

Oregon Emergency Medical Services (EMS) Cardiac & Stroke Pre-Hospital Care Survey Results

In 2007, the American Heart Association (AHA), the American Stroke Association (ASA) and the Oregon Department of Human Services (DHS) Heart Disease and Stroke Prevention Program (HDSP) partnered with EMS professionals statewide to conduct a short survey (24 questions) assessing the current state of pre-hospital care for stroke and cardiac events in Oregon. Questions were about pre-hospital care in Oregon for chest pain or myocardial infarction (MI) and for stroke. The responses to these questions can help us direct and coordinate resources to improve the care of patients in Oregon.

An online survey link was sent to 115 EMS agencies and an estimated 44 to 62 EMS supervising physicians (medical directors) respectively. Twenty-three of the twenty-four total questions were identical in the two versions of surveys. Responses from EMS agencies represented 29 Oregon counties with a response rate of 49%. Responding EMS supervising physicians represented 11 counties with half the response rate of the EMS agencies. Significant findings are summarized below:

- Almost all responders (EMS agencies: 98%; supervising physicians: 100%) reported that their 9-1-1 Public Safety Answering Point (PSAP) considered chest pain an emergency call.
- Almost all responders (EMS agencies: 98%; supervising physicians: 92%) reported that their 9-1-1 PSAP considered stroke an emergency call.
- Almost all agencies (EMS agencies: 96%; supervising physicians: 100%) reported having a specific chest pain protocol.
- Most agencies (EMS agencies: 89%; supervising physicians: 83%) had a specific stroke protocol. The Cincinnati Stroke Scale was used most commonly for documentation.
- Some agencies (EMS agencies: 25%; supervising physicians: 50%) had a triage protocol for sending patients with chest pain or ST-elevated myocardial infarction (STEMI) to a specific cardiac or heart hospital, even if it was not the nearest hospital or the hospital of patient choice.
- Few agencies (EMS agencies: 5%; supervising physicians: 8%) had a triage protocol for sending patients with stroke symptoms to a specific stroke hospital, even if it was not the nearest hospital or the hospital of patient choice.
- Most of the agencies (EMS agencies: 66%; supervising physicians: 92%) performed pre-hospital 12 lead ECGs on patients with chest pain.
- Some decisions about sending patients to a specific cardiac or heart hospital relied on automatic ECG or EMT reading. A few agencies transmitted the ECG electronically to a hospital for interpretation.

For specific results, please go to
<http://www.oregon.gov/DHS/ph/hdsp/pubs.shtml>

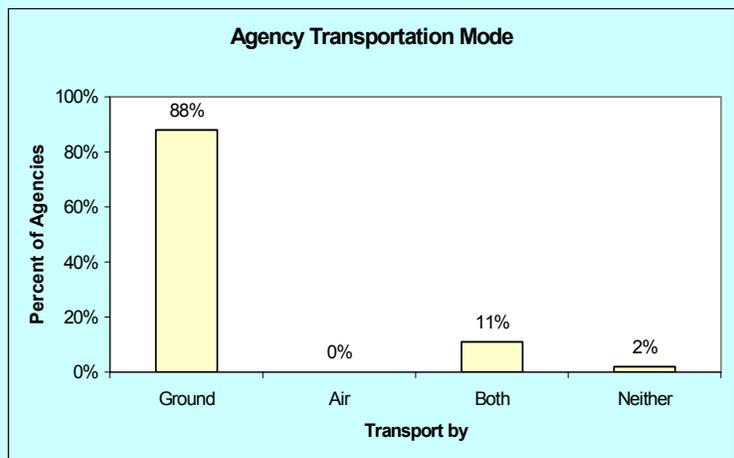
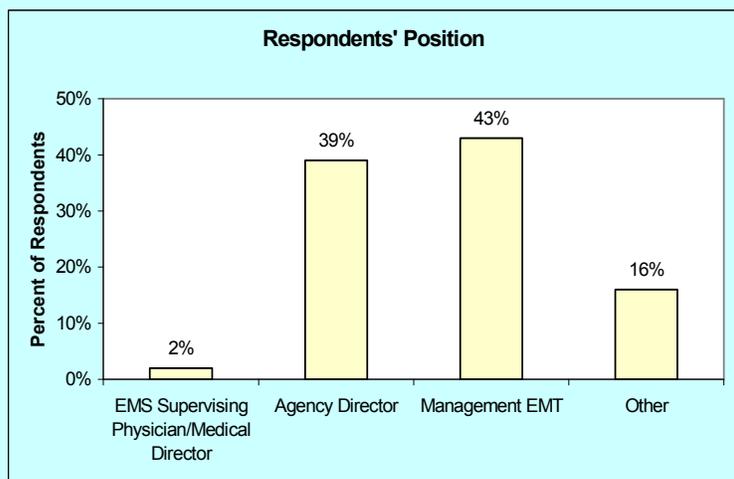
Response Rates

EMS Agencies
48.7% (56/115)

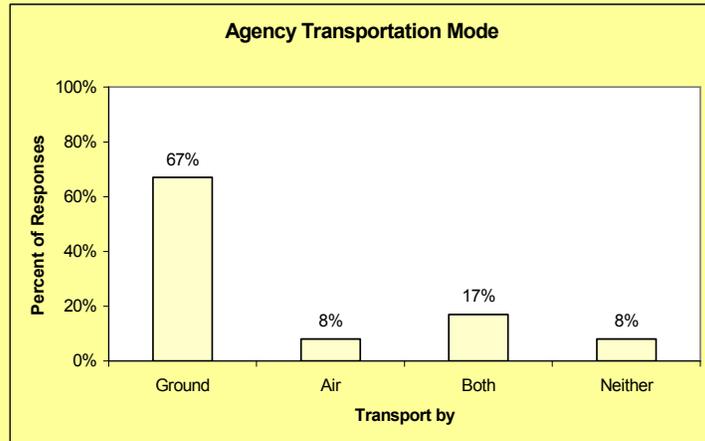
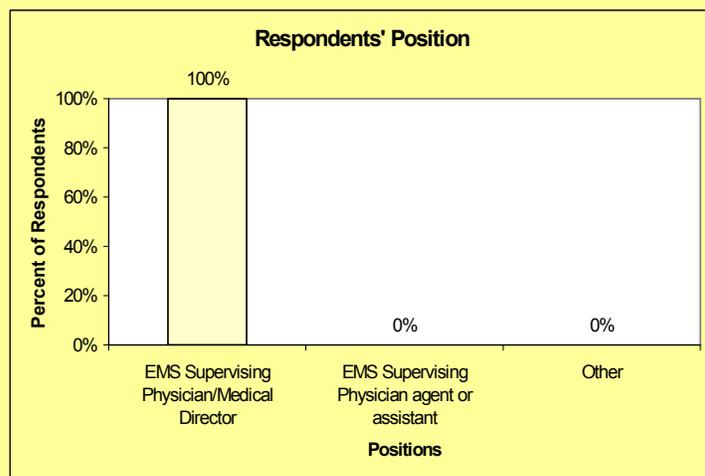
**EMS Supervising Physicians
(Medical Directors)**
19.4% (12/62) ~ 27.3% (12/44)

Characteristics of EMS Responders

EMS Agencies

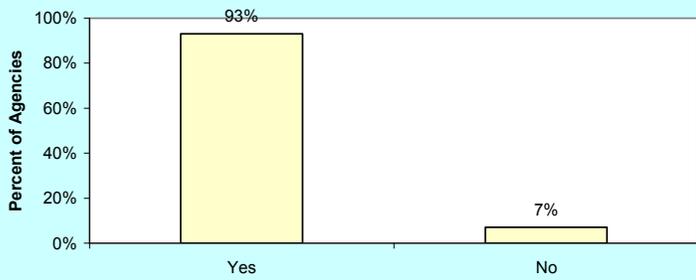


EMS Supervising Physicians

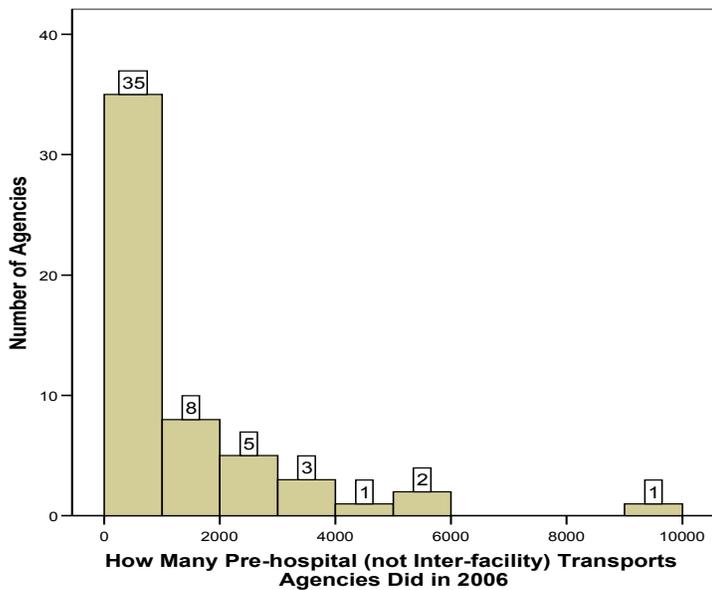
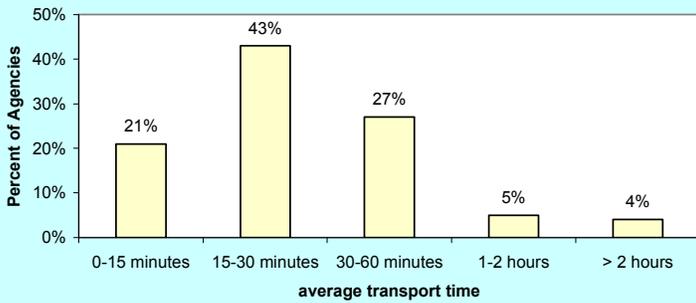


EMS Agencies

Whether Agency is an ASA (Ambulance Service Area) Provider (as Opposed to Being a Subcontractor to ASA Provider)

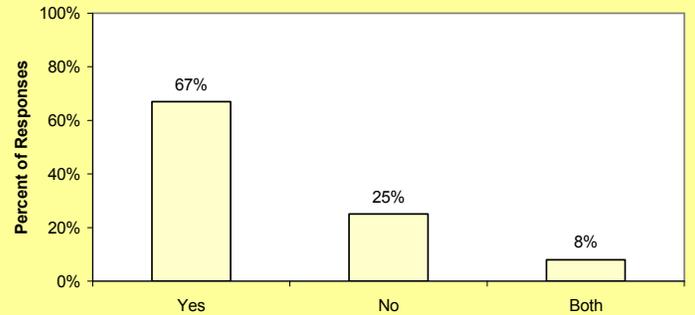


Average Transport Time for Agencies to the Nearest Hospital

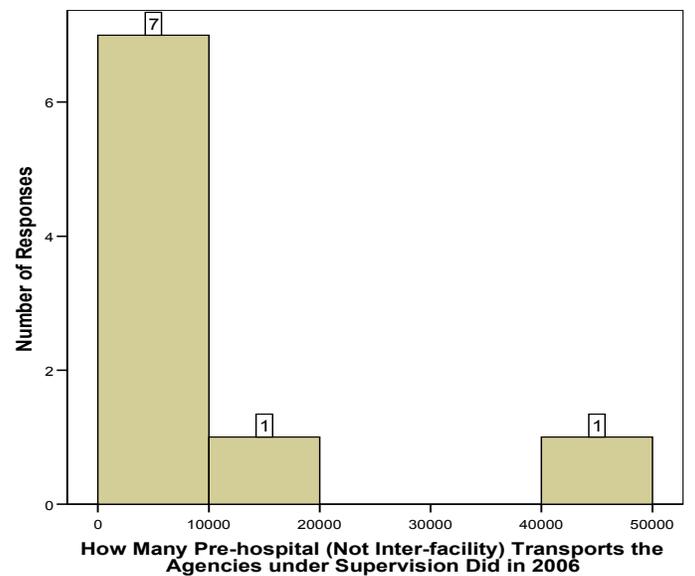
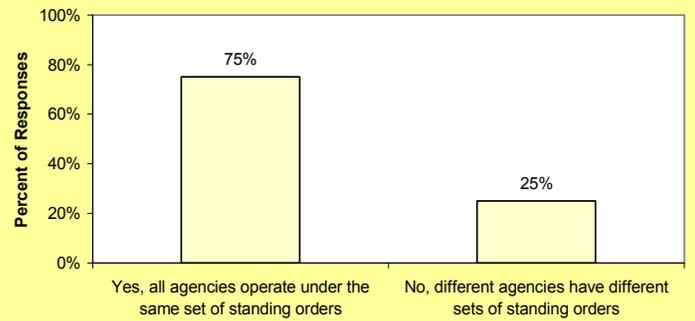


EMS Supervising Physicians

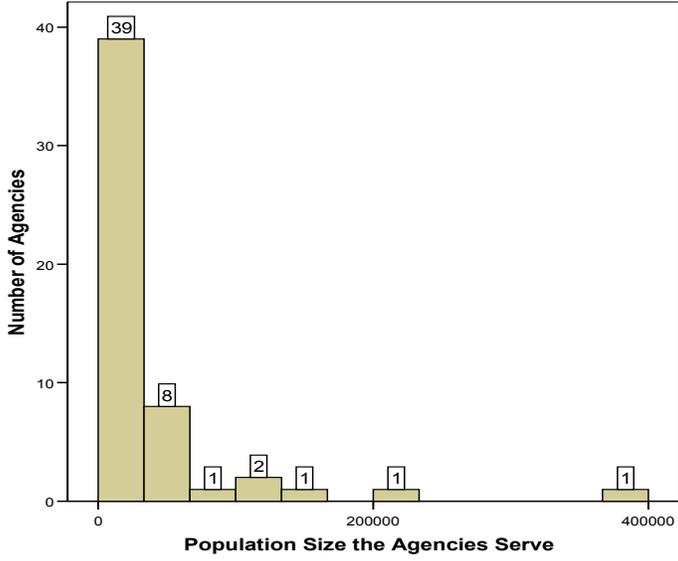
Whether Agencies under Supervision Are ASA Providers (as Opposed to Being Subcontractors to the ASA Provider)



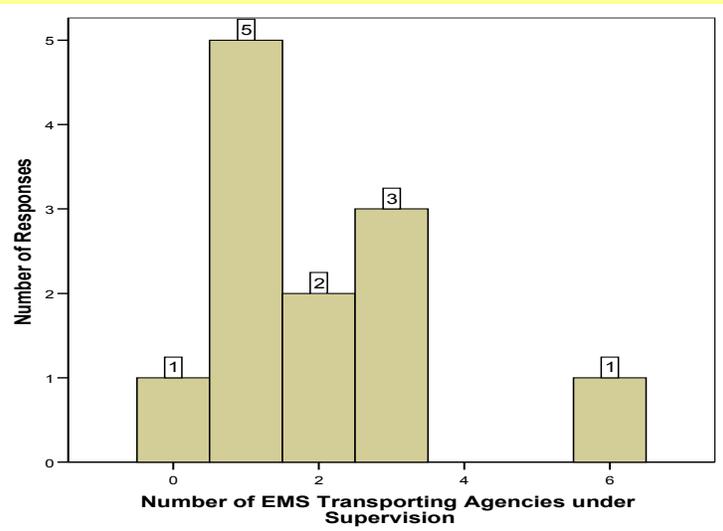
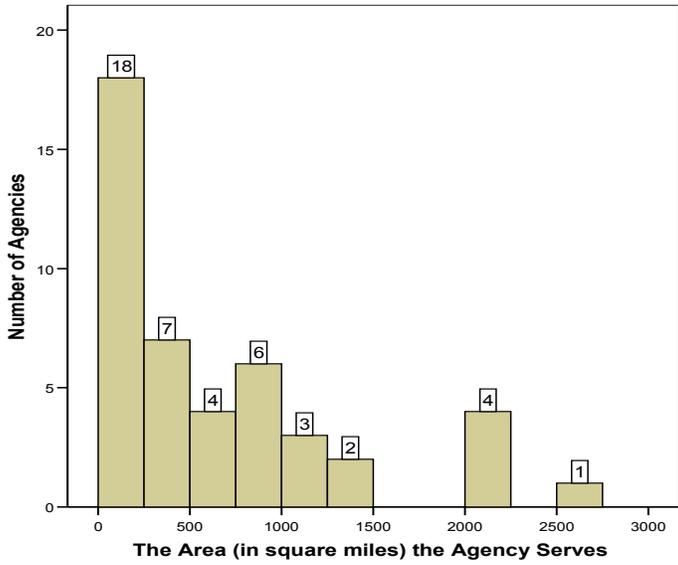
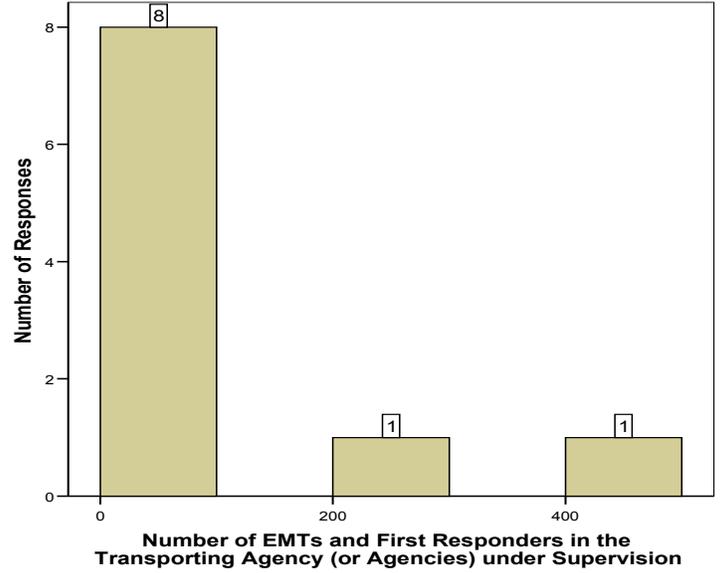
Whether the Agencies Under Supervision Use the Same Set of Standing Orders



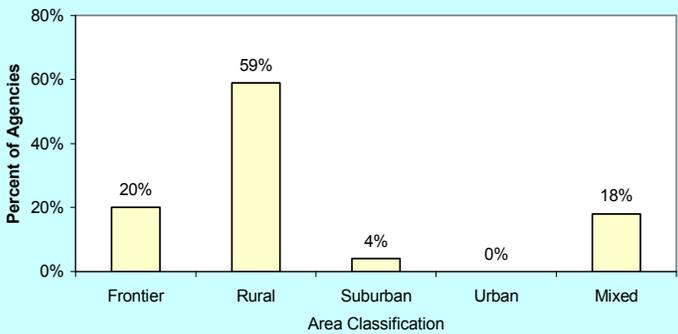
EMS Agencies



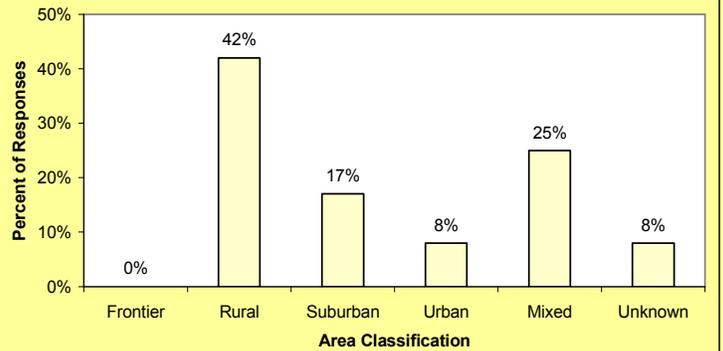
EMS Supervising Physicians



Agency Primary Geographic Area

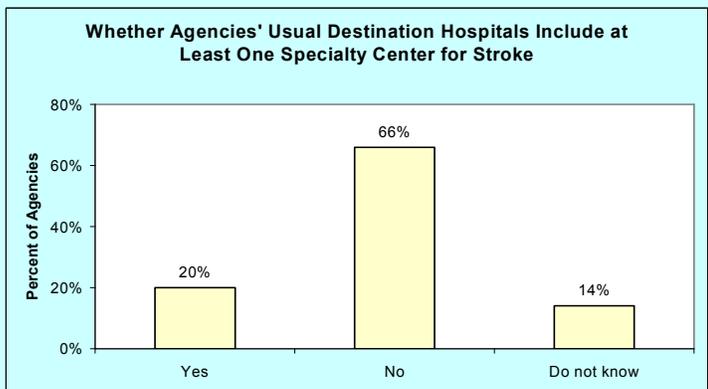
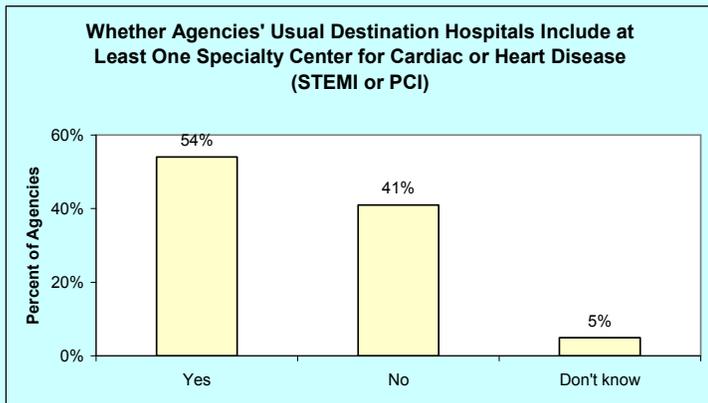
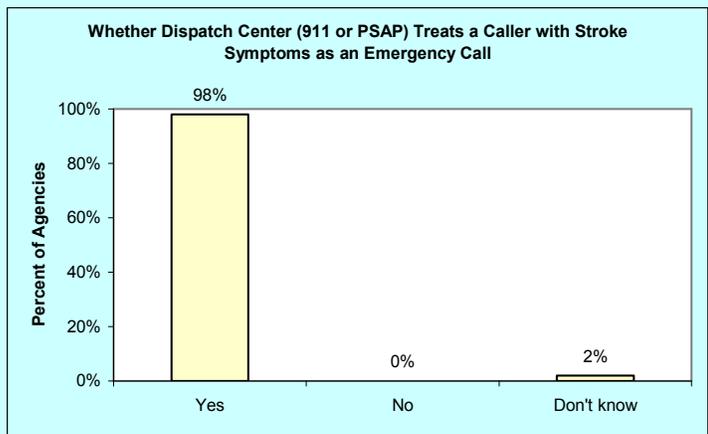
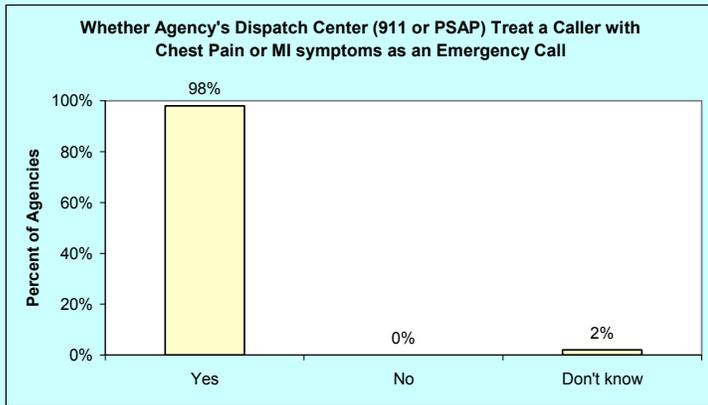


Setting of Agency's Primary Service Area

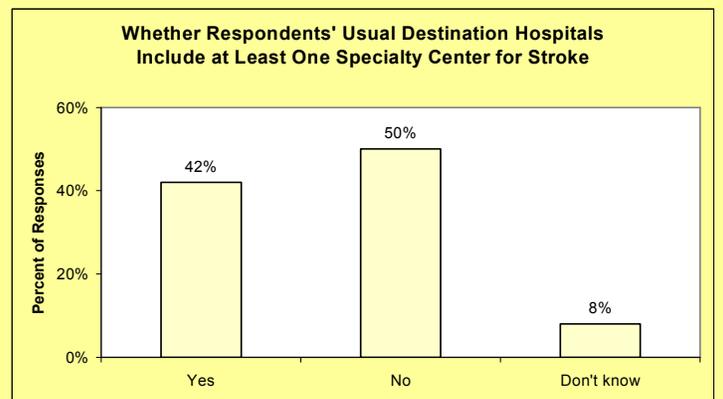
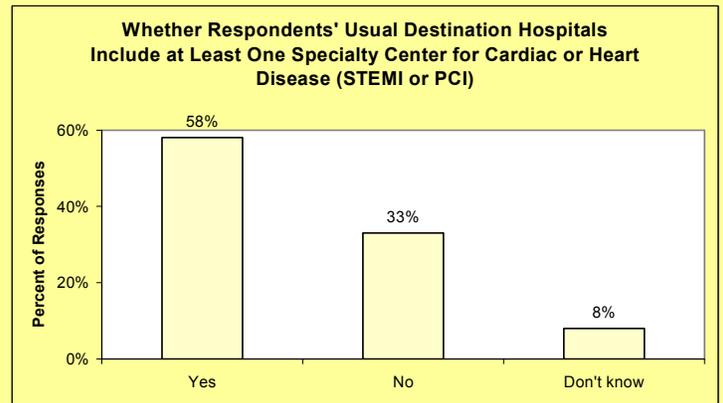
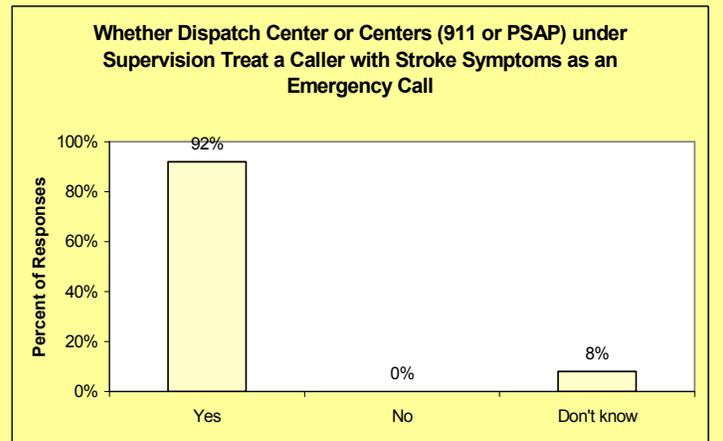
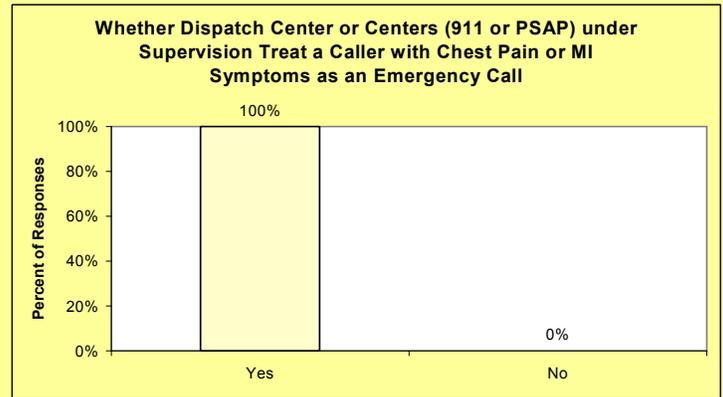


Pre-Hospital Care

EMS Agencies

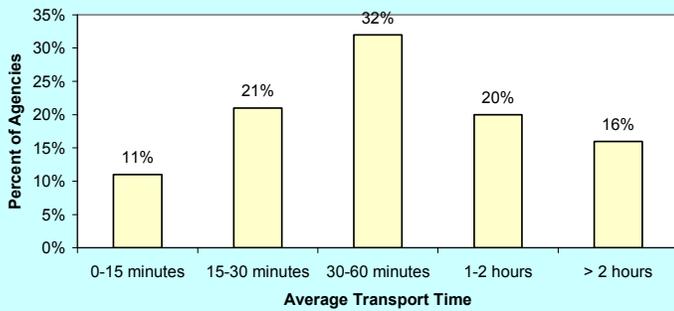


EMS Supervising Physicians

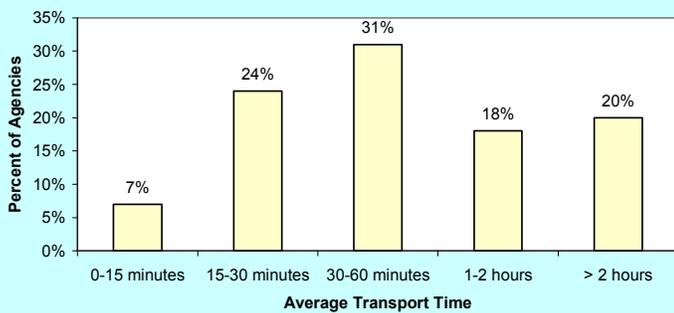


EMS Agencies

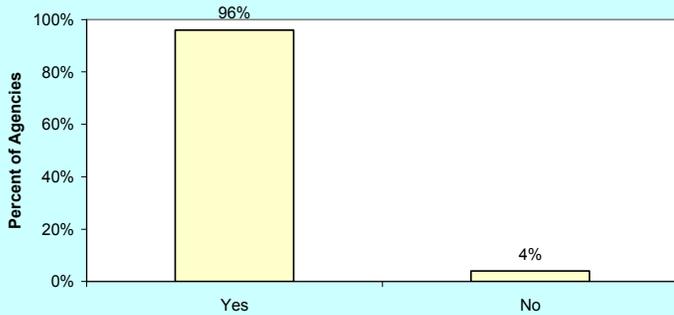
Agency's Average Transport Time to a Specific Cardiac or Heart Hospital



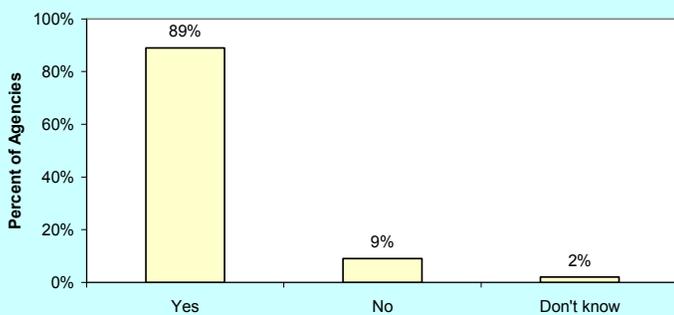
Agency's Average Transport Time to a Specific Stroke Hospital



Whether Agencies Have a Specific EMS Chest Pain Protocol

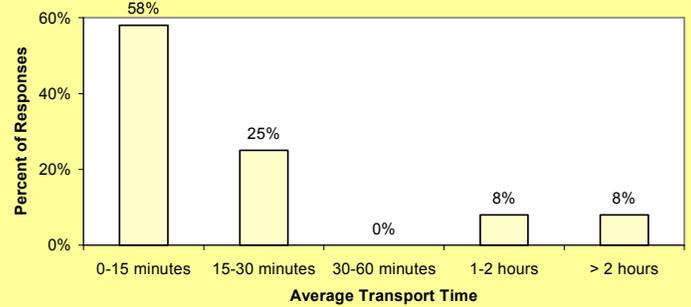


Whether Agencies Have a Specific EMS Stroke or CVA Protocol

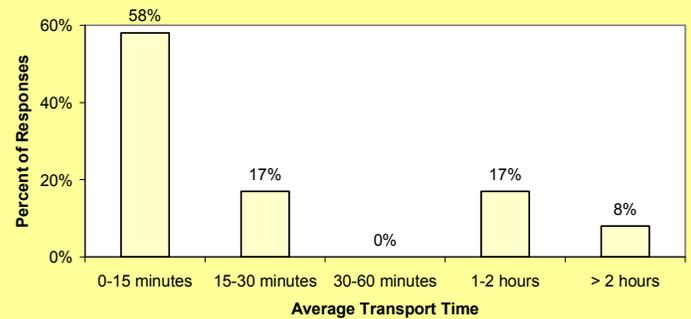


EMS Supervising Physicians

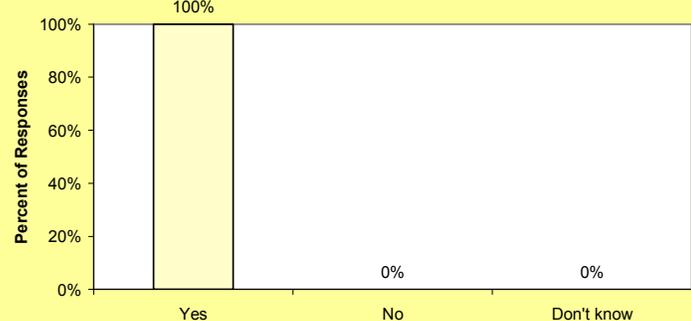
Average Transport Time for Agencies under Supervision to a Specific Cardiac or Heart Hospital



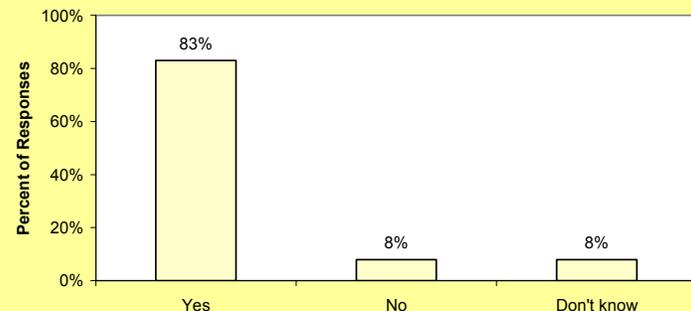
Average Transport Time for Agencies under Supervision to a Specific Stroke Hospital



Whether Agencies under Supervision Have a Specific EMS Chest Pain Protocol

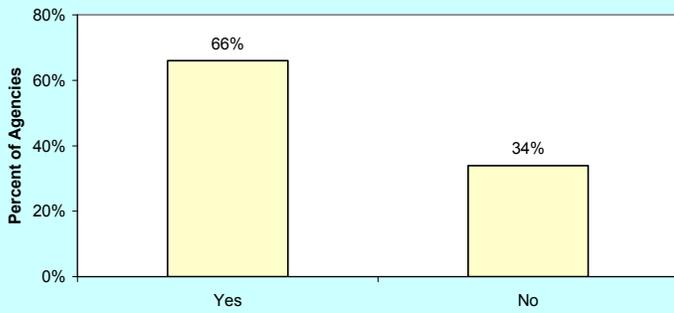


Whether Agencies under Supervision Have a Specific EMS Stroke or CVA Protocol

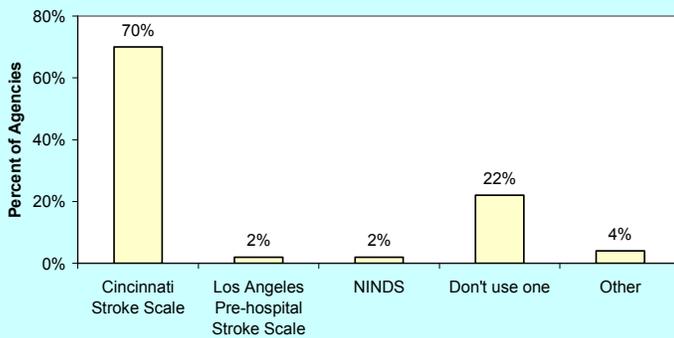


EMS Agencies

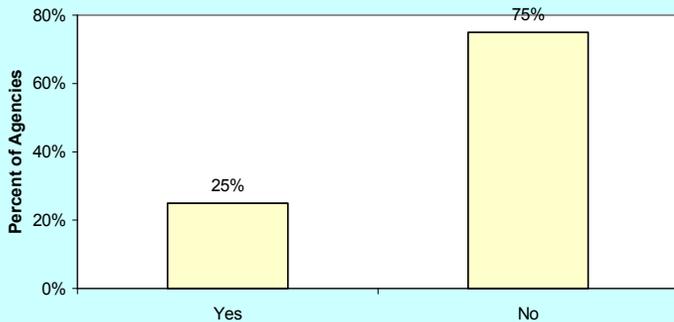
Whether Agencies Perform 12-lead ECGs in the Field on Patients with Chest Pain



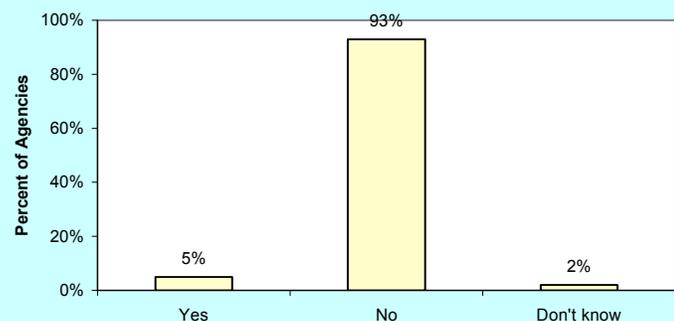
Which Stroke Scale or Score the Agency Uses



Whether Agencies Have a Triage Protocol for Sending Patients with Chest Pain or STEMI to a Specific Cardiac or Heart Hospital (Even If It Is Not the Nearest Hospital or the Hospital of Patient Choice)

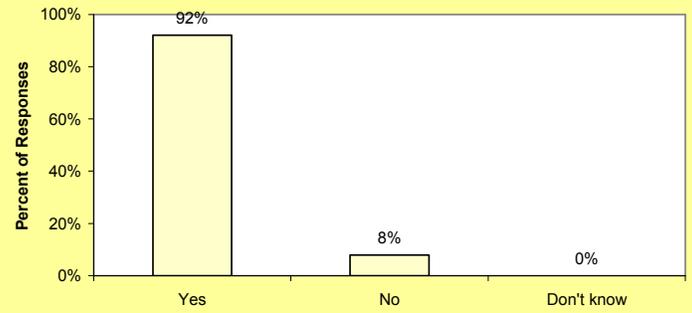


Whether Agencies Have a Triage Protocol for Sending Patients with Stroke Symptoms to a Specific Stroke Hospital (Even If It Is Not the Nearest Hospital or the Hospital of Patient Choice)

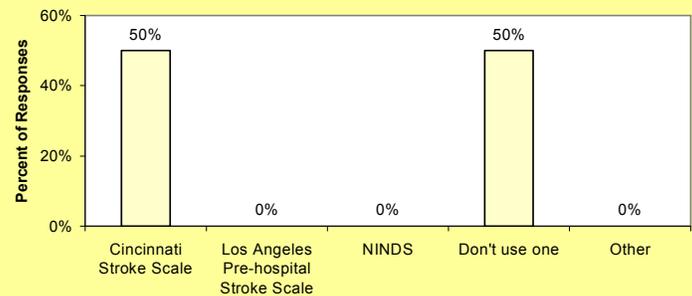


EMS Supervising Physicians

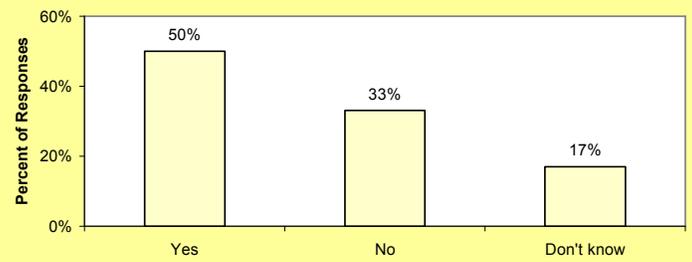
Whether Agencies under Supervision Perform 12-lead ECGs in the Field on Patients with Chest Pain



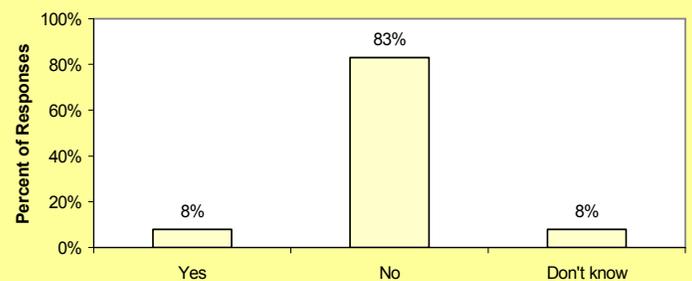
Which Stroke Scale or Score the Agencies under Supervision Use



Whether Agencies under Supervision Have a Triage Protocol for Sending Patients with Chest Pain or STEMI to a Specific Cardiac or Heart Hospital (Even If It Is Not the Nearest Hospital or the Hospital of Patient Choice)

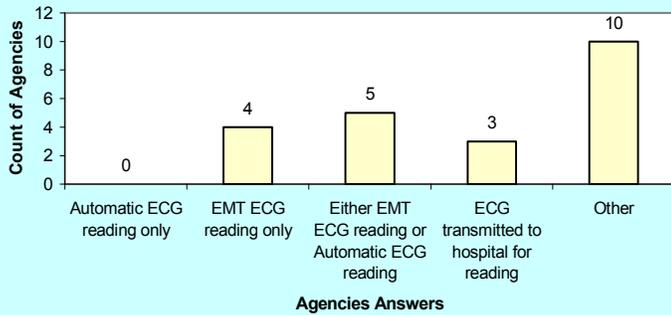


Whether the Agencies under Supervision Have a Triage Protocol for Sending Patients with Stroke Symptoms to a Specific Stroke Hospital (Even If It Is Not the Nearest Hospital or the Hospital of Patient Choice)



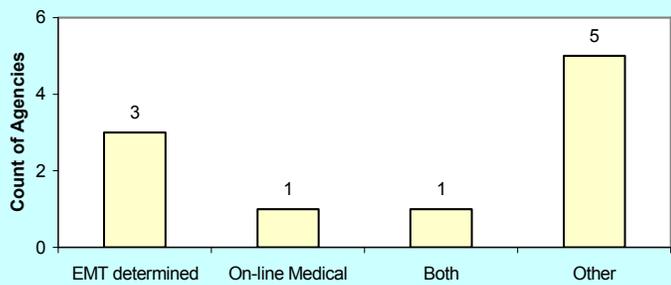
EMS Agencies

How Is the Decision Made to Send Patients to Specific Cardiac or Heart Hospital (If the Agency Has a Triage Protocol for Patients with Chest Pain or STEMI)



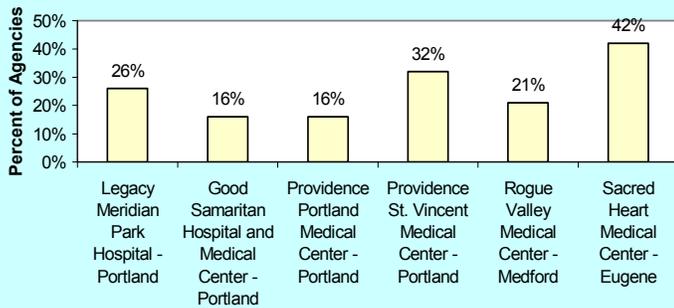
Agencies Answers

How Is the Decision Made to Send the Patient to the Specific Stroke Hospital (If the Agency Has a Triage Protocol for Patients with Stroke Symptoms)



Agencies Answers

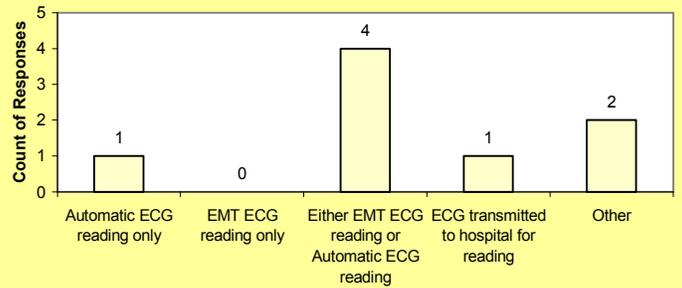
Which JCAHO Primary Stroke Center Agencies Usually Transport Patients with Stroke Symptoms to (If Any)



JCAHO Primary Stroke Centers

EMS Supervising Physicians

How Is the Decision Made to Send the Patient to the Specific Cardiac or Heart Hospital (If the Agencies under Supervision Have a Triage Protocol for Patients with Chest Pain or STEMI)



How Is the Decision Made to Send the Patients to the Specific Stroke Hospital (If the Agencies under Supervision Have a Triage Protocol for Patients with Stroke Symptoms)



To Which JCAHO Primary Stroke Centers the Agencies under Supervision Usually Transport Patients with Stroke Symptoms (If Any)

