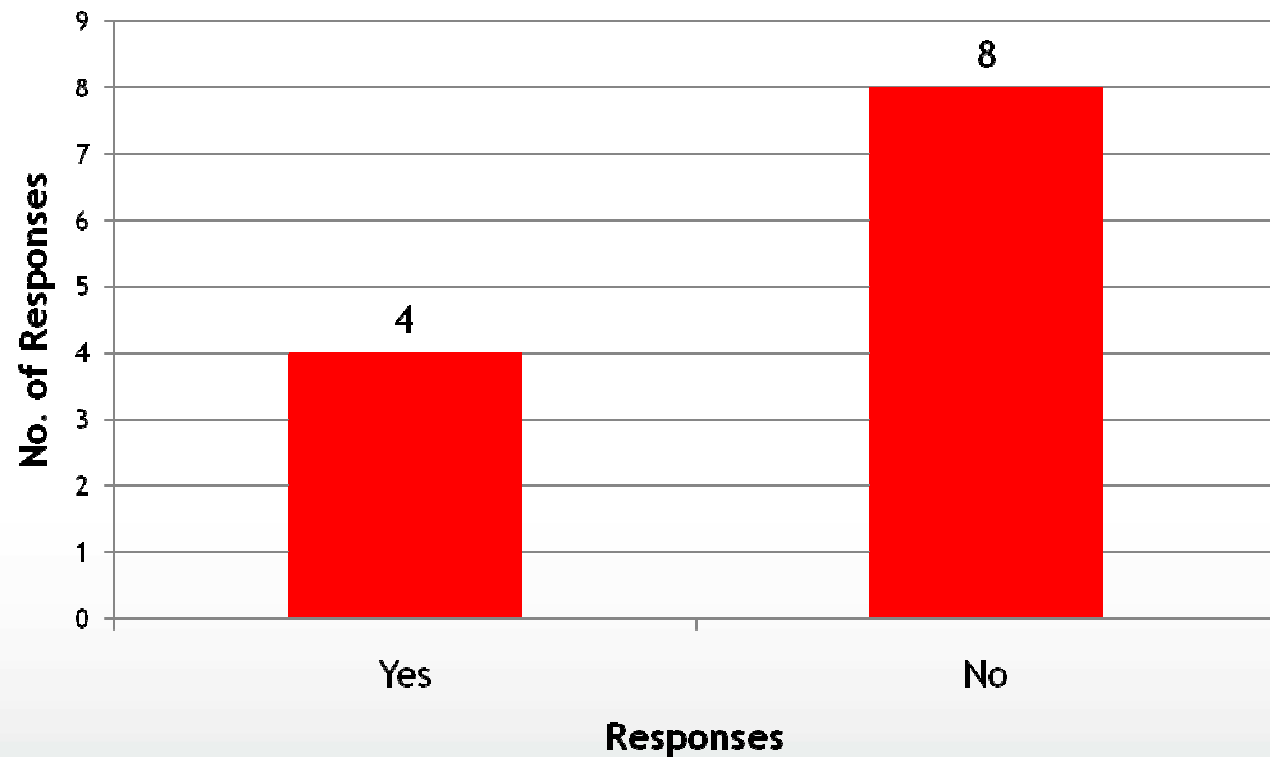
Non-PPCI Hospital

- ➔ 10. Does your ED maintain a standardized reperfusion STEMI care pathway that designates fibrinolysis in the ED (for eligible patients) when the system cannot achieve times consistent with ACC/AHA guidelines for primary PCI?



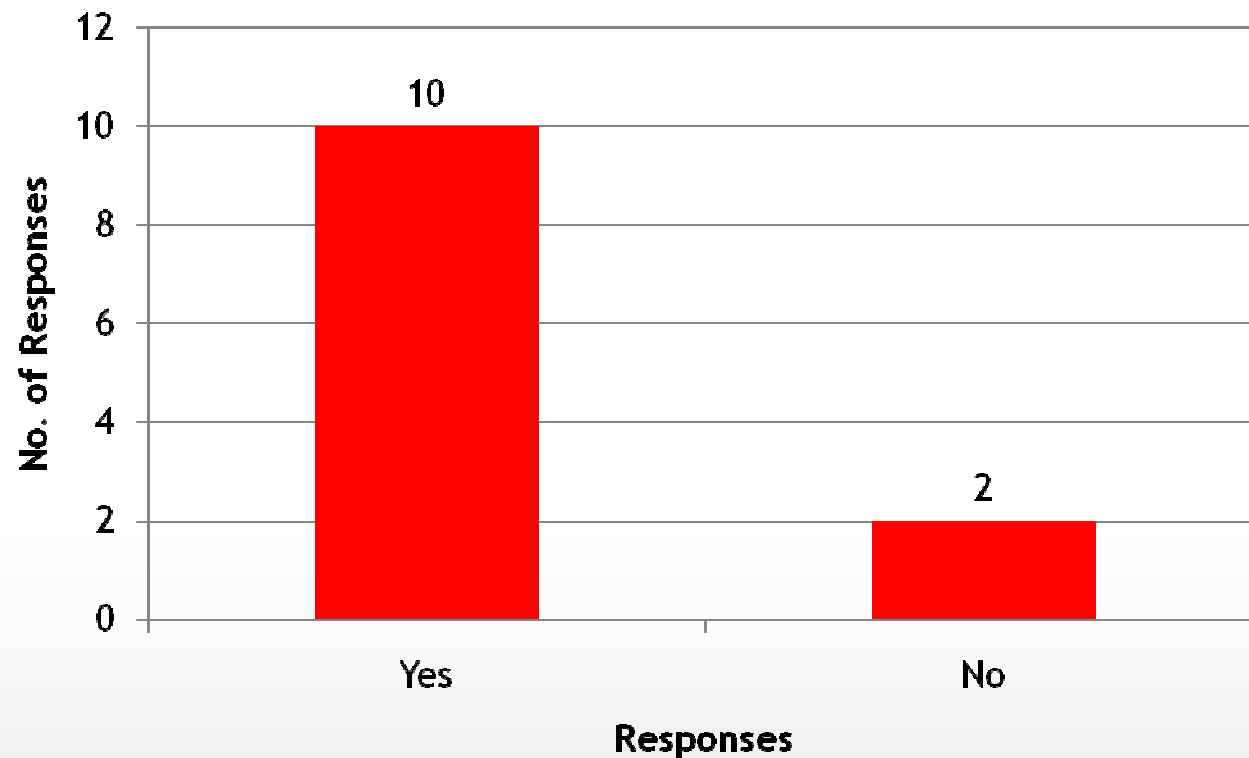
Non-PPCI Hospital

➔ 12. Do you have a multidisciplinary STEMI team that includes EMS that reviews hospital specific STEMI data on a quarterly basis?



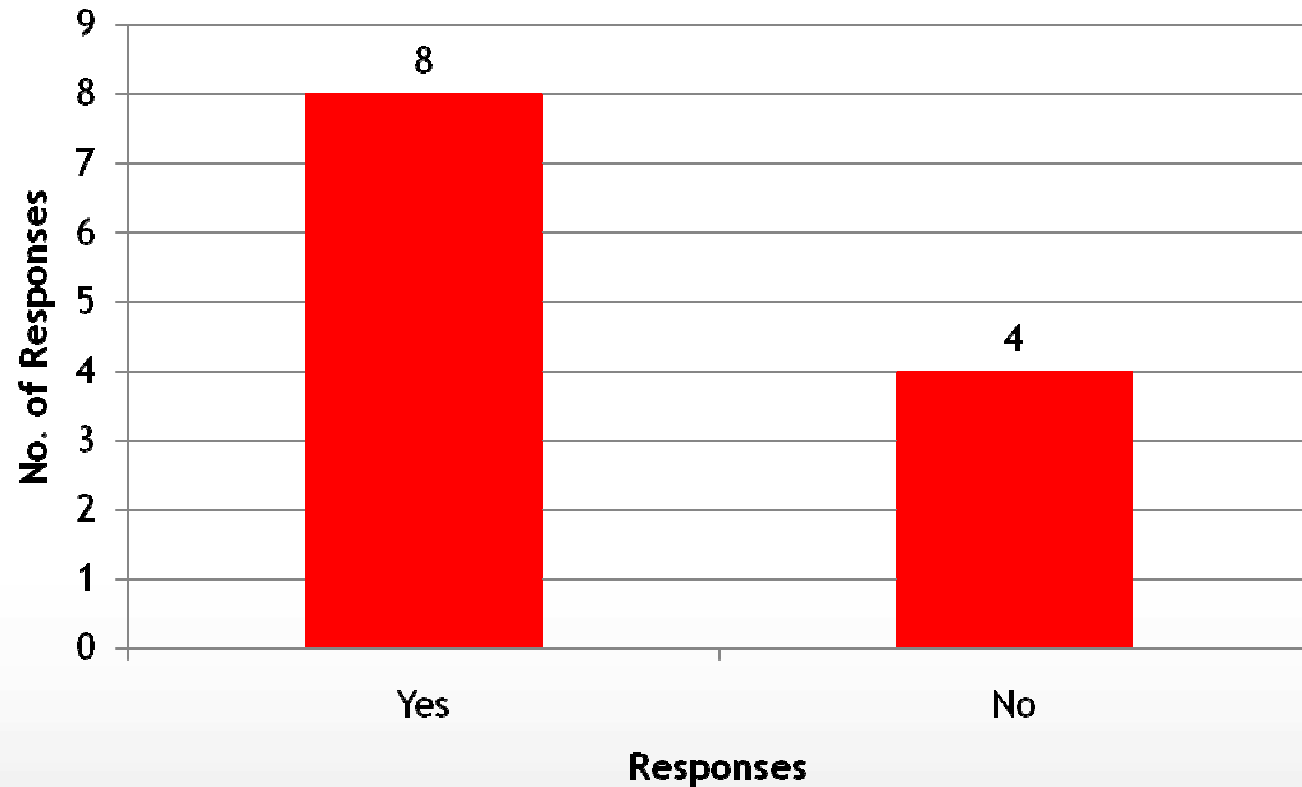
Non-PPCI Hospital

➔ 14. Do you have a back up reperfusion strategy/plan depending on availability of transport, weather, traffic, etc?



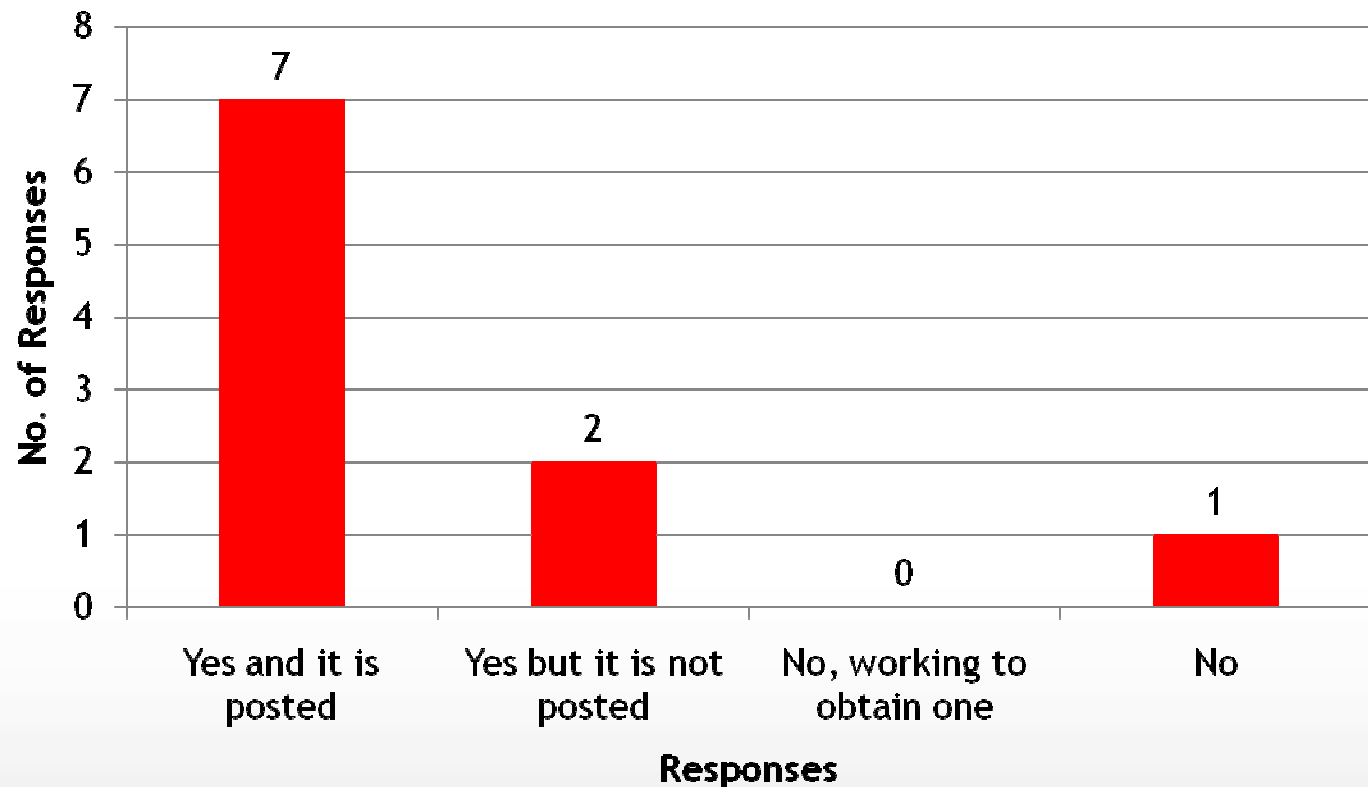
Non-PPCI Hospital

➔ 20. Do you have a pre-determined transfer for PCI plan for fibrinolytic ineligible & shock patients?



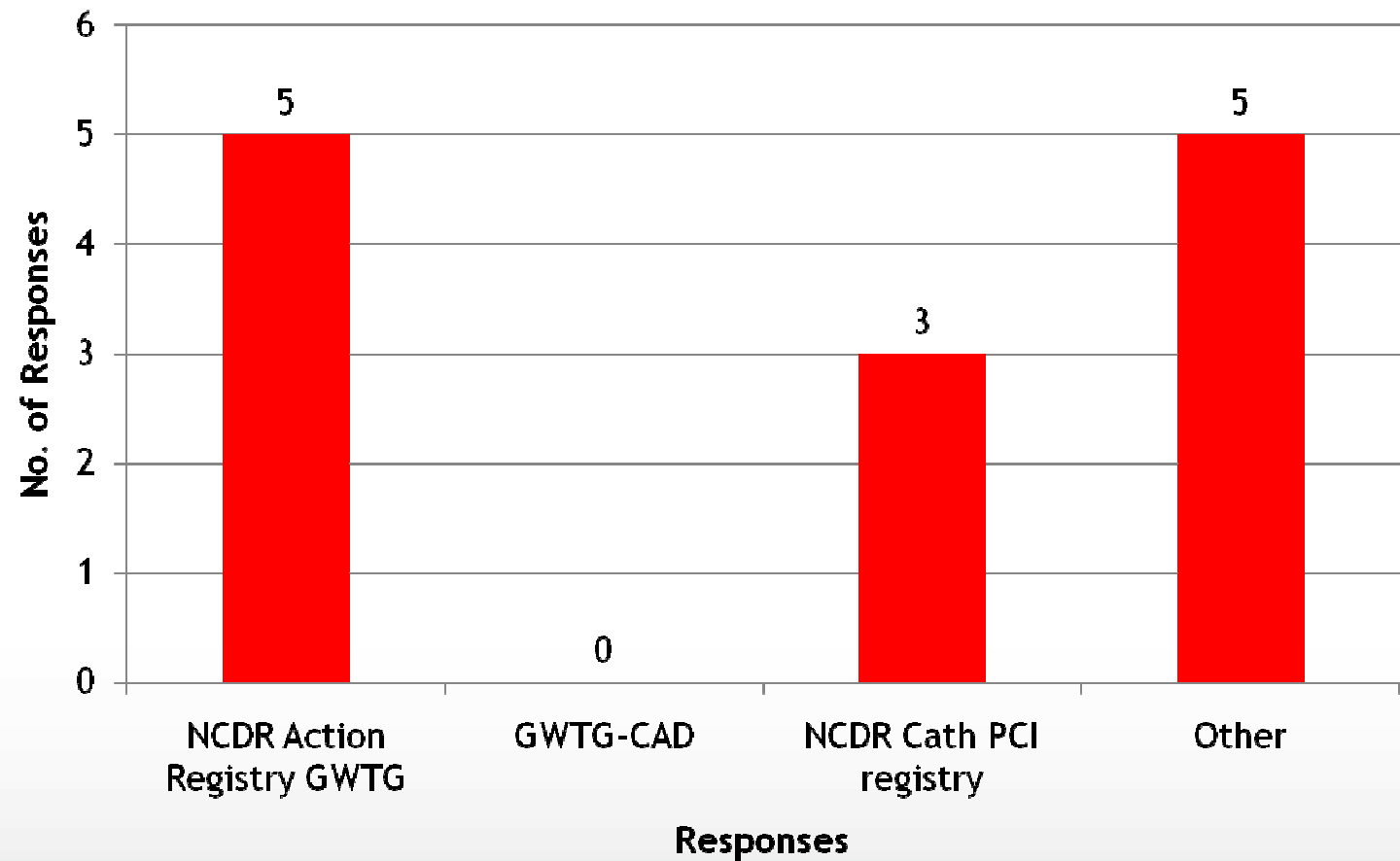
PPCI Hospital

➔ 2. Does your hospital have a 12 lead ECG triage protocol, “who gets a 12 lead”, and is it posted?



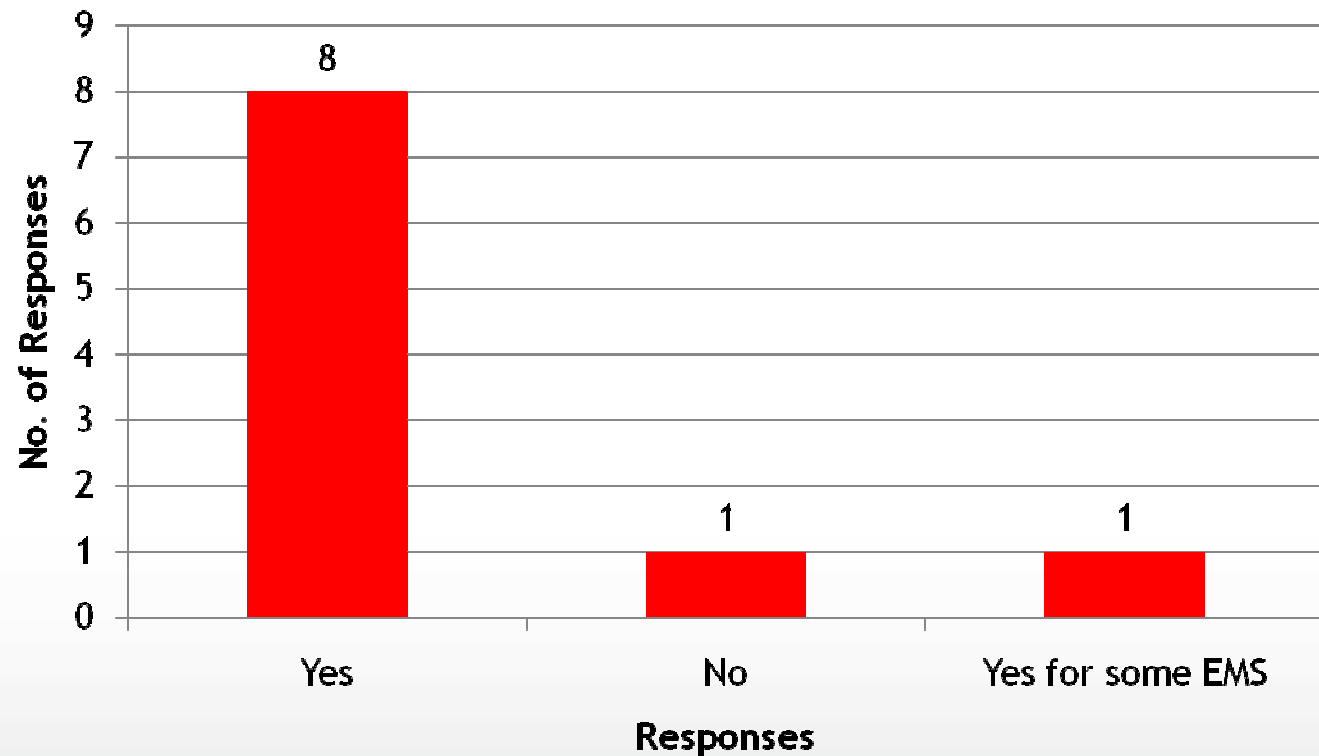
PPCI Hospital

➔ 13. What is your STEMI data collection tool?



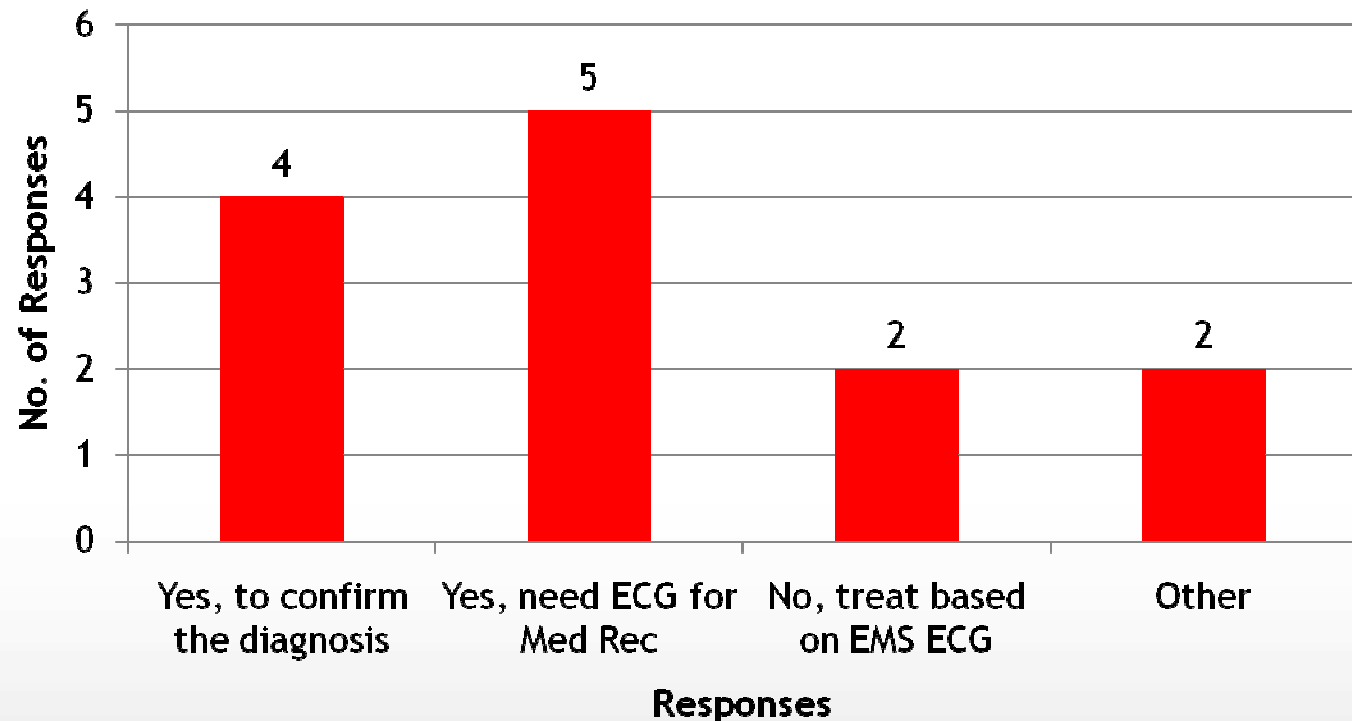
PPCI Hospital

- ➔ 16. If EMS Agency staff communicate that they have identified a STEMI, do you activate your Cath lab team and interventional cardiologist ahead of the patient's arrival to your emergency department?



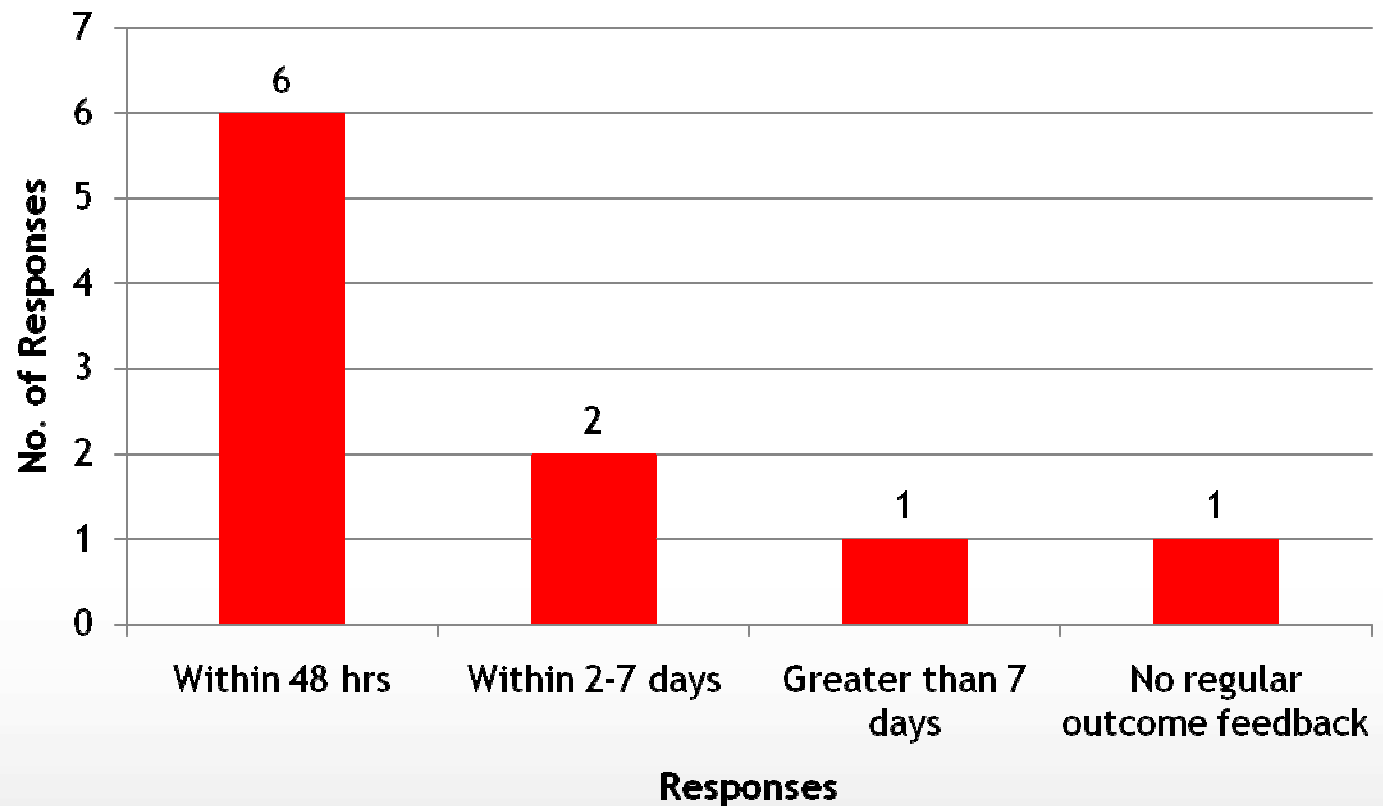
PPCI Hospital

➔ 17. If a patient is brought to your ED by EMS with a pre-hospital ECG identifying STEMI, do you repeat the ECG? Circle all that apply.



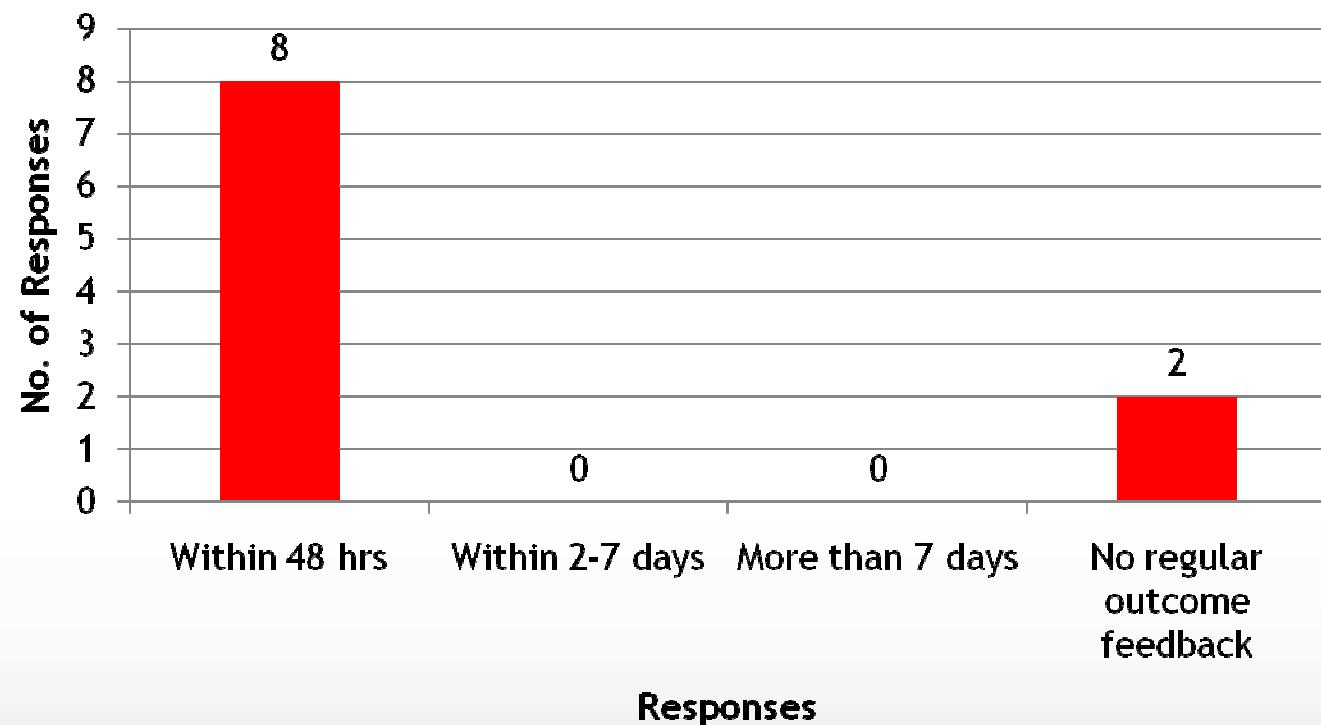
PPCI Hospital

➔ 19. Within what time period does your hospital provide regular outcome feedback to EMS providers?



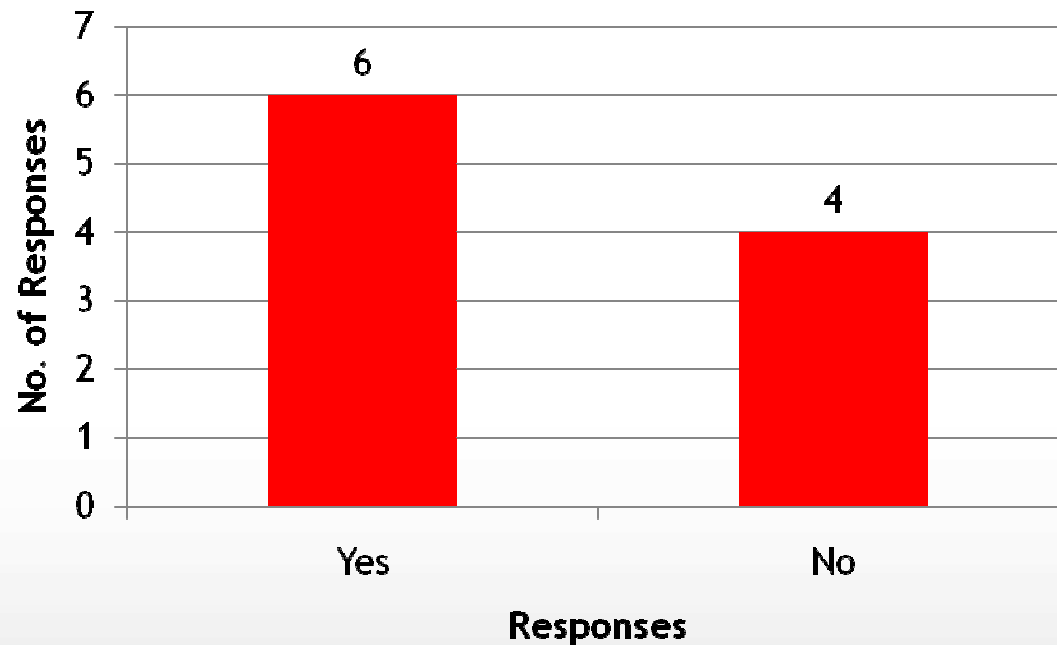
PPCI Hospital

➔ 23. Within what time period does your hospital provide regular outcome feedback to the referring hospital/non-PCI center?



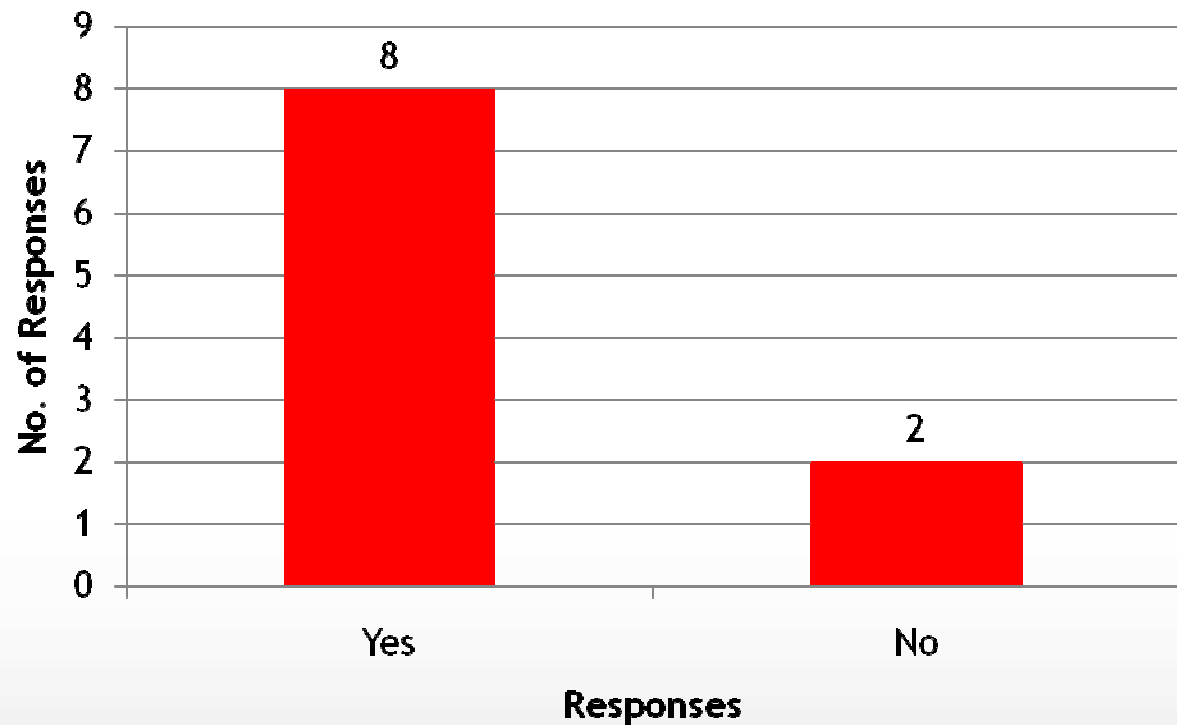
PPCI Hospital

- ➔ 27. Does your hospital participate in on-going multidisciplinary team meetings that include EMS, non-PCI hospitals/STEMI Referral Centers, and PCI hospitals/STEMI-Receiving Centers to evaluate outcomes and quality improvement data, review operational issues, identify problems and implement solutions?



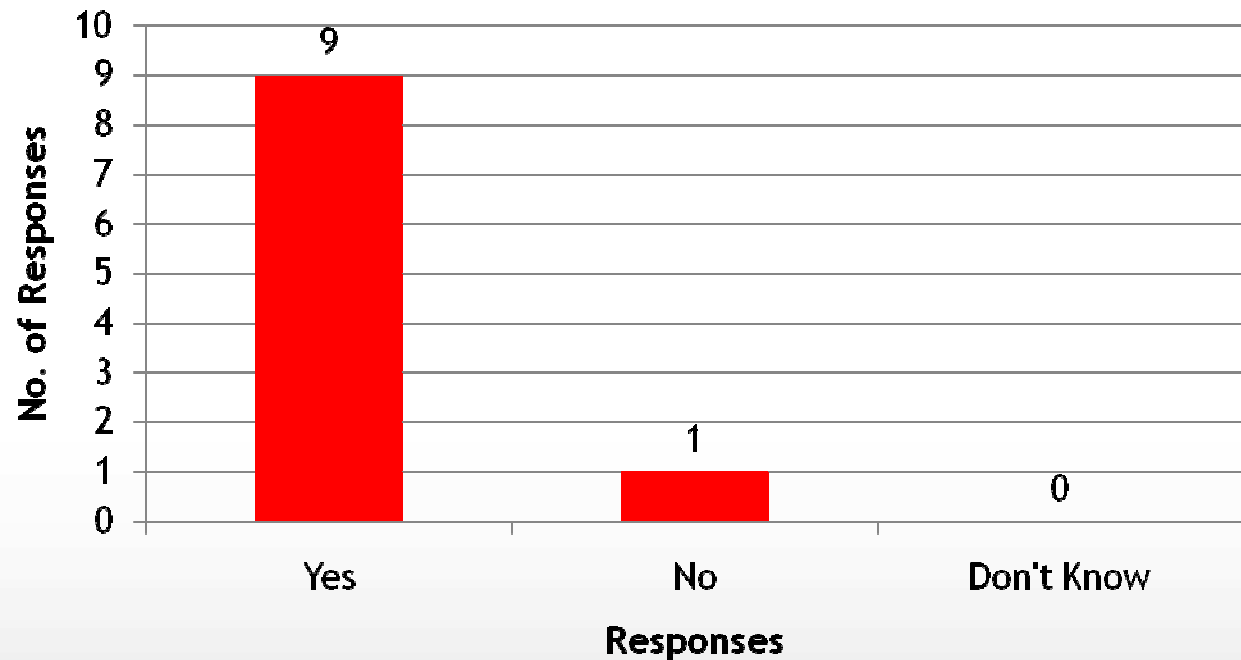
PPCI Hospital

➔ 31. Do you have a recognized STEMI Receiving Center liaison/system coordinator and a recognized physician champion?



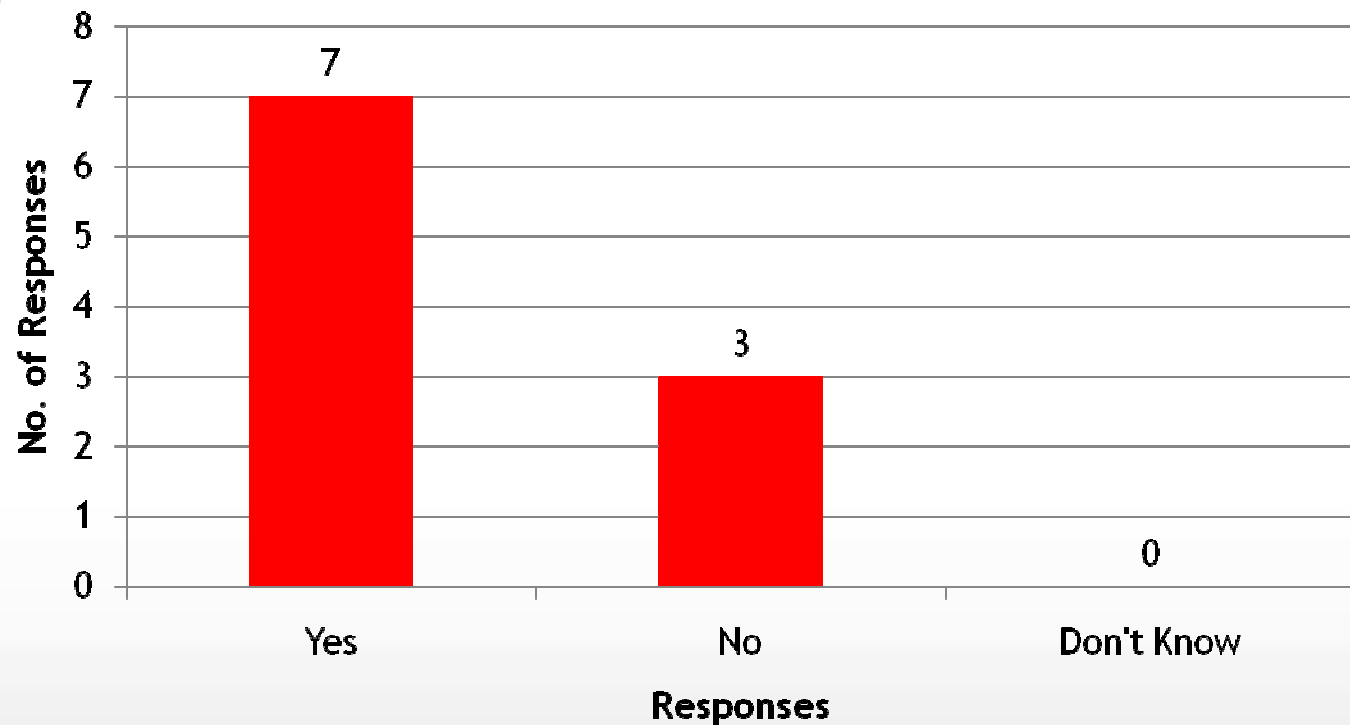
PPCI Hospital

→ 33. Do each of your interventional cardiologists meet ACC/AHA criteria requiring the performance of at least 11 primary PCI procedures per year and 75 total PCI procedures per year?



PPCI Hospital

➔ 34. Does your hospital meet ACC/AHA criteria requiring the performance of at least 36 primary PCI procedures per year and 200 total PCI procedures per year?



Key Findings

Key Findings - EMS

- ➔ A small number have no 12 lead ECG capabilities
- ➔ Annual 12 lead ECG education/training is variable & some have no training
- ➔ A 12 lead ECG triage protocol is needed
- ➔ For those performing 12 lead ECGs, all appear to have a PCI destination protocol
- ➔ Most are not able to activate the cath lab
- ➔ Participation in STEMI Receiving Center QI meetings is uncommon

Key Findings - Non-PPCI Hospitals

- ➔ A small number repeat the EMS ECG at the ED
- ➔ Reperfusion using transfer to PPCI is consistent
- ➔ Routine review of STEMI data with EMS is uncommon
- ➔ There is a need for a transfer plan for fibrinolytic ineligible and shock patients

Key Findings - Non-PPCI Hospitals

➔ Transfer to Designated PPCI Hospitals

Average Distance	Median Distance	Distance Range
• 65.5 miles	• 40 miles	• Min 5 • Max 78.3

Key Findings - PPCI Hospitals

- ➔ Development and posting of a 12 lead ECG triage protocol requires improvement
- ➔ There is variation in STEMI/AMI data collection tools; not all use the Action Registry-GWTG
- ➔ 20% do not routinely activate the Cath Lab based on EMS ECG findings
- ➔ 40% repeat the EMS ECG to confirm the diagnosis
- ➔ Feedback to EMS & Referral Hospitals is inconsistent
- ➔ QI Team participation responses are inconsistent with EMS responses

Key Findings - Regional System

→ In general, System aspects are not being addressed



www.americanheart.org/missionlifeline