

Rapid Early Action for Coronary Treatment

MEASUREMENT MANUAL OF OPERATIONS

REACT Measurement Manual of Operations Table of Contents

I. Overview and Purpose of the REACT Study							
	A. Study Goal	1					
	B. Study Specific Aims and Other Objectives	1					
	C. Study Timeline	3					
II.	Study Organization						
	A. Participating Institutions	5					
	B. Governance Structure	5					
III.	Study-wide Communication Procedures						
	A. Committee Reporting Procedures	10					
	B. Procedures for Conference Calls and Meetings	10					
	C. Site Communication Procedures	11					
IV.	Study Design						
	A. Experimental Design						
	B. Community Selection and Matching Criteria	15					
	C. Hospital Inclusion Criteria						
	D. Case Inclusion Criteria	17					
V.	Intervention Methods						
	A. Description of Methods						
	B. Community Organization						
	C. Community Education						
	D. Provider Education	19					
	E. Patient Education	19					
	F. Site Action Plans	19					
VI.	<u>Case Ascertainment</u>						
	A. Patients with Confirmed Acute Ischemic Cardiac Events						
	B. Patients Released from the ED						
VII.	Sample Selection Procedures						
	A. Case Sampling Procedure	23					
	B. Community Survey Sample						

VIII. Measurement Methods

	A. Purpose and Description of REACT Data Collection Methods	24				
	1) ED Database Form					
	2) Locator Form					
	3) ED Record Abstract					
	4) In-Patient Medical Record Abstract					
	5) Transferred Patients Medical Record Abstract					
	6) EMS Log Form					
	7) RDD Community Survey					
	8) ED Patient Follow-up Survey					
	9) Inpatient Follow-up Survey					
	B. Data Collection Schedule of Implementation	26				
IX.	Special Substudies and Protocols					
	A. Transfer from ED	28				
	B. Transfer after Admission	28				
X.	Emergency Department Nurses' Training Protocol					
	A. Introduction					
	B. Sample Dialog to Nurses	32				
	C. Case Scenarios	34				
	D. Refresher Training					
XI.	Guidelines for Medical Record Abstraction					
	A. Overview and Purpose of Record Abstraction	38				
	B. Obtaining Charts	38				
	C. General Instructions for Completing Data on the Form	38				
XII.	Informed Consent	45				
XIII.	Data Management					
	A. Overview and Structure	51				
	B. Data Collection/ID Assignment Procedures	52				
	C. Data Management Reports and Quality Control	71				
	D. Laptop Maintenance	72				

XIV. Quality Control

A.	Abstractor Training and Certification	.74
B.	Abstractor Reliability Assessments	.75
C.	Site Visits	.75
D.	Quality Control Reports	.80

Appendix A: REACT Forms and Question-by-Question Instructions

A.	Locator Form	82
B.	ED Log Form	95
C.	ED Abstract Form	99
D.	In-Patient Medical Record Abstract Form	120
E.	Transferred Patient's Medical Record Abstract Form	146
F.	EMS Log Form	150
G.	RDD Community Survey	159
H.	In-Patient Follow-up Telephone Survey	184
I.	ED Follow-up Survey	217

I. PURPOSE AND OVERVIEW OF REACT

A. Study Goal

The goal of REACT (Rapid Early Action for Coronary Treatment) is to reduce patient delay time from onset of acute myocardial infarction (AMI) symptoms to contact with hospital-based emergency medical care. To accomplish this goal, REACT will implement a community-wide intervention program and evaluate its effects on delay time. REACT will also evaluate the impact of the program on medical care, utilization of emergency medical services, and AMI associated outcomes.

REACT is a four-year multi-center randomized controlled community trial in which 10 communities will receive a community-wide intervention program and 10 matched communities will serve as a comparison group. The study is a collaborative effort between five Field Centers, a Coordinating Center, and the National Heart, Lung, and Blood Institute.

B. Study Specific Aims and Other Objectives

The <u>primary aim</u> of REACT is to evaluate the effect of an 18-month community-wide intervention program on patient delay time from onset of symptoms suggestive of AMI to arrival at the hospital in patients admitted for possible acute cardiac ischemia and receiving a cardiac-related discharge diagnosis.

The secondary aims of REACT are to:

- 1. develop, implement, and evaluate the implementation of an 18 month multicomponent community intervention program based on sound behavior change theory and consisting of four components: community organization, community education, professional education, and patient education.
- 2. evaluate the impact of the intervention program on factors hypothesized to be important influences on patient delay, including knowledge, attitudes, and skills of adult citizens, health care professionals, and patients about the symptoms of AMI, appropriate actions to be taken, and specific skills necessary for taking action at the time of acute symptom onset.
- 3. evaluate the effect of the intervention program on delay time from onset of AMI symptoms to arrival at the hospital (ED) in patients with AMI symptoms, including patients presenting to the Emergency Department (ED) with chest pain/discomfort, patients admitted for possible acute cardiac ischemia (rule-out MI, unstable angina, chest discomfort (or synonym)) and patients receiving 410/411 discharge diagnoses.
- 4. evaluate the effect of the intervention program on other delay time intervals, including, symptom onset to contact with emergency medical personnel (either EMS or acute ED), symptom onset to receipt of reperfusion treatment in patients receiving such treatment, and symptom onset to time of taking action.

- 5. evaluate the effect of the intervention program on medical care and health outcomes in patients with <u>diagnosed</u> acute cardiac ischemia, including receipt of thrombolytic therapy and other reperfusion therapy, AMI severity, in-hospital case fatality rates, length of hospital stay, and community-wide CHD mortality rates.
- 6. evaluate the effect of the intervention program on utilization of medical services, including 911/EMS and E.D. and hospital admissions.
- 7. evaluate the impact of the intervention program on delay time in subgroups by gender, age, and race/ethnicity.

REACT will also:

- 1. estimate the current national average delay time and its trends from onset of AMI symptoms to ED arrival, and to describe the distribution of delay times by race/ethnicity, gender, age, socioeconomic status, geography, and symptom pattern.
- 2. study differences among communities and among subgroups identified by race/ethnicity, gender, and age, in symptom presentation and outcomes of acute ischemic cardiac disease.
- 3. study hospital practices for thrombolytic and other reperfusion therapy, and describe the distribution of <u>such</u> treatment by patient race/ethnicity, gender, age, and socioeconomic status.
- 4. evaluate, amongst patients receiving thrombolytic and other coronary reperfusion strategies, the time-to-treatment effect on in-hospital case fatality rates overall and by subgroups identified by race/ethnicity, gender, age, socioeconomic status, and geography, controlling for AMI severity.
- 5. contribute to methods for measuring and analyzing delay time and its components in diverse population groups with suspected acute cardiac ischemia.
- 6. study factors associated with various phases of the delay interval as well as overall delay time, including situational characteristics (e.g., location during symptoms, presence of others, day of week, etc.).
- 7. study patterns of behavior, including patient actions such as self-care, in response to AMI symptoms.
- 8. determine the impact of the various program components on knowledge, attitudes, skills, and behaviors of the general public and patients with acute CHD.

C. Study Timeline

The overall timeline for REACT is shown in Figure 1. The first year of the study consists of study planning and development. In year 02, baseline data collection will be conducted for four months in all study communities from December 1 to March 31. Follow-up data collection will be conducted from April 1, 1996 through September 1997. The intervention will be implemented in phases, beginning with community organization and professional education late in year 02 and followed by all four education components, including community organization, community education, professional education, and patient education in year 03. The final 9 months of the four years will be utilized for data processing and analyses.

REACT STUDY TIMELINE



II. STUDY ORGANIZATION

REACT is a collaborative study supported by cooperative agreements from the National Heart, Lung and Blood Institute (NHLBI). The participating institutions and governance structure of the study are described below.

A. Participating Institutions

The REACT study is being carried out by five participating study centers, a Coordinating Center, and the NHLBI project office. The Study Centers are as follows:

- 1. University of Alabama at Birmingham, Birmingham, AL
- 2. University of Massachusetts Medical School, Worcester, MA
- 3. University of Minnesota, Minneapolis, MN
- 4. University of Texas Health Science Center at Houston, Houston, TX
- 5. University of Washington, Seattle, WA and Oregon Health Sciences University, Portland, OR

The Coordinating Center is the New England Research Institutes (NERI) located in Watertown, MA.

The Project Office is located in the Division of Epidemiology and Clinical Applications (DECA), National Heart, Lung and Blood Institute, Bethesda, Maryland.

Biostatisticians are part of the Project Office and a Grants Management Specialist works closely with the Project Scientist regarding policies and procedures related to fiscal matters. The NHLBI Project Scientist serves as a direct link between REACT investigators and the Director of NHLBI. The NHLBI Office of Prevention, Education, and Control (OPEC) is also involved in the development of this project.

Figures 2 and 3 present the REACT organizational structure and the structure of committee and working groups, respectively.

B. Governance Structure

1. <u>Steering Committee</u>

The REACT study is governed by the Steering Committee, consisting of the Principal Investigator (P.I.) from each of the five Study Centers, the Principal Investigator of the Coordinating Center, and the NHLBI Project Officer. The chair of the Steering Committee is elected by the Steering Committee. The chair serves as spokesperson for the study, develops agendas for and chairs Steering Committee meetings and conference calls, works closely with the Coordinating Center P.I. and the Project Officer on day-to-day matters, and attends DSMB meetings as the study representative. Each member of the committee has one vote. If a member of the Steering Committee is not present at a meeting, that center's vote may be delegated to another investigator from that center. All study protocol decisions are made through Steering Committee consensus or, if necessary, a Steering Committee vote. A motion or proposal can be passed by simple majority; in case of a tie, the motion will be tabled for repeat consideration at the next meeting or conference call. The Steering Committee will meet regularly, as needed for the first year, to direct the development of the study protocol and manual of operations, and to review and approve all major design, intervention, and measurement aspects of the study. The Steering Committee is the decision-making body for all scientific aspects of the study, including the study design, interventions, and measurements. It can seek advice from the DSMB or NHLBI regarding a Study Center or the Coordinating Center if they do not appear to be carrying out REACT activities satisfactorily.

2. <u>Subcommittees</u>

There are four major subcommittees for the REACT study as follows: Design and Analysis Subcommittee, Measurement and Quality Control Subcommittee, Intervention Subcommittee, and Publications and Ancillary Studies Subcommittee. The chair of each subcommittee is a Principal Investigator from a study center and is elected by the Steering Committee. For all subcommittees, at least one representative from each study center, one representative from the Coordinating Center and one representative from NHLBI is a member. The responsibilities of each subcommittee are outlined briefly below:

- a. Design and Analysis Subcommittee
 - (1) Develop the study design
 - (2) Determine the primary and secondary outcomes for the study
 - (3) Estimate Sample Size and Power for the specified effects and determine a sampling scheme, if needed
 - (4) Develop the analytical methods for evaluating the specified study hypotheses.
 - (5) Review and advise on all proposed ancillary studies and substudies
- b. Intervention Subcommittee
 - (1) Determine a behavioral theory model for the intervention
 - (2) Define the intervention components and strategies
 - (3) Develop standardized intervention materials
 - (4) Develop a standard intervention approach for all communities
 - (5) Define and develop process and impact evaluation
- c. Measurement and Quality Control Subcommittee
 - (1) Define the primary endpoint of delay time
 - (2) Determine subject eligibility criteria and methods for identifying subjects
 - (3) Develop and standardize the data collection instruments designed to measure primary and secondary trial outcomes, as well as impact measures.
 - (4) Determine the training required for all data collectors
 - (5) Develop quality control protocols for all data collection methods

- d. Publications, Presentations, and Ancillary Studies Subcommittee
 - (1) Develop the study publication policy
 - (2) Review and approve all publications, presentations and ancillary studies proposed by investigators that relate to data collected through REACT
 - (3) Assure accurate and timely presentation of pertinent information from REACT to the scientific community
 - (4) Assure that all REACT investigators have the opportunity to participate in the presentation and publication of study wide data.

3. Working Groups

Specific tasks are assigned by the subcommittees to working groups, as the need for such are ascertained. Four working groups were created by the Intervention Subcommittee to develop the major components of the intervention. The Process Evaluation and Impact Working Group combined members from the Intervention and Measurement Subcommittees.



Figure 3. REACT ORGANIZATION OF COMMITTEES



III. React Study-Wide Communication Procedures

A. Committee Reporting Procedures

The Steering Committee is the primary decision-making body for REACT. It directs the development of the study's protocol and all major design, measurement, and intervention activities. Officially, the Steering Committee makes assignments to Subcommittees. Subcommittees make assignments to the Working Groups. All REACT Subcommittees (Design and Analysis, Intervention, Measurement and Quality Control and Publications, Presentations, and Ancillary Studies) report to the Steering Committee. All Working Groups report to their respective Subcommittee. The Chairpersons of Community Organization, Community Education, Patient Education, Provider Education and Process and Impact Evaluation Working Groups report to the Intervention Subcommittee.

Chairpersons of the Subcommittees should provide written or verbal reports to the Steering Committee at regular intervals and at each scheduled Steering Committee meeting. This should include progress or problems with assignments, new developments and/or recommendations. Working Group Chairpersons should provide regular progress reports (either written or verbal) to Subcommittee Chairpersons as appropriate.

B. Procedures for Conference Calls and Meetings

The Coordinating Center makes arrangements for all committee and working group conference calls through the NHLBI, who in turn informs FTS, a Maryland vendor. The monthly conference call calendar schedule is provided to the project coordinators for distribution to all investigators at their site. The Coordinating Center requires at least one week's notice for an additional participant to join a call. Participants must inform FTS of temporary telephone number changes or telephone cut-off s by calling the 800 number and providing the Reservation number for the call as listed on the calendar. The Coordinating Center also makes arrangements for all committee and working group meetings. Additional specific procedures are as follows:

<u>Steering Committee</u> The Coordinating Center sends out a notice to all Steering Committee members requesting suggestions for the agenda for conference calls and meetings. The Coordinating Center acts as recorder for all Steering Committee calls and meetings; circulates drafted minutes to the Committee for edits; and distributes final minutes to all PIs. All Other Committees and Groups:

The Chair of the Subcommittee or Working Group should establish a written agenda for every call and meeting. The Committee or Working Group Chair is directed to forward the agenda to the Coordinating Center seven to ten days prior to a call or meeting, taking care to clearly identify the agenda and other materials (e.g., minutes) that need to be distributed. The Coordinating Center will distribute the agenda together with relevant materials to each participant

in advance of each conference call or meeting.

The Chair of all Subcommittees and Working Groups should make arrangements to have minutes taken for conference calls or meetings. Draft minutes for these calls and meetings should be provided to committee members for review and edit; final copies are then circulated to all participants. In many cases, the recorder of the call will add the edits to a final draft and the Coordinating Center will circulate draft and/or final versions of the minutes. Any materials being

provided to the Coordinating Center must be properly identified, including reference to the working group and call to which they pertain.

C. Site Communication Procedures

Field staff will have specific questions about the intervention or measurement procedures. It is important that all questions about study procedures and protocols be quickly resolved. In general, most clarifications of procedures can be found in the Measurement or Intervention Manual of Operations. However, REACT field staff should be encouraged to bring questions to the attention of the Site Coordinator for follow-up and resolution. When indicated, the Site Coordinator may need to direct an inquiry to NERI. All questions about

study procedures should be directed to Kathy Schulman at NERI at (617) 923-7747 x441.

Site Coordinators will be responsible for documenting, answering and triaging questions from their field staff. The Site Coordinator should document these questions and the answers they provide in a Site Inquiry Binder.

Communication and correspondence between NERI and the sites will also be documented and filed in a Communications Log Book at NERI. For minor points of clarification, site-inquiry telephone logs will be kept at NERI and may not be forwarded to the site. If an inquiry and its resolution require that all REACT sites have the information, then a study-wide numbered communications memo will be written and provided to the Coordinators at each site for distribution to their staff (see Figure 4). Again, all memos should be filed in their Communications Log Book. Data Collectors should be instructed to file all Communications memos. NERI will be using a document delivery system that includes Fax, Fed-ex and E-Mail. This system allows each site/investigator to express their preferred method for receipt of documents. In general, documents will be sent by the individuals' preferred method. However, sometimes the nature of the document, or timing restrictions may require NERI to override your delivery preference. For example, if a heavily formatted study instrument is being circulated, the document would likely be restricted to Fax or Fed-ex . In order to facilitate timely and efficient distribution of communications, NERI must be informed of any name and address changes, and delivery preferences, as soon as possible. Please complete a copy of the Mailing Information Form, Figure 5, when new staff join the study, or when changing mailing addresses, phone numbers or document delivery preferences. The Mailing Information Form should be forwarded to Maggie Cotter at NERI.

Figure 4. COMMUNICATIONS LOG MEMO

RAPID EARLY ACTION FOR CORONARY TREATMENT COMMUNICATIONS LOG MEMO

#001

The Principal Investigator, Site Coordinators, and other appropriate REACT staff should read this memo. It should then be filed in the REACT Communications Log Notebook. Where appropriate, this memo should be forwarded to Data Collectors in the field.

TO:	All REACT Personnel
FROM:	Deborah Sellers, NERI Project Director
DATE:	September 1, 1995
RE:	Using the REACT Communications Log

The memos from NERI that are distributed simultaneously to each site for this Communications Log will be numbered clearly as shown above. Please note that only study wide communication log memos are numbered. Site inquiries and site specific communications are not numbered correspondence. The Site Coordinator should verify that their site has each memo. If a memo is lost or misplaced, simply call Kathy Schulman, REACT Project Coordinator at NERI, and tell her the memo number and she will send another copy. She can be reached at (617) 923-7747 Ext. 441.

As stated above, the Site Coordinator is responsible for maintaining the Communications Log, distributing these memos to other appropriate REACT staff, ensuring that the memo is read and initialed.

Any questions should be directed to Kathy Schulman at NERI at (617) 923-7747 Ext. 441.

Figure 5. SITE MAILING INFORMATION FORM

SITE MAILING INFORMATION FORM REACT					
Type (<i>Please Circle One</i>): (1) New Empl	oyee (2) (Change of Information	on		
First Name:	Last Name	:			
Site Name:	Position:				
(Data Collectors Only) Hospital Name:		Laptop #:			
Mailing Address:	Fed-	-ex Address: (if diffe	erent)		
Phone Number:					
Fax:					
Internet Address:					
Document Delivery Methods	OK to Use		Ranked by Preference*		
Fax:	Yes / No				
Fed-Ex:	Yes / No				
E-Mail:	Yes / No				
U.S. Mail:	Yes / No				

* Please only rank those methods that you are willing and capable of using.

IV. STUDY DESIGN

A. Experimental Design

An experimental design will be used consisting of 10 matched pairs of communities selected and recruited by field-site investigators. Each Field Site will study four communities, organized into two pairs and matched according to relevant criteria.

Community pairs were selected such that either community would be appropriate to receive the intervention. The randomization will be carried out by the Coordinating Center in a two-stage process similar to that of COMMIT. A computer-based pseudo-random number generator will be used to make the random assignment within each pair, with one community labeled "red" and the other "black." A second random assignment will determine whether "red" or "black" communities are to receive the intervention. This two-stage randomization serves to negate the effect of any flaws or tampering that may occur at either stage and adds credibility to the process. The nature of the intervention makes blinding impossible; all members of the study staff and concerned individuals in the communities will know whether or not the intervention is being implemented. It is therefore critical that intervention staff be separated from measurement staff in order to minimize bias.

B. Community Selection and Matching Criteria

1. Community Selection Criteria

Communities were selected so as to have sufficient population to provide an adequate number of patients hospitalized for acute ischemic heart disease required to achieve 80% statistical power for detecting a 30-40 minute net reduction in median delay time. All communities have hospitals whose catchment areas, when considered together, include the boundaries of the community. All communities have local media channels available for use in the intervention and have either basic or enhanced 911 service and Emergency Medical Services.

Within and across pairs, communities were selected to minimize media overlap and therefore, contamination. Whereas, it is impossible to completely insure that media coverage of local intervention events will not spread to comparison sites (e.g., via the Associated Press wire service), the process of community selection has attempted to minimize the potential for such contamination. Contamination of the comparison communities will be monitored through process and impact evaluation measures.

In addition, the following factors were considered:

- a. *variability among Field Sites* greater variability will provide for better generalizability for the primary and secondary trial outcomes; and
- b. *homogeneity within pairs of communities on key characteristics* homogeneity will provide a more efficient design by reducing within-pair community variability.

The variability of populations across community pairs is demonstrated by the geographic distribution of the Field Sites and the race/ethnicity diversity of the populations. A major goal of community selection was to approximate the sex and race/ethnicity distributions in the U.S. population and to provide geographic distribution across the U.S.

2. Community Matching Criteria

The use of a pair-matched design in this trial has the potential to considerably reduce between community variation - especially as the total number of communities will not be large. However, the problems of over-matching as well as ineffective matching have been well-documented (68,69). Moreover, as shown from recent estimates (71), the between community component of total variation is remarkably small - even among seemingly very different communities.

The pair-matching criteria were kept as relevant and as few as possible. These criteria include:

- a. *Size of community:* This will largely determine the number of hospital facilities, the organization of emergency medical services, and the media channels available for intervention.
- b. *Sociodemographic variables*: age, race/ethnicity, sex, median income, and educational attainment are important in estimating the baseline rate of acute IHD as well as the probable response to intervention. The inclusion of matched pairs with substantial minority populations will improve the generalizability of the results.

C. Hospital Inclusion Criteria

The goal of our hospital inclusion criteria is to maximize the catchment of patients from the study communities with acute ischemic heart disease while enabling us to maintain quality assurance and manage study resources efficiently. Specifically, all hospitals that provide care to patients from the study community with acute IHD will be included, as is practical. Pediatric, psychiatric, rehabilitation, convalescence hospitals, and hospitals without emergency departments will be excluded.

Two special situations deserve specific comment.

- 1. <u>Hospitals within the study communities with small market shares for the treatment of MI patients.</u> If a Field Site P.I. requests to exclude a small market share hospital, the PI must show conclusively that minority representation will not be adversely affected and, furthermore, that the expected number of events at that hospital is so low (no more than 10% of community MI patients) as to make data collection quality assurance difficult. Hospitals that traditionally provide care to minority populations will not be excluded. Investigators proposing to exclude a hospital will provide data regarding MI patient market share and the race/ethnicity and sex composition of the hospital population to the Design and Analysis Subcommittee for consideration.
- 2. <u>Other hospitals near, but not in the study community, which provide care to MI</u> patients who experience their events while away from their home community.

In these hospitals, many MI patients from outside the study community would need to be enrolled in order to capture a few MI patients from the study community. This issue is more challenging for those investigators who are studying a suburban community near a larger metropolitan area. Nevertheless, the study benefits from the inclusion of urban and suburban communities as this leads to greater generalizability of study results. Therefore, Field Centers proposing the exclusion of such hospitals will provide information to the Design and Analysis Subcommittee regarding the extent of this challenge. Specifically, this information shall include, the percentage catchment of MI patients by individual hospitals within and outside, but near, the study community.

In any case as described above, exclusion or inclusion of a hospital that falls under one of these special situations will be considered on a case-by-case basis. The Design and Analysis Subcommittee will first make a recommendation to the Steering Committee. The Steering Committee will then make the final decision as to the inclusion or exclusion of hospitals.

D. Case Inclusion Criteria/Primary Study Population

Patients will be eligible for inclusion in this study who meet the following criteria:

- 1. Age \geq 30 years (acute cardiac ischemia is uncommon at younger ages),
- 2. Residence within one of the study communities as defined by zip code of residence,
- 3. Not institutionalized (i.e. nursing homes, prisons, or chronic care facilities)
- 4. Not a transfer from a non-participating hospital, and
- 5. Presenting complaint of chest discomfort, with no obvious source of trauma, during initial evaluation in the ED of a participating hospital.

In addition to the above criteria, the primary population for the study will be those patients who are admitted to the hospital for possible acute ischemia and receive an ICD discharge code <u>indicating a cardiac-related diagnosis</u>. We will include all such patients irrespective of a previous history of MI. Since previous findings are consistent with the idea that patients with a history of CHD delay longer than those without such a history, we will examine this issue as an a priori subgroup hypothesis.

V. INTERVENTION METHODS

A. Description of Methods

The intervention components include: community organization to mobilize the community and enlist support of key individuals and agencies; community education to develop changes in attention/awareness, knowledge, beliefs, skills, and behavioral intentions of high-risk individuals, spouses of high-risk individuals, and community residents at large; professional education to increase their knowledge, behavioral capacity and self-efficacy, and their behaviors for educating patients about methods to reduce delay in seeking treatment for AMI; and patient education to alter their knowledge, behavioral capacity and self-efficacy, and behaviors for increasing quick action in seeking treatment for AMI. These components comprise a multi-faceted intervention designed to be comprehensive and to target the several audiences hypothesized to be necessary to reduce overall delay in seeking treatment for AMI.

B. Community Organization

The community organization component of REACT will be a planned process in which organizations and individuals within each intervention community are engaged in a collaborative effort to reach the study goals. The individual behaviors we seek to change occur within the environmental context of the community. Thus, the interventions used must accurately reflect the values and realities faced by community members. The community organization techniques and strategies described in Community Organization section of the Manual of Operations will assist communities in mobilizing their own resources and institutional structures for the purpose of reducing MI delay. The organizational model chosen for each community will depend on that community's culture, competence and readiness for change. The lead agency model and the coalition model will be used.

C. Community Education

The REACT community education program will target groups at risk for MI, their spouses and families, and the general public through programs and messages designed to reduce delay in seeking care for MI symptoms. At-risk target groups include those who have experienced a previous MI; those with diagnosed CVD/CHD conditions but who have not experienced an MI; and those who have not experienced an MI but with known MI risk factors (hypertension, hyperlipidemia; smoking; diabetes); and bystanders who may witness an acute ischemic event. Education methods include programs and messages aimed at each of the five groups delivered through a common core of social group settings; through social group settings unique to some communities; and through mass and small media. Intervention objectives include building attention, awareness, and knowledge about AMI and the problem of delay; modifying beliefs that may act as barriers to seeking treatment; and building specific skills in responding to MI symptoms to improve behavioral intentions and actions. Finally, the intervention will be implemented in partnership with community organizations that will provide resources for, and access to, important community education programs.

D. Provider Education

The various health care professionals who have contact with persons at risk for heart attack have a pivotal role in the reduction of delay time and have opportunities to provide education to patients. The professional education component of the intervention is thus critical to the success of REACT. Professional education intervention components will be designed to change clinicians' behavior in the following areas: 1) to alter their motivation to learn skills and to intervene with patients and to support the REACT project by changing their knowledge, attitudes, and beliefs; 2) to enhance their patient-centered counseling skills and skills about recognition of high risk patients; and 3) to impact their clinical practice environment. The professional education component will consist of multiple personal and impersonal strategies designed to change behaviors in each of these three areas. Professionals who will be targeted for inclusion in the professional education component are those in which patients with risk factors for MI can be reached, such as those who work in hospitals, doctors' offices, pharmacies and even patients' homes, as well as in community settings.

E. Patient Education

The patient education program includes interpersonal (individual and group counseling) as well as impersonal (flyers/brochures, posters, magnets and other "tokens" and video) strategies to reach high-risk patients and their families with information regarding the importance of prompt and appropriate actions in response to MI symptoms. The interventions are designed to affect patients' knowledge, beliefs, attitudes, skills and behaviors regarding prompt action for MI symptoms. Within these strategies, principles of patient-centered counseling, role-modeling and behavioral rehearsal are employed. Local providers will need to relied upon to deliver much of the patient education intervention component.

F. Site Action Plans

Individualized Site Action Plans for communities have been developed to address cultural, ethnic and regional differences while addressing studywide practice standards. The intervention components have thus been conceptualized to - accommodate two, somewhat different types of messages which would also allow appropriate tailoring of the message to cultural, gender, regional and other relevant factors: 1) a simple message, emphasizing chest pain as the primary symptom and shortness of breath as a commonly occurring symptom, but ensuring that this message is framed to convey that chest pain and shortness of breath may not be the only symptoms which occur for the large media portions of the community education component; and 2) a more complex message, emphasizing the variety of symptoms that may occur, for use with the interpersonal methods proposed for the patient component of the intervention and the group education sessions of the community education component. The action component of the message is to be to develop a plan in the event of an acute MI to get to the ED quickly, preferably by calling 911.

The intervention will take place during the 18 months from April 1, 1996 through September 30.

G. Additional detail on the instruction methods as well as process and impact evaluation are provided in the Intervention Manual of Operations.

VI. CASE ASCERTAINMENT

The primary specific aim of the REACT study is to evaluate the effect of an 18 month community-wide intervention program on patient delay time from the onset of symptoms of acute IHD to arrival at the hospital in patients admitted with acute cardiac ischemia and receiving a cardiac-related discharge diagnosis (ICD 410-414, 427, 428, 429, 440, and 786.5). As a secondary aim, the study will also evaluate the effect of the intervention in persons seen in the ED for chest pain/discomfort and sent home. The process of case ascertainment for persons in each of these three groups are described in detail below.

A. Patients with Confirmed Acute Ischemic Cardiac Events

In each community, the emergency department logs of study hospital(s) will be retrospectively monitored by the measurement staff throughout the trial for patients presenting to the Emergency Department with symptoms of acute CHD, specifically chest pain, pressure, tightness and/ or discomfort. Chest pain/discomfort refers to any descriptor used by the patient in reference to thoracic discomfort (e.g. pain, ache, pressure, tightness, squeezing, bloating, burning, indigestion, etc.).

The second step in case ascertainment for patients with confirmed acute ischemic cardiac events requires admission to the hospital with an admission diagnosis of MI, ruleout MI, UA, or chest pain/discomfort.

Patients who present in a study ED with chest pain and are admitted to the hospital with MI, ruleout MI, UA, or chest pain/discomfort will be screened on five additional study eligibility criteria:

- age greater than or equal to 30 years,
- residence within one of the study communities as defined by zip code of residence,
- not institutionalized (i.e. nursing homes, prisons, or chronic care facilities),
- not a transfer from another hospital,
- no obvious traumatic source of the chest pain/discomfort.

These eligibility criteria will be assessed using ED and/or In-patient medical records by Data Collectors in the field.

B. Patients Released from the ED

Many patients who present with chest pain in the ED of a study hospital will be released from the ED rather than admitted to the hospital. The same criteria for case ascertainment apply to this group as to admitted patients except that the admission and discharge diagnoses are eliminated as criteria. That is, patients that present to study hospitals with chest pain, pressure, tightness or discomfort and are released from the ED are eligible for REACT measurement if they meet the following criteria:

- no obvious source of traumatic chest pain/discomfort, as defined above, in the ED of a study hospital,
- age greater than or equal to 30 years,
- residence within one of the study communities as defined by zip code of residence,
- not institutionalized (i.e. nursing homes, prisons, or chronic care facilities),
- not a transfer from another hospital.

VII. SAMPLE SELECTION PROCEDURES

The study protocol specifies that outcome data be obtained in each study community for all patients admitted to hospital following presentation with chest pain in the Emergency Department. Telephone surveys will be completed with 200 of the admitted patients who are discharged with a 410 or 411 ICD discharge code. In each study community, outcome data will also be obtained from 200 persons released from the ED. Telephone surveys will be completed with 100 of these 200 persons. In addition, random digit dial telephone surveys will be completed with 180 members of each community. The following procedures will be employed to select each sample.

A. Sampling Procedures for Hospitalized Patients and Patients released from the ED The random sampling will be implemented by the CC with the following mechanism: Case ID numbers will be generated in bulk at the CC. Along with each ID, a random number will be drawn from the uniform distribution between 0 and 1 and coupled with that ID in the permanent database. The ID numbers will be used by the field sites case accrual, but the numbers will be retained in the CC database. On receiving each batch of ascertained cases (on ED Log Forms) from the field, the CC will determine by consulting the random numbers in the database which ID's should be followed up with REACT Locator Forms, ED and Medical Abstract Forms, and Followup Telephone Surveys.

This system is unbiased and blinded to a high degree because the field sites will have no access to the random numbers. An important advantage of the system is the ability to adjust sampling fractions. This adjustment can be done without bias because the CC has no access to data from the medical charts other than what has already been collected.

The extent to which sampling of admitted patients and persons released from the ED is required will depend upon the number of persons presenting to the ED in study hospitals in each community. Smaller communities will require 100% sampling to reach the target goals. Other communities may require sampling of persons released from the ED but not of admitted patients. The need for sampling, the sampling fractions, and the sampling itself will be monitored and completed by the CC.

B. Sampling Procedures for the Community Telephone Survey

The 180 persons per community for the community survey will be divided across four waves of the community survey: 60 in Wave I, 60 in Wave II, 30 in Wave III, and 30 in Wave IV. Sampling for the community survey will be completed by random digit dialing, a sampling procedure used with telephone surveys in which all working numbers are given an equal chance of selection whether or not they are listed in the telephone directory. The RDD sampling, as well as the interviews, for the community survey will be completed by the Survey Research Center at the CC.

VIII. MEASUREMENT METHODS

A. Purpose and Description of REACT Data Collection Methods

The outcome evaluation of the REACT study requires data that will be collected from several hospital record sources throughout the course of the study. There are four REACT data collection instruments designed to extract data form hospital records. They are: REACT ED Database Form, the REACT Locator Form, the REACT ED Abstract Form, and the REACT Medical Record Abstract Form. In addition, some secondary outcomes require data to be collected from the Emergency Medical Services (EMS) that serve the intervention and control communities. This information will be collected on the REACT EMS Log Form.

Impact evaluation is defined as the assessment of program intervention effects on intermediate objectives including changes in knowledge, attitudes, and skills of the public, patients and professionals, and in environmental and organizational factors. Impact evaluation will be conducted primarily through three sets of telephone interviews using the REACT Community Survey Form, the REACT In-Patient Follow-up Survey, and the REACT ED-Patient Follow-up Survey.

Each of these forms are described in more detail below.

- 1. <u>The REACT ED Database Form</u> will document all patients presenting to the ED with chest pain/discomfort from ED logs (hard copy or computerized records) in order to ascertain cases that may be eligible to participate in REACT.
- 2. <u>The REACT Locator Form</u> will collect information from the hospital's computerized patient registration databases and/or the patient's medical record in order to determine study eligibility as well as document gender and ethnicity.
- 3. <u>The REACT ED Record Abstract Form</u> will collect information from the patient's ED record or medical record in order to document key delay time information as well as sociodemographic and clinical information.
- 4. <u>The REACT In-Patient Medical Record Abstract Form</u> will collect information from the patient's medical record in order to provide secondary delay time information and data on severity of disease, procedures, and medications administered.
- 5. <u>The REACT Transferred Patients Medical Record Abstract Form</u>, an abbreviated version of the In-Patient Medical Record Abstract Form, will be used to collect similar information for patients who are transferred to another hospital after admission (see Section C.2 below).
- 6. <u>The REACT EMS Log Form</u> will collect information from the Emergency Medical Services in both control and intervention communities about the total number of 911 calls. This information will only be collected in communities

where it is available in computerized or aggregate form. This information will be used to assess whether the intervention increases the load on the emergency medical system.

- 7. <u>REACT RDD Community Survey</u>: The study will monitor intervention impact in the communities in part through use of a series of random-digit-dial cross-sectional surveys conducted at four time points during the study: a baseline survey (n=60/community), two interim surveys (n=60/community and n=30/community), and a final survey at the end of the intervention (n=30/community). The surveys will be conducted by phone in both intervention and comparison communities. The purpose of the RDD Community Survey is twofold (1) to assess the level of exposure to the intervention or similar programs and (2) to assess the impact of the interventions on the knowledge, beliefs and attitudes, and behaviors of community members. This will permit both estimation of intervention impact and the impact of non-intervention messages from other sources on MI delay with ability to pinpoint messages and their effects over time (i.e., the secular trend in information). The Intervention Manual of Operations provides more details on the measures in this survey.
- 8. ED Patient Follow-up Survey: The study will also conduct a follow-up telephone interview, seven to nine weeks following an ED visit, on a sample of 100 patients per community who present to the ED with chest pain, but who are subsequently released without an acute cardiac diagnosis. The sample for this survey will be randomly selected throughout the data collection period from the pool of released patients for whom an ED Abstract Form will be completed. The purpose of the telephone interview is fourfold: (1) to characterize these individuals, their symptom experiences, and their reasons for seeking treatment; (2) to identify specific intervention components that prompted these patients to seek treatment; (3) to collect self-reported information on decision time; and (4) to assess the impact of the patient and professional education interventions on the knowledge, beliefs and attitudes, and behaviors of these individuals. The impact and process evaluation questions included in the phone survey will be similar to those in the random digit dial survey of community residents. The Intervention Manual of Operations provides more details on the measures in this survey.
- 9. <u>REACT In-Patient Follow-up Survey</u>: At seven to nine weeks following an ED visit, a telephone interview will be conducted by the coordinating center with a sub-sample of 200 patients per community who have confirmed discharge diagnosis of 410 or 411. The sample for this survey will be randomly selected throughout the data collection period from the pool of admitted patients for whom an In-Patient Medical Record Abstract Form will be completed. The purpose of the telephone interview is fivefold: (1) to characterize these individuals, their symptom experiences, and their reasons for seeking treatment; (2) to identify specific intervention components that prompted these patients to seek treatment; (3) to collect self-reported information on decision time; (4) to assess the impact of the patient and professional education interventions on the knowledge, beliefs and attitudes, and behaviors of these individuals; and (5) to assess the intentions and preparations to take action if another event occurs. This survey will provide an assessment of the impact of the intervention Manual of Operations

provides more details on the measures in this survey.

B. Data Collection Schedule of Implementation

The schedule of Data Collection is presented in Figure 7. The collection of REACT data will begin with a run-in period from November 15, 1996 through November 30, 1996. Enrollment of study participants from the ED of participating hospitals will begin on December 1, 1996 and continue through September 30, 1997. Data collection will continue through October and November of 1997 in order to obtain complete data for persons who presented with chest pain in the ED of participating hospitals during the final days of enrollment.

The follow-up telephone surveys are to be completed within seven to nine weeks of the ED visit and will be implemented throughout the study from December 1, 1995 to September 30, 1997. Procedures for meeting this timeline are discussed in the Data Management section (Section XIII). The Community Survey will be completed with 180 members of each community in 4 waves: 60 cases per community completed during the 4-month baseline period, 60 cases per community collected after 5-6 months of intervention have been completed (September and October, 1996), 30 cases per community after 12-13 months of intervention (April and May, 1997), and 30 cases per community after the intervention has been completed (October and November, 1997).

Figure 7. DATA COLLECTION SCHEDULE OF IMPLEMENTATION

	Dec 1995	Jan-Mar 1996	April-Aug 1996	Sept-Oct 1996	Nov 1996- Mar 1997	Apr-May 1997	June-Sept 1997	Oct-Nov 1997
ED Database Form ED Abstract Form							•	
In-Patient Medical Record Abstract								·····
Community Survey					•	••••••	•	•
In-Patient Follow-up Survey								
ED Patient Follow-up Survey								

IX. SPECIAL SUBSTUDIES AND PROTOCOL

A. Transfers from the Emergency Department

Some persons who present with chest pain in the ED of study hospitals will be transferred from the ED to another hospital prior to admission. The rate at which these transfers from the ED occur will be monitored by the CC based upon the admission status variable on the ED Database Form, which is coded 5=transferred from the ED for persons who are transferred from the ED prior to admission to the hospital.

If the rate of transfers from the ED in a community remains less than 10% of the number of persons who are admitted to the hospital with MI, ruleout MI, or UA plus the number of transfers from the ED, then the transfers from the ED in that community are ineligible for further data collection. Should the rate of such transfers equal or exceed 10%, the transfers will be eligible fro participation in the study. Persons transferred from the ED will be sampled at the same rate as persons admitted to the hospital.

The CC will send a list of REACT ID numbers and medical record numbers to the sites for tracking persons transferred from the ED. The Locator Form and the ED Abstract Form will be completed, on hard copy, at the hospital where the person visited the ED. The In-Patient Medical Record Abstract Form will be completed, also on hard copy, at the hospital to which the person was transferred. The sites will copy the completed forms, retain the copy in their locked files, and return the original form to the CC for data entry.

B. Transfers After Admission

Some participants who are admitted to study hospitals with MI, ruleout MI, or UA will be transferred to another hospital after admission. The ED Abstract and Medical Record Abstract will be completed to the extent possible in the hospital where the person visited the ED, was admitted to the hospital, and was enrolled in the study.

The CC will monitor, based upon the Patient Disposition question (B3) in the In-Patient Medical Record Abstract Form, the percentage of eligible admitted persons who are transferred to another hospital. If the percentage of persons who are transferred to another hospital in a community exceeds 20% of persons admitted with MI, ruleout MI, or UA in that community, then persons transferred to another hospital after admission must be traced in that community.

In order to accommodate resource constraints, the first transferred patients to be tracked will be those at the largest receiving hospital. That is, the CC will determine, based upon information provided in item B3 of the In-Patient Medical Record Abstract, how many patients are transferred to each receiving hospital. Tracking of transfers will start with patients transferred to the hospital receiving the largest number of transfers, then the hospital receiving the second largest number of transfers, and so forth. Tracking of persons transferred after admission

will continue until at least 80% of persons admitted with MI, ruleout MI, or UA are subject to data collection.

If tracking of persons transferred after admission is required, the CC will provide the Site Coordinator with a cover sheet providing tracking information about the transfer to be followed along with a hardcopy of the Transfer Patient Medical Record Abstract Form. Data collectors will complete the hardcopy abstract form from the medical record in the receiving hospital. The completed form should be mailed to the CC (via two day UPS with a tracking number) for data entry, after the Site Coordinator makes a copy for their files.

X. ED NURSES TRAINING PROTOCOL

A. Introduction

Emergency Department nurses and physicians at all REACT participating hospitals must be trained by REACT staff to interview all patients presenting with chest pain (or related synonyms such as chest tightness, pressure, burning or other chest discomfort) about the time of onset of acute symptoms and recording these data in the medical record in a standardized manner.

REACT staff should identify a key triage nurse and senior emergency department physician at each hospital who will serve as primary contacts/liaisons with the emergency department staff. All contacts with the emergency department staff including the scheduling of training sessions should be coordinated with these persons. In preparation for the training sessions, REACT staff should realize that multiple contacts/sessions will need to be held since the nursing and physician staff on all E.D. shifts must be informed about the study. Unit clerks should be included in these sessions. One approach to maximize the training of the E.D. physicians may be to present the training session at their regular staff meeting which most physicians attend or to schedule the training as a separate grand rounds or in-service training. For the nursing staff, it may be necessary to instruct these individuals at the time different shifts are on (e.g., 8:30-10:00 a.m. for the 7-3 shift, between 4:30-6:00 p.m. for the 3-11 p.m. shift).

All Emergency Department nurses and physicians from all shifts must be trained two weeks before the onset of baseline data collection activities (December 1, 1995). The training session should be approximately 30-45 minutes in duration and cover the following topics: overview of the REACT study, patients to be interviewed, specific questions to be asked, probing technique and specific probes to be used, definition of acute symptoms, sample case scenarios, proper recording of time of onset of acute symptoms and patients' responses in the medical record. At the end of the session, the E.D. staff should be given the opportunity to ask questions, and provide examples of cases that they have encountered for discussion. All nurses and physicians should be provided with the REACT Emergency Department Handout Poster (Figure 8). This poster should be placed in visible areas in the Emergency Department. You should also discuss quality control measures and future training sessions that will be held.

After this initial session, booster training sessions with as many nurses and physicians as possible should be conducted every three months throughout the study. To contact the hospitals to arrange refresher training, the site should send a letter that provides feedback on the percent of missing delay times in that hospital relative to the study average, other hospitals at that site, and/or the study goal for completion of delay times. Each time hospitals are contacted for refresher training, the site should provide the CC with a copy of the letter and any accompanying materials as well as the date(s) of the refresher training sessions. The refusal of any hospital to participate in refresher training must also be documented with the CC.

Figure 8. ED HANDOUT POSTER

REACT Recording, Evaluation and Assessment of Chest Pain Time

Who to ask:	Adult patients with chest pain/discomfort (or equivalent)
What to ask:	"What are the symptoms that brought you here today?"
	"When did those symptoms start?"
What to record:	Acute symptoms Date and time of onset Initials and title
When to probe:	When patient is uncertain of onset time
	When patient reports onset time is \geq 24 hours before arrival in E.D.
Where to record:	E.D. Medical Record

B. Sample Dialogue To Nurses

1. Overview of REACT

REACT is a multi-center study designed to evaluate the duration of prehospital delay, namely the time from the onset of acute symptoms to hospital arrival in patients presenting with chest pain or discomfort to the emergency departments of participating hospitals. The study will evaluate how patients "REACT" when they have chest pain. Data collection efforts will be implemented nationally in 20 communities and in a large number of hospitals. Five field sites from the states of Alabama, Massachusetts, Minnesota, Texas and Washington will participate in this study. Each field site will include 4 communities. Determinants of duration of prehospital delay will be examined in individuals presenting with acute chest pain or related descriptors in the 20 communities. Data collection efforts including the review of E.D. records will take place for 22 months beginning on December 1, 1995. As emergency department nurses and physicians are involved in the care of these patients, we will be training you to collect key information concerning the time of onset of acute coronary symptoms in a standard manner using questions that are routinely asked of patients by emergency department staff.

2. Who should be asked about the onset of acute symptoms?

All adult patients who present to the Emergency Department with non-traumatic chest pain, chest discomfort, or other related synonyms such as chest pressure, chest tightness, or chest burning should be asked about their acute symptoms and the time of onset of these symptoms.

Patients should be asked the questions described below directly by E.D. staff. If a patient is dead upon arrival in the emergency department, he or she will not be eligible to participate in the study. If a patient is otherwise unable to be interviewed, these questions may be directed to anyone who witnessed the event and accompanied the patient. However, the source of the obtained information should be documented in the medical record. For example, a 75 year old patient presented to the E.D. and was unable to be interviewed. His spouse reported that the patient had indigestion and palpitations that started at 7:00 a.m. on October 3, 1995 that caused him to go the emergency department.

It is very important that we do not miss any cases who present to the emergency department with acute chest pain/discomfort. Therefore, we would like our two primary questions to be asked of all patients and in the same way in order to assure consistency.
3. <u>What are the questions to be asked?</u> *What are the symptoms that brought you here today?*

We would like to know the nature of the acute symptoms that led the patient to seek emergency care. For example: crushing chest pain, pain in the shoulder and arm, nausea and vomiting, dizziness, etc. may all be acute symptoms. All symptoms mentioned by the patient should be recorded exactly as they are described.

When did those symptoms start?

The purpose of this question is to determine the onset of acute symptoms for the present visit to the Emergency Department. This time should be recorded in military clock time, but A.M. or P.M. can be used (as long as these times are accurate), along with the date provided by the patient. For example, the patient's acute symptoms began at 5:30 AM (05:30) on October 7, 1995.

- If the patient asks which symptoms you are asking them about, you should explain that it is whatever symptoms he or she feels led him or her to seek emergency care.
- If the time of onset of the acute symptoms cannot be recalled or specified, then use probes to help the patient remember when the symptoms started. The patient may find it easier to remember if he/she links the symptoms to other events, for example dinner time, waking in the morning, etc.
- If the patient still cannot recall the time of onset of the acute symptoms that led them to seek care at the Emergency Department, you should indicate as such on the record and ask for an estimate of how long ago in hours and/or minutes the symptoms began. For example, you should specifically ask: *How long before you arrived at the emergency department did your symptoms start*? Record the clock time in the record. For example, a patient had crushing chest pain that began 2 hours and 30 minutes before arriving at the Emergency Department. He arrived at the E.D. at 3:00 P.M. You should confirm with the patient that the pain started at 12:30 P.M.
- If the patient reports that their acute symptoms started more than 24 hours ago, question the patient further about the symptoms he or she experienced over the past 24-48 hours. Start by asking the patient about the sequence of events and symptoms that led to the present emergency department visit to determine if there was any change in the nature, quality or severity of the symptoms. If there was a point at which the symptoms became more severe or more constant (for example a change from mild or intermittent chest discomfort to crushing chest pain), use the point of change in symptoms as the time of onset of the acute symptoms. In some cases, it may not be clear that the patient is describing acute symptoms, i.e., the patient could be describing prodromal symptoms or subacute symptoms

that occurred prior to the acute symptoms. Premonitory (prodromal) symptoms are defined as the initial symptoms suggestive of acute coronary disease that precede the acute symptoms. These initial symptoms may be less intense, less severe, and more nonspecific than the acute symptoms. Acute symptoms are defined as those symptoms considered serious enough by the patient for them to seek emergency medical care.

If you have a problem with a specific question, please record anything you can tell us about duration or time of onset of the acute symptoms in the medical record.

4. Where should I record this information?

You should record the patient's responses to these questions in the patient's emergency department record. Depending upon your hospital's record system this information could be recorded in the triage section. If your emergency department records don't include a triage section, then they should be recorded in the ED nurse's notes. For all instances this information should be initialed and include the interviewer's title, i.e. R.N. A REACT study staff member will subsequently and on a regular ongoing basis review the E.D. records of chest pain patients presenting to your E.D. to abstract the information that was recorded in addition to other information that is being obtained on these patients. This data abstraction process will take place for nearly two years.

5. <u>Sample Case Scenarios</u> (See Section C)

A list of sample cases that should be discussed with the E.D. staff is enclosed.

6. <u>Discussion</u> (open the discussion to questions or feedback from the ED staff)

7. Closing

Your help and cooperation with this project is greatly appreciated. Thank you again for your help. If you have any further questions, please contact your REACT Project Coordinator:

Name: _____

Phone Number:

C. Case Studies for E.D. Staff Training to Characterize Symptom Onset Times

Case 1

Patient experienced a slight case of indigestion after dinner. He then went to sleep and was awakened from sleep at 2:00 a.m. by excruciating chest discomfort.

Acute Sx onset time = 2:00 a.m.

Case 2

Patient had been experiencing episodes of shortness of breath (SOB) upon exertion on and off for the past 2 weeks. Late one afternoon (approximately 4:30 p.m.) the patient experienced additional and more severe bouts of SOB followed by palpitations and tingling in her arm. She took mylanta to ease the pain. Approximately four hours later (8:30 p.m.) and following dinner, she experienced crushing chest discomfort and pain that convinced her to seek medical care.

Acute Sx onset time = 8:30 p.m.

Case 3

Patient with a history of coronary disease had been experiencing SOB and chest discomfort for the last several months. On the morning prior to admission he experienced left arm pain for approximately 10 minutes soon after awakening (7:15 a.m., 8/24). This pain continued on and off over the next 24 hours until the patient's wife convinced the patient to seek medical care following breakfast the next morning (8:30 a.m., 8/25).

Acute Sx onset time = 7:15 a.m. (8/24)

Case 4

A 68 year old male, with known hypertension and elevated cholesterol levels, presented to his family physician with intermittent aches and sensations in his shoulder and upper neck and arms, sometimes extending to his hands for the past 3 weeks. The aches and pains came at intervals that were not steady or consistent. As he was driving his car to his family physician for an appointment at 10:00 in the morning he had more severe achiness in both upper arms, but this pain was gone by the time he saw his doctor. At approximately 3:30 that afternoon, while working in the garden, the patient experienced an episode of severe chest and shoulder pain and presented to the local Emergency Department .

Acute Sx onset time = 3:30 p.m.

Case 5

A 76 year old patient presents to the ED at 10:30 p.m. with severe, pressure-like pain in the midsternum accompanied by nausea and diaphoresis. He states that he experienced some chest heaviness about 8 hours ago, but attributed it to "indigestion" because it was somewhat relieved by antacids and belching. Approximately 2 hours prior to arrival in ED he became lightheaded and vomited, at which time he asked his wife to drive him to the hospital.

Acute Sx onset time = 2 hours ago

Case 6

A 68 year old male presents to the ED at 01:15 a.m. with intermittent chest discomfort over the past day and a half. The stabbing, knife-like chest pain was relieved each time with siblingual nitroglycerin tablets and rest. Each episode of chest pain lasted approximately 5-10 minutes in duration. On the evening prior to admission, the patient used his last nitroglycerin tablet for an episode of chest discomfort.

Acute Sx onset time = $1 \frac{1}{2} \text{ days} (36 \text{ hours ago})$

Note: In this case, the E.D. staff should probe more deeply in an attempt to determine whether there had been a change in these acute Sx that led the patient to seek medical care. If a time can be identified, then this should be repeated back to the patient and confirmed.

Case 7

A 42 year old male with a history of coronary disease presents at 1400 (2:00 p.m.) with sharp, grabbing left sided chest pain. The patient had no pain at the time of presentation to the E.D. There have been multiple episodes similar to these over the past 3 hours with the last episodes beginning 30 minutes ago and the longest lasting for several minutes. No radiation, no SOB, no diaphoresis, no palpitations. The patient has had similar episodes in the past 3 weeks.

Acute Sx onset time = 11:00 a.m.

Case 8

A 68 year old male presents at 01:15 p.m. with SOB for the past 2 days. The patient has been unable to lie down due to SOB. This morning, about breakfast time, which he usually has at 8:00 a.m., the patient felt a "gripping" in his chest similar to his MI in the past. He now presents to the E.D. with just minor chest pain.

Acute Sx onset = 8:00 a.m.

Note: In this case, the patient may not have provided the time at which he usually has breakfast. The patient should be questioned as to what time this usually is and confirm that time (e.g., 8:00a.m.) with the patient.

D. Refresher Training

Quarterly, each site will provide feedback to REACT hospitals regarding the percent of complete delay time. Each site should send a letter which asks to conduct refresher training and provides a bar graph comparing the percent complete delay time in that hospital to the study average, the average in other community hospitals (no hospital names should be listed) and/or study goal. Additionally, it is suggested that in order to improve the collection of delay time data, each site should create a poster size chart of the hospital's delay time documentation rate. Site may want to offer incentives to the those hospitals with the highest rates.

For each hospital, Site Coordinators must document the activities that occurred during each quarter. This information should be forwarded to Kathy Schulman at the CC. Documentation should include at a minimum: a copy of the letter and accompanying graphs that were sent to the ED staff at each hospital, the list of hospitals for which refresher trainings were conducted by REACT staff along with the date the training was conducted and a list of those hospitals which refused refresher training. Any additional activities should also be documented.

XI. GUIDELINES FOR MEDICAL RECORD ABSTRACTION

A. Overview and Purpose of Record Abstraction

The REACT study will collect data from several hospital record sources throughout the course of the study. The following four REACT data collection instruments are designed to extract data from hospital records: the REACT ED Database Form, the REACT Locator Form, the REACT ED Abstract Form and the REACT Medical Record Abstract Form. These data will be collected via direct entry using CAMRAS as described in Appendix B.

The <u>REACT ED Database Form</u> will document patients presenting to the ED with chest pain/discomfort from ED logs (hard copy or computerized records) in order to ascertain cases that may be eligible to participate in REACT. Patients who present to the ED with cardiac-related symptoms, but are not experiencing chest pain, pressure or discomfort are not eligible and should not be recorded on the ED Database Form. In addition, if the information is readily available in the ED, Data Collectors may screen out chest pain patients who do not meet study age and zipcode eligiblity criteria. That is, the ED Database Form is not completed for chest pain patients who are less than 30 years old and/or who do not live in a study and thus are not eligible for the study. The Site Coordinator must notify the CC of the hospitals in which this screening on zipcode and age will take place prior to completion of the ED Database Form before the screening begins. If the hospital uses computerized records to screen chest pain patients for age and/or zipcode eligibility, the CC must review the procedure prior to any screening.

The <u>REACT Locator Form</u> will collect information from the hospital's computerized patient registration databases and/or the patient's medical record in order to determine study eligibility as well document gender and ethnicity.

The <u>REACT ED Record Abstract Form</u> will collect information from the patient's ED record or medical record in order to document key delay time information as well as sociodemographic and clinical information.

The <u>REACT In-patient Medical Record Abstract Form</u> will collect information from the patient's medical record in order to provide data to confirm cases of myocardial infarction or unstable angina, secondary delay time information, clinical complications, severity of disease, and medications administered.

B. Obtaining Charts

For the purposes of accessing records, REACT staff should refer to and follow the site and hospital specific procedures provided by the site measurement supervisor.

C. General Instructions for Completing Data on the Forms

1. <u>Guidelines to Determine Acute Symptom Onset</u>

Definition of Onset of Acute Symptoms: This is the point when the patient's signs or symptoms of ischemic heart disease begin abruptly or become severe, intense or constant as opposed to intermittent and cause a person to notice or be aware of their start or change. Acute symptoms have some definable start point characterized by suddenness; a change or alteration in on-going symptoms, such as increased intensity or the emergence of a new symptom on an already existing symptom set. Several examples define the onset of initial (I) and acute (A) symptoms as follows:

1. Sudden Onset, No Prodromal: Initial and Acute are the Same



2. Increase or Gradual Increase in Severity: Onset of Initial and Acute are the Same



- Time
- 3. Prodromal Symptoms with Sudden New Symptoms: Initial and Acute are Different



4. Symptoms stop and start with same intensity level: Initial and Acute are the Same



5. Symptoms stop and start at same intensity level for some period then increase in severity. Initial and Acute are different.



2. <u>"YES", "NO" and "NOT RECORDED"</u>

A "YES" response requires a <u>definite statement</u> in the record that the event or characteristic was present.

A "NO" response requires a <u>definite statement</u> in the record that the event or characteristic was absent or was ruled out.

A "NOT RECORDED" response indicates that the event or characteristic was not found or <u>stated</u> in the record.

There may be many items coded as "not recorded".

3. <u>Recording of Time</u>

Throughout the forms, data collectors must enter all time in military time. It should be determined whether the hospital record has data recorded in clock time (AM/PM) or military time and the conversion to military time made where appropriate. The instructions to the forms contain a conversion chart at the end to help the data collector.

The general rule is as follows: Military time begins at midnight with a time of 00:00, continues hourly (01:00, 02:00 etc.) to noontime which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. Figure 9 provides a conversion chart. Remember to record the time using leading zeros as needed.

If the recorded time of a procedure is before the recorded ED arrival time a validation error will occur. Enter data as it is recorded and enter a reason in the override log, such as "patient triaged first".

CLOCK TIME	MILITARY TIME
12:00 midnight to 12:59	00:00 to 00:59
1:00 a.m. to 1:59 a.m.	01:00 to 01:59
2:00 a.m. to 2:59 a.m.	02:00 to 02:59
3:00 a.m. to 3:59 a.m.	03:00 to 03:59
4:00 a.m. to 4:59 a.m.	04:00 to 04::59
5:00 a.m. to 5:59 a.m.	05:00 to 05:59
6:00 a.m. to 6:59 a.m.	06:00 to 06:59
7:00 a.m. to 7:59 a.m.	07:00 to 07:59
8:00 a.m. to 8:59 a.m.	08:00 to 08:59
9:00 a.m. to 9:59 a.m.	09:00 to 09:59
10:00 a.m. to 10:59 a.m.	10:00 to 10:59
11:00 a.m. to 11:59 a.m.	11:00 to 11:59
12:00 p.m. to 12:59 p.m.	12:00 to 12:59
1:00 p.m. to 1:59 p.m.	13:00 to 13:59
2:00 p.m. to 2:59 p.m.	14:00 to 14:59
3:00 p.m. to 3:59 p.m.	15:00 to 15:59
4:00 p.m. to 4:59 p.m.	16:00 to 16:59
5:00 p.m. to 5:59 p.m.	17:00 to 17:59
6:00 p.m. to 6:59 p.m.	18:00 to 18:59
7:00 p.m. to 7:59 p.m.	19:00 to 19:59
8:00 p.m. to 8:59 p.m.	20:00 to 20:59
9:00 p.m. to 9:59 p.m.	21:00 to 21:59
10:00 p.m. to 10:59 p.m.	22:00 to 22:59
11:00 p.m. to 11:59 p.m.	23:00 to 23:59
12:00 midnight	next day

Figure 9. MILITARY TIME CONVERSION CHART

4. Recording Numeric Fields

If a result must be entered into a numeric field which has fewer digits than allowed, enter leading zeros in the blank spaces. For example on dates enter 01/01/96 for single digit months and days of the month.

5. Missing Information

Completion of the abstract forms should not begin until the required sections of the medical record are available. For example, if the discharge summary is not in the medical record when the record is obtained for abstraction, attempts to obtain the discharge summary should be made prior to abstraction.

6. Sources of information in the record

In order to avoid missing data, REACT measurement staff should be thoroughly familiar with the medical records in their hospital. The questions-by-question specifications for each form specify the permissable sources of information in the medical record for each section of the form. Only those sources should be used. For example, the progress notes are not a permissable source of information for laboratory results. The following sections of the medical record are permissable sources of information for one or more sections of the abstract forms:

- the patient admission or registration sheet
- the emergency department notes or record
- the EMS run sheet
- the nurse and physician admission note
- the CCU/ICU flow sheets
- the nurse's medication sheets
- printed laboratory results
- results of diagnostic /therapeutic procedures
- typed discharge summary
- discharge form

7. Interpreting Information in the Medical Record

If there are specific items which are unclear or ambiguous to the data collector during the collection of data, they should be reviewed with the site measurement supervisor. If the site supervisor cannot resolve the question upon review of the case and instructions to the question, the question should be raised with the Coordinating Center. If necessary, the question should be brought to the attention of the REACT Measurement and Quality Control Committee for standard interpretation.

8. Specific Instructions for Completing the Data Forms

Specific instructions for each form are provided in the QxQs for that form. Data collectors must be familiar with and refer to the specific QxQs for each form when collecting the data on these forms.

All REACT data collectors should carry the REACT data collector's handbook containing the hard copy forms with detailed instructions for each question and the directions for operating the laptops.

XII. INFORMED CONSENT

Initial data collection will be conducted by emergency department nurses at participating study hospitals, who will be instructed on the use of a common protocol asking patients with acute chest pain or related descriptors about the time of onset of acute symptoms. These questions are part of routine medical care and do not require informed consent from patients.

The chart abstractions and telephone follow-up interviews will be conducted by specifically trained REACT staff and will involve the collection of demographic characteristics, diagnoses, symptom attribution, and clinical course. In the review of the medical records, patient identifiers will be separated and kept in a locked file, with access limited to REACT staff. Informed consent from the patient will not be obtained for review of medical records, as no patients will be individually identified.

Telephone interviews of ED patients admitted with MI/ROMI/UA and then discharged with an ICD code of 410 or 411 and persons released from the ED will require the patient's informed consent. Consequently, passive consent will be obtained from participants selected for telephone surveys. The following procedure will be used to obtain passive consent for admitted patients and for persons released from the ED:

- 1. For patients selected for the telephone follow-up survey, the CC will provide the Site Coordinators with a database that includes the REACT ID, the patient name, address, telephone number, medical record number, admission status, social security number, gender, date of birth, the ED visit date, and the date the database was generated. This database will also include blank fields for the date the passive consent letter was distributed and the refusal status of each participant.
- 2. For persons admitted to the hospital, Site Coordinators are responsible for checking with the hospital to verify that the participant did not die while in the hospital prior to distributing passive consent letters. A Participant Disposition Form (see Figure 10) should be completed immediately and sent by e-mail or fax to the CC for any Participant who has died. Site Coordinators are responsible for ensuring that the CC receives this e-mail or fax. Passive consent letters should not be sent to participants who are identified as having died during the hospitalization.
- 3. Except in Minnesota, where the IRB requires that selected persons be called to obtain consent, Site Coordinators will send a passive consent letter to the participant. Figure 11 provides a model consent letter for both admitted patients and persons released from the ED. This letter should be sent on hospital letterhead. The passive consent letter should also include the cover page illustrated in Figure 12. This cover page should be placed before the consent letter since it is intended as a less formal, easier to read introduction to the request for an interview. The passive consent letter will also include a refusal postcard (see Figure 13). The letter instructs participants to sign and return the postcard if they do not want to participate in the telephone survey. Any modifications of these letters or the Refusal Postcard must be done in accordance with your local IRB. The CC must be notified of these changes. Please note that passive consent letters must be mailed within a week of the receipt of the passive consent database. In Texas, passive consent letters are sent in both Spanish and

English because of the large number of predominantly Spanish speaking individuals.

- 4. When the Site Coordinator receives a refusal postcard from a participant, the Site Coordinator will record the refusal on their list of persons selected for the telephone survey, record the REACT ID on the Participant Disposition Form (Figure 10), and fax or e-mail the form or the information in the form to the CC. If a passive consent letter is returned as undeliverable, the Data Collector must verify that the address is correct. If the address is in fact correct, the Site Coordinator should complete the Participant Disposition Form and send it to the CC immediately. Site Coordinators are responsible for ensuring that the CC receives this e-mail or fax. If the address is incorrect, the Site Coordinator should fill out an Edit Correction Notification Form and send it to the CC. The Site Coordinator should then resend the passive consent letter ASAP. The follow-up telephone calls will begin two weeks after the passive consent database is received at the sites.
- 5. The CC will forward the refusal information to the Survey Research Center so that the participant is withdrawn from the telephone survey list.
- 6. The CC will also periodically provide the Site Coordinator with a list of participants, by ID, who have refused to participate in the telephone survey during the passive consent process in order to verify the exchange of information about refusals between the sites and the CC.

Figure 10. PARTICIPANT DISPOSITION FORM

SITE USE

Date Form Completed:/_/	Site Name:
Person Completing Form:	
Participant ID:	_
Admission Status (Circle One): Admitted	Released

ED Visit Date: __/__/

Do not contact this participant because s/he has (check the appropriate box):

REASON FOR EXCLUDING FROM THE FOLLOW-UP SURVEY	CHECK ONE	DATE
1. REFUSED		
2. DIED		
3. CONSENT LETTER RETURNED AS UNDELIVERABLE AND ADDRESS HAS BEEN VERIFIED AS CORRECT		
4. NO CONTACT AFTER TEN ATTEMPTS (MINN ONLY)		
5. OTHER (PLEASE SPECIFY)		

.....

FOR NERI USE ONLY

DATE AND TIME RECEIVED FROM SITE	: / /		AM/PM

RECEIVED VIA (CIRCLE ONE): EMAIL	FAX	OTHER (SPECIFY): _	
----------------------------------	-----	--------------------	--

DATE PASSIVE CONSENT GENERATED: __/__/

HAS CONTACT RECORD BEEN GENERATED YET? (CIRCLE ONE) YES NO

IF NO, DISPOSITION ENTERED INTO REACT DATABASE BY:

IF YES, WHEN WAS CONTACT RECORD GENERATED:/	/
DATE AND TIME CONTACT RECORD PULLED:/_/	:AM/PM

DATE/TIME DISPOSITION ENTERED INTO DMS: __/_/ ____: ___AM/PM OTHER COMMENTS:

Figure 11. REACT CONSENT LETTER

Dear (NAME OF PATIENT),

Recently you visited (HOSPNAME). We write to invite you to take part in a research study whose goal is to improve educational programs related to symptoms of chest discomfort. This study is being done by the (NAME OF UNIVERSITY) and is funded by the NATIONAL HEART, LUNG and BLOOD INSTITUTE.

It's easy to participate. An interviewer from the New England Research Institutes will call you on the telephone. During a brief survey, you will be asked about your medical history, the symptoms that led you to seek care at the Emergency Room, use of emergency medical services, your opinions about seeking care and your experiences at the Emergency room. The telephone interview will take approximately 15 minutes and you can schedule it at a time convenient for you.

There are no right or wrong answers. All information will be kept strictly confidential. Your name will not be used in any reports. While the hospital and your doctors know about the study, they will not see your survey responses.

If you do not wish to participate, sign and return the enclosed postcard and you will not be contacted again. If we do not receive the postcard, an interviewer will call and you may decline the interview at the time you are called. Of course, your refusal will have no effect upon your subsequent medical treatment at this hospital.

If you have any questions or concerns about this project, please feel free to call (NAME OF PROJECT DIRECTOR OR COORDINATOR) at the (NAME OF UNIVERSITY). The number is (SITE TELEPHONE NUMBER) and you may call "collect".

Thank you in advance for your participation! Your name was picked at random, and it is important that people like yourself share their experiences and opinions so that we can imporve education programs for the public and for healthcare professionals.

⁽NAME OF PROJECT DIRCTOR OR COORDINATOR) (TITLE)

A FEW MINUTES PLEASE...

Yes, we're hoping you will help!

It's easy to do and it won't take long...

-- a 15-20 minute confidential telephone survey.

We know you are busy and get lots of phone calls – but we hope you will participate. (P.S. we are not looking for donations)

We need to learn about your opinions and experience! You can help us plan better education programs for the public and for doctors, nurses and other professionals.

Please read the enclosed for details.

Figure 13. REACT PATIENT REFUSAL POSTCARD

NAME_____

I do not wish to participate in a REACT interview. I understand that my refusal to participate in the interview will in no way affect my medical care.

- [] Yes, I do wish to participate in a REACT interview
- [] No, I do not wish to participate in a REACT interview

SIGNATURE

XIII. DATA MANAGEMENT

A. Overview and Structure

A multi-center study requires the implementation of a sound and workable system for collecting, entering, managing, and securing all data. To most efficiently facilitate these procedures and prepare data sets for analyses, the REACT study will implement a central data management system with both distributed and central data entry as indicated below.

Using a centralized Data Management System (DMS), all data management activities, such as the production of edit reports, changes to the database based on the resolution of edits, the production of identifying labels and study participant lists, and the production and distribution of reports to monitor data quality will be performed centrally at the REACT Coordinating Center (CC). Data entry will take place at both field sites and the CC. The field sites will perform direct data entry on laptop computers using software (<u>Computer Aided Medical Record Abstract System</u>) and data entry routines developed and maintained by the CC. Data entry procedures will be as follows.

- <u>Outcome Evaluation Data</u> from the ED Database Form, Locator Form, ED Abstract Form, and Medical Record Abstract Form will be entered using Laptop Computers by the field sites. For communities where the percentage of participants who are transferred after admission to another hospital exceeds 20%, the Transferred Patients Medical Record Abstract Form will be completed on hard copy and mailed to the CC for centralized data entry.
- <u>Process Evaluation Data</u> which includes the Coalition, partnership, Team Meeting Log, Lay Volunteer Tracking Form, Education Contact Tracking Form and the accompanying evaluation forms will be collected on hard copies at the field sites and mailed to the CC for centralized data entry.
- <u>Impact Evaluation Data</u> which includes the Random-Digit-Dial Community Survey, the Emergency Department Patients Telephone Survey, and the In-Patient Telephone Follow-up Survey will be collected and data entered centrally at the CC.

At the sites, only the REACT ED Database Form, Transferred Patients Medical Record Abstract Form and Process Evaluation data will be collected on hard copy forms. NERI will provide copies of these forms to the Site Coordinators at each site. Site Coordinators should forward these materials to the appropriate field staff.

B. Data Collection/ID Assignment Procedures

1. <u>REACT Study Identifiers and ID Assignment Procedures</u>

REACT ED Database Forms will be generated at the CC and provided to Site Coordinators, pre-numbered, for distribution to Field Staff. %00 IDs per hospital will be distributed at study start. Requests for additional IDs should be sent to Norina Coppinger at NERI the first of each month using the form shown in Figure 14. Unique identifiers will be assigned by the CC for Process Evaluation Data Forms. Master versions of these forms will be generated by the CC and distributed to Site Coordinators.

RAPID EARLY ACTION FOR CORONARY TREATMENT ED DATABASE FORM REQUEST FORM

DATE:
SITE NAME:
COMMUNITY NAME:
HOSPITAL NAME:
NUMBER OF ID'S REQUESTED:
BEGINNING ID NUMBER:

Only Site Coordinators can place an order for additional ED Database Forms. All orders should be placed by the first of each month. Please note that we need five business days to turn around this request. Requests should be either e-mailed or faxed to Norina Coppinger, Data Manager, at <u>norinac@neri.org/617-926-8246</u>.

INTERAL USE ONLY

DATE SENT: _____

SENT BY:	

FEDEX TRACKING #: _____

a. Study Participant Identifiers and ID assignment

The structure of the study Participant ID number is as follows:

S-I-HH-PPPPP-C

S: Site Number: The current REACT site numbers are as follows:

- 1: Alabama
- 2: Massachusetts
- 3: Minnesota
- 4: Texas
- 5: Washington

I: Community #: The current REACT community numbers are as follows:

- 1: Tuscalossa, AL 1: Worcester, MA 2: Huntsville, AL 2: Lowell, MA 3: Anniston, AL 3: Pittsfield, MA 4: Opelika, AL 4: Westfield/W. Springfield, MA 1: Tyler, TX 1: Lacrosse, WI 2: Eau Claire, WI 2: Lake Charles, TX 3 : Sioux Falls, SD 3: Brownsville, TX 4: Fargo, ND 4: Laredo, TX
- 1: Shoreline, WA
- 2: Olympia, WA
- 3: Beavertown, OR
- 4: Eugene, OR

HH: Each hospital in each community will be assigned a two digit hospital #

PPPPP: This is the sequential individual participant # within each hospital

C: This is a computer generated check digit. The REACT DMS uses an algorithm to generate this last digit in order to prevent data entry of incorrect ID numbers. It is automatically included by the DMS whenever IDs are generated.

Figure 15 presents a sample REACT ED Database Form. Participant ED numbers will be pre-listed sequentially on each page of this form. A REACT Participant ID number is assigned for each case recorded in the ED where the Participant presents to the ED with chest pain, pressure, tightness or discomfort using the next available ID number in the sequence. If the Data Collector has access to the patient DOB and/or patient zipcode, s/he may screen manually on these two variables, only recording on the ED Database Form those patients who reside in an eligible zipcode and are thirty years of age or older. If this data in not available, the data collector should record all patient presenting to the ED with chest pain, pressure, tightness or discomfort on the ED Database Form. Eligibility screening will occur when the Locator Form is completed. The data collector should record the Patient Name, Date of Birth, Medical Record number, the ED visit date, admission status, and admission diagnosis next to the ID number. Be sure to use the next available pre-numbered ID. If an error is made in assigning the ID, strike a line through the ID, record "error" and your initials next to the erroneously assigned ID and assign the next available ID. Do not use white out. The ED Database Form, when complete, will serve as the official REACT ID Assignment Log. The Assignment Log should be stored in a confidential location and sent to Site Coordinators on a regular basis.

b. Process Evaluation Identifiers

All process evaluation data forms will be assigned a unique identifier by the CC which will be preprinted on each process data collection form. The structure of this identifier will depend on the nature of the data collected. For example, data collected on the Education Contact Tracking Form will contain an identifier that uses the Site and Community Code, the event number and the date of the contact. This identifier will enable the CC to track and resolve any problems that may arise during the management and analysis of this data. It is imperative that sites only use those process evaluation forms which have been issued to their community. If the master copy of a process evaluation form is misplaced, sites should contact the CC for a replacement.

2. Data Collection and Transfer

a. Outcome Data

The Coordinating Center will provide sites with laptop computers with data entry routines for the ED Database Form, Locator Form, ED and Medical Record Abstract Forms. The ED Database Form documents persons who present to the ED of participating hospitals with chest pain, pressure, tightness or discomfort. The Locator Form is used to determine eligibility and collect some demographic data. The ED and Medical Record Abstract Forms collect outcome information. Collection of this data will necessitate excellent communication and cooperation between Site Coordinators, Data Collectors, and the CC in order to complete necessary functions within the 8 week window for telephone interviews.

Sites will document all persons who present to the ED with chest pain, pressure, tightness or discomfort on the ED Database Form. Those eligible for further data collection will either be admitted to the hospital with an eligible admission diagnosis or be discharged from the ED. Those patients who are dead upon arrival, who die in the ED or who are transferred to another hospital from the ED will be excluded from any further data collection.

The hard copy version of the ED Database Form, except for Patient Name and DOB, is identical to the electronic version. Once data has been completely recorded onto the hard copy version of the ED Database Form, Data Collectors should enter data directly onto the laptop version of the form. Each Tuesday, data should be transferred electronically to the CC via the electronic transfer procedures described in the Data Management Section of the Data Collectors Handbook and in the CAMRAS manual.

A random sample of Participants released from the ED will be selected by the CC for further data collection, screened for eligibility on the Locator Form and if eligible, will have an ED Abstract Form completed. A subsample of eligible patients will also be contacted for participation in a telephone survey.

All or a random sample of those Participants admitted to the hospital will be screened for eligibility on the Locator Form and if eligible, will have an ED and a Medical Record Abstract Form completed. Again, a subsample of eligible patients will also be contacted for participation in a telephone survey.

The data flow for data collection is depicted schematically in Figure 16 on pages 63-65. Operationally, the chain of events will be initiated when a Participant presents in the ED with chest pain, pressure, tightness or discomfort. Data Collectors will routinely review the Emergency Department Log in the Emergency Department at the hospitals in their communities. Site Coordinators will determine the schedule for review of the Emergency Department Log with their Data Collectors, keeping in mind that the period for data collection begins at 12:01 AM on Saturday and ends at midnight the following Friday. The Data Collector should follow these steps:

Figure 15. SAMPLE REACT ED DATABASE FORM

REACT Data Manager ED Database form for Report Date: 01/21/98 Page 1	Site and C		lospital: WHATEV	YER HOSI		ollection period:	!!	_TO	//
Patient Name	Date of Birth	REACT ID Number	Medical Record Number	ED Visit Date	1=Yes	1=MI or R/O MI 2=Unstable Angina			
	//	1-1-01-90001-6		//					
	//	1-1-01-90002-8		//					
	//_	1-1-01-90003-0		_/_/					
	//	1-1-01-90004-2		//					
	//	1-1-01-90005-4		//					
	//	1-1-01-90006-6		//					
	//	1-1-01-90007-8		_/_/					
Data Collector Name:_			Page	of					
Version 07/01/96		R	EACT Measurement N	/anual of O	perations				page 57

Figure 16: REACT DATA COLLECTION AND SAMPLE SELECTION SCHEME



ADMITTED PATIENTS SAMPLE FLOW



<u>Steps 5</u>: Sites enter Locator onto Laptop for each patient in random sample (2). Sites mail diskettes with Locator data to REACT CC. Sites can proceed to enter ED Abstract and/or Medical Record Abstract data onto Laptop for all patients determined from random sample list (2) determined eligible.

Step 6: REACT CC selects a (second) random subsample (2a) from the eligible patients to receive the telephone follow-up. A list with these patients is sent to the sites.

Step 7: Sites send out letters to patients on list for passive consent. Sites notify REACT CC of any refusals.

Step 8: REACT CC conducts telephone survey on those with passive consent.

ED PATIENTS SAMPLE FLOW



<u>Steps 5</u>: Sites enter Locator onto Laptop for each patient in random sample (1). Sites mail diskettes with Locator data to REACT CC. Sites can proceed to enter ED Abstract data onto Laptop for all patients from random sample list (1) determined eligible.

Step 6: REACT CC selects a (second) random subsample (1a) from the eligible patients to receive the telephone follow-up. A list with these patients is sent to the sites.

Step 7: Sites send out letters to patients on list for passive consent. Sites notify REACT CC of any refusals.

Step 8: REACT CC conducts telephone survey on those with passive consent.

Step 1: Use the next sequential Participant ID number available on the REACT ED Database Form. If the Data Collector has access to the patient DOB and/or patient zip code, s/he may screen manually on these two variables, only recording on the ED Database Form those patients who reside in an eligible zipcode and are thirty years of age or older. If this data is not available, the Data Collector should record all patient presenting to the ED with chest pain on the ED Database Form. Eligibility screening will occur when the Locator Form is completed.

The Data Collector should complete the remaining columns next to the assigned ID number by recording the Participant's name, date of birth, medical record number, date of ED visit, whether patient was admitted to the hospital, and admission diagnosis. Please note that if the Participant was released from the ED, the admission diagnosis is code "4", Not Applicable. Site Coordinators are responsible for ensuring that Data Collectors are supplied with the appropriate ED Database Forms.

Step 2: After recording the ID Assignment and ED Database information onto the ED Database Form, this data should be entered directly into the electronic version of the ED Database Form. The hard copy form should be forwarded to the Site Coordinator. Since the ED Database Form becomes the official REACT ID Assignment Log after completion, Site Coordinator should be sure to devise site specific procedures to ensure the confidentiality of these forms. Once the Site Coordinator receives the ED Database Forms, they should be systematically filed in a locked REACT filing cabinet at the central office for the site.

Step 3: ED Database Form data should be electronically transferred to the CC. Procedures for transferring data are detailed in the CAMRAS Manual. CAMRAS has been pre-programmed. Site Coordinators should ensure that data is transferred to the CC every Tuesday. If for any reason, data will not be transferred on Tuesday, the site coordinator must contact Norina Coppinger immediately. If Data Collectors experience technical difficulty while attempting to transfer data electronically, these procedures should be followed in the following order:

- 1. Attempt to transfer two times
- 2. If busy after two attempts, try back in an hour or two
- 3. If unsuccessful due to technical problems, contact N. Coppinger
- 4. Follow instructions provided by the CC.

If problems arise which prohibit the electronic transfer of data, Data Collectors will be asked to export data to diskette. Please note, only the CC can authorize data transfer to diskette. Sites will be provided with diskettes to be used for this purpose only. Sites are responsible for procuring their own diskettes for the weekly back-up of data.

Step 4: EVERY THURSDAY Data Collectors should select the Call NERI to retrieve data option in CAMRAS in order to retrieve the database needed to generate the ED Log

Listing Reports. Please note the procedure for retrieval only requires the Data Collector to select the Call NERI to Transfer/Retrieve option. Data Collectors should not select the Export Data to NERI option when retrieving data. Once the database has been retrieved, Data Collectors will be able to print the ED Log Lists for Released Selected Participants; Admitted Selected Participants; Released, Not Selected Participants; and Admitted, Not Selected Participants. These lists indicate which data should be collected for which IDs (See Sample ED Database Log Listing Reports, Figures 17 and 18). These reports will be generated by laptop number and will include data from all hospitals for which that laptop has collected data.

- ED Database Log Listing Report for Released Selected Participants: This list will contain a random sample of those Participants discharged from the ED for whom the Locator Form should be completed. Sites will directly enter data for the Locator Form, using the laptop, for each Participant on this list. If the Participant is eligible for participation after completion of the Locator Form, Data Collectors should proceed to directly enter data for the ED Abstract Form, using the Laptop.
- ED Database Log Listing Report for Admitted Selected Participants: This list will contain all or a random sample of Participants admitted to the hospital. Sites will directly enter data for the Locator Form, using the laptop, for each Participants on this list. If the Participants is eligible for participation after completion of the Locator form, Data Collectors should proceed to directly enter data for the ED and Medical Record Abstract Forms.
- ED Database Log Listing Report for Released, Not Selected Participants: This list will contain those Participants discharged from the ED for whom no further data is needed. These Participants are deemed ineligible for participation.
- ED Database Log Listing Report for Admitted, Not Selected Participants: This list will contain those Participants admitted from the ED for whom no further data is needed. These Participants are deemed ineligible for participation.

Step 5: Once Locator data has been entered into the laptop for those eligible admitted and released Participants listed on the ED Database Log Listing Reports, data should be transferred to the CC as instructed in Step 3. It is critical that Locator data be collected and entered, using the laptop, for transfer to the CC as soon as possible, preferably the following Tuesday, even if ED and/or Medical Record Abstract data cannot be completed at that time. Participant eligibility and address information from the Locator will be used to generate the lists of Participants to be contacted for a telephone survey (see Section XII, Informed Consent). ED and/or Medical Record Abstract data should be transferred weekly to the CC as it is completed.

Step 6: Based on locator data received from field sites, the CC will generate a database and accompanying list of Participants randomly selected for participation in the Telephone Follow-up Survey. (See sample ED Database Log Listing Report for Passive Consent Letters in Figure 19). This list will be sent, in database form, to each Site Coordinator. Prior to generating passive consent letters, Site Coordinators must first ensure that none of the patients listed in this database died during admission. A Participant Disposition Form must be completed and sent to the CC for all participants who have died. Passive consent letters should not be sent to these

individuals. Sites should mail passive consent letters to the remaining Participants on these lists, recording the date the passive consent letter was mailed. See Section XII, Informed Consent, for addition instruction.

Step 7: If a Participant refuses to give his/her consent to be contacted for the Telephone Followup Interview, a Participant Disposition Form (see Figure 13 in section XII) must be completed. Site Coordinators will be responsible for faxing or sending by e-mail Participant Disposition Forms to Maggie Cotter as soon as each one is completed. Site Coordinators should direct questions/concerns about this process to Kathy Schulman, REACT Project Coordinator.

Once the transferred patients protocol has been finalized, data will be monitored quarterly to determine whether or not the number of participants being transferred after admission to another hospital is greater than 20%. Once an ID is identified as having been transferred after admission to the presenting hospital, the CC will generate a list of transferred participants and hard copies of the Transferred Patients Medical Record Form. Data Collectors will abstract the medical record for these patients at the transferred hospital and return the data to the CC for data entry.

In order to facilitate the outcome data entry, CAMRAS has been programmed to remove data for each case as it becomes complete. This occurs each time the Data Collector electronically transfers or retrieves. On Tuesdays, all data for patients recorded on the ED Database Form who are not eligible for further participation are removed from the laptop at the time data is transferred. On Thursdays, as the laptops retrieve the database for the printing of ED Log List, the REACT DMS indicates to each laptop which IDs were selected at random. CAMRAS then "knows" which cases to expect and which cases to close. The following Tuesday, those IDs which were not marked as selected will transfer off the laptop during the transfer process. In addition, cases will transfer off the laptop once a selected case is completed. Released cases are considered complete once a Locator and an ED Abstract has been completed. Admitted cases are completed.

b. Process Evaluation Data Collection and Transfer

The Process Evaluation data consists of all information that documents the intervention activities. These forms will be completed, by the appropriate intervention staff members, on hard copy only. These forms will be distributed to intervention staff by Site Coordinators. Completed forms should be collected by the Site Coordinator and the original forwarded to the CC. Photocopies should be filed and locked in the REACT-designated filing cabinet. These photocopies should be easily accessible to field intervention staff in order to facilitate the resolution of data related inquiries.

Figure 17. ED LOG LISTING REPORT FOR ADMITTED PARTICIPANTS

REACT Data Management System ED Log Listing Report for Admitted Participants of week end date: 12/18/95 Community and Site: Lowell, MA Hospital: LOWELL GENERAL HOSPITAL Date: 12/18/95 Page: 1

REACT ID	MED	VISIT	ADM TO	ADM			COMP	LETED?	READY FOR
	REC #	DATE	HOSP.	DX	LAPTOP	FOLLOW-UP ACTION	LOC	EDA MRA	TRANSFER?
==========	=======	===========	=======	======	=======	=======================================	=====	========	=========
2201001924	020880	12/11/95	Yes	ANGINA	6	Locator, if elig,			
						Need EDA & MRA			
2201001948	029825	12/11/95	Yes	M.I.	6	Locator, if elig,			
						Need EDA & MRA			
2201001998	173273	12/11/95	Yes	ANGINA	6	Locator, if elig,			
						Need EDA & MRA			
2201002039	047832	12/12/95	Yes	M.I.	6	Locator, if elig,			
						Need EDA & MRA			
2201002217	155193	12/15/95	Yes	ANGINA	6	Locator, if elig,			
						Need EDA & MRA			

Figure 18. ED LOG LISTING REPORT FOR RELEASED PARTICIPANTS

REACT Data Management System ED Log Listing Report for Released Participants of week end date: 12/18/95 Community and Site: Lowell, MA Date: 12/18/95 Page: 1

REACT ID	MED REC #	VISIT DATE	ADM TO HOSP.	LAPTOP	FOLLOW-UP ACTION	PLETED? EDA	READY FOR TRANSFER?
2201001823	095657	12/09/95	No	6	Locator, if elig, Need ED Abstract	 	
2201001847	166917	12/10/95	No	6	Locator, if elig, Need ED Abstract	 	
2201001861	283859	12/10/95	No	6	Locator, if elig, Need ED Abstract	 	
2201001873	063652	12/11/95	No	6	Locator, if elig, Need ED Abstract	 	
2201001811	283841	12/09/95	No	6	Not Selected		
2201001835	283850	12/09/95	No	6	Not Selected		
2201001859	155332	12/10/95	No	6	Not Selected		
2201001885	283868	12/10/95	No	6	Not Selected		

Figure 19. ED LOG LISTING REPORT FOR PASSIVE CONSENT PARTICIPANTS

REACT Data Management System ED Database Log Listing Report for Passive Consent Letters Report Date: 12/15/95 Page: 4

REACT ID Number	Patient Name	Admission Status	Medical Record #	Adress Street1	Street2	City, State	Zipcode	Telephone Number	Passive C Date
4101000658 4101001078		2 1	83001623 84157295			TYLER, TX TYLER, TX	75701 75704		/ / / /
4102001384		2	224129			TYLER, TX	75702		/ /

It is imperative that the Interventionist who initially completes a Process Evaluation Data Form, reviews it for completeness, missing pages, legibility, internal consistency and clarity before forwarding it to the Site Coordinator. No field should be left blank and any questions that arise should be directed to Kathy Schulman at the CC.

Process Evaluation Forms are due at the CC on the 7th of each month for intervention activities that occurred from the 16th to the 31st of the prior month and on the 22nd of each month for those activities that occurred from the 1st to the 15th of the current month. Site Coordinators should mail the forms to Norina Coppinger, REACT Data Manager, on a weekly basis via express mail (2-day delivery).

Please send data to:

Norina Coppinger -REACT New England Research Institute 9 Galen Street Watertown, MA 02172 Phone (617)923-7747 x415

3. Form Tracking, Validations and Edit Reports

The DMS tracks the status of every form. Forms that are required by the protocol, but have not been data entered, are tracked as "expected". Forms that have been entered partially but which remain incomplete are tracked as "partial". Forms that are complete in every field and have been saved as "finalized", are tracked as "complete". As the forms are being data entered, the REACT DMS checks for data entry errors, missing data, and invalid or out-of-range values. The DMS accomplishes this by using a series of validations to identify potential data entry errors. A validation flags values in the DMS data that are either not acceptable, illogical, or impossible. For example, pre-coded questions have validations that display a message to the Data Collector stating that a value has been entered that is not included in the programmed list of response choices. For example, question B3 in the Locator form asks if the patient is a transfer from another hospital. The response choices are "yes", "no" or "information not available". An attempt to enter any value other than these three values will cause the DMS to display a validation error. For clinical variables, validations flag data which are highly unlikely or clinically impossible.

Since sites will be performing direct data entry of forms as the data is being collected, any edits which are generated must be resolved by the Data Collector during data entry. Data Collectors should carefully read the help screens provided if the DMS displays a validation error message asking for verification that an entered value is correct. If the entered value is correct, the Data Collector will have to override the validation error by entering a reason for the value as entered. This both ensures data quality and prevents generation of Edit Correction Forms at a later time.

Regardless, there may still be some cases where erroneous data or potentially erroneous or problematic data will be discovered either by the Data Collector or at the Coordinating Center during QC checks. If a Data Collector discovers that data entered previously is erroneous, then s/he may edit the form if the case is still on his/her laptop. Occasionally, this discovery will occur after a case has been transferred to NERI. If this occurs, Data Collectors must complete a

Site Data Edit Form (see sample Site Data Edit Form in Figure 20). In addition, the CC will distribute Coordinating Center Edit Correction Forms to the Site Coordinators for verification and/or correction of problematic data. Both forms will reference the form name and question number, the REACT ID number, medical record number, current value and the initials of the person who completed the form (see Sample Coordinating Center Edit Correction Form in Figure 21). Once an Edit Correction Form has bee completed at the site, it should be returned to Norina Coppinger.
Figure 20. SITE DATA EDIT FORM

REACT

Site Data Edit Form

Current Date: ___/___/___

Name of Person Completing Form:

Site Name:_____

Hospital Name:

Data Collector's Name:_____

ID Number	Medical Record #	ED Visit Date	Form Name	Question #	Current Value	New Value	Explanation

Figure 21. SAMPLE COORDINATING CENTER EDIT CORRECTION FORM

REACT

Coordinating Center Edit Correction Form

Current Date: __/__/___

Site Name:_____

Hospital Name:

Data Collector's Name:_____

ID Number	Medical Record #	ED Visit Date	Form Name	Question #	Current Value	New Value	Explanation	Initials

C. Data Management Reports and Quality Control

A primary concern of REACT is to assure the quality of the data being collected and analyzed. The validity of the reports and results produced and published by the study will depend upon the appropriateness, thoroughness, and correctness of the data processing and data analysis procedures carried out at the Coordinating Center.

A number of data management reports will be generated to assist in the maintenance of the data. These reports will include information on missing forms for study subjects and forms which have unresolved edit reports. These reports will be routinely monitored by the Measurement & QC Subcommittee and the NHLBI Project Administrator. Additionally, the DMS allows for the random selection of a percentage of entered data forms for re-entry. For those data that are entered centrally, the Coordinating Center will use 100% re-entry with new personnel adjusting the percentage downward, except for key identifiers, depending on performance. Additional reports will be developed on an ongoing basis as is necessary. The following details reports which will be generated on an ongoing basis:

- 1. *Accrual Report*: This report will provide information <u>monthly</u> on the number of completed cases by site and community, as well as detail on delay times and response rates.
- 2. *Sampling Fraction Report*: This report will be produced four weeks after the start of the study, eight weeks after the start of the study, at the end of baseline data collection and as needed thereafter. This report will be used internally only to adjust the sampling rate.
- 3. Variable Frequency Report: For each variable on the database, a tabulation of the frequency of occurrence of every distinct value will be obtained quarterly. This will help to identify many types of anomalies in the data such as: (a) illegal codes, (b) measurements given to more decimal places than provided by the measuring instrument, (c) digit preferences, (d) bimodality or other form of the distribution, and (e) outliers, i.e., extreme values distinctly separate from the rest of the distribution. Once an observation has been identified as a true outlier, the first step is to go back to the original records and determine whether a recording or keying error was made. If such a value is verified as correct, then the question of whether or not to include the value in the data analysis depends upon the nature of each analysis. There is no reason to exclude the value if the analysis is a count of the number of Participants having a value exceeding a given cut point. However, if means and standard deviations are being computed, or if correlation or regression analyses are being carried out, and the outlier value is such that it could have an undue impact on the mean and standard deviation, regression analysis, etc., then it should either be excluded or statistically transformed for purposes of the analysis. These frequencies will be used for internal QC only.

- 4. Data will be reviewed periodically for discrepancies in key fields. This report will be used to generate Edit Correction Forms. When preparing data reports, tables developed from a variety of analysis programs will be checked for consistency. A discrepancy of as little as one Participant among the denominators in different tables may be an indication of a much larger problem.
- 5. *Outstanding Locator Report:* This weekly report provides a detail listing of any Participant with an incomplete or missing Participant Locator Form four weeks after their ED Visit. These Participants will be in danger of falling outside the eight week timeline for the telephone follow-up calls. This will also be distributed cumulatively each quarter.
- 6. Outstanding Abstract Report: This weekly report provides a detail listing of any Participant with an incomplete or missing Abstract Form ten weeks after their ED Visit. Since the completion of the Abstract Data Collection Forms is dependent on the availability of the discharge summary, sites will seldom be able to control the number of cases which are detailed on this report. This report is to be used to assist in the allocation of resources for each site. This will also be distributed cumulatively each quarter.
- 7. *Data Quality Report:* This report will provide feedback to Site Coordinators about Data Collector performance. The report will detail number of forms collected, average completion times, percent of outstanding forms, number of cases outside the 8 week window for telephone follow-up, percent of missing data in key fields and other data quality measures.
- 8. *Summary of Data Transferred:* This report will detail by laptop which data has been transferred each week.
- 9. *Special Reports:* Reports will be genearated as needed to address special requests and areas of particular concern.

D. Laptop Maintenance

Site Coordinators should contact Norina Coppinger whenever there is a problem with a laptop that is used for data collection. She will triage the problem and determine whether or not that laptop should be sent to the Coordinating Center. If the laptop needs to be sent to the Coordinating Center, REACT staff will attempt to recover and transfer all data onto a diskette or into the central database. Once data has been recovered, the Coordinating Center will have the laptop repaired and send the fixed/new laptop back to the study center. Study centers should not send faulty laptops directly to Dell. Each center will have a spare laptop in order to avoid losing valuable data collection time during repair or replacement.

Due to extensive time and resources needed to complete the above process, only laptops used for data collection should be submitted for repair/replacement. Sites that use laptops for purposes other than data collection should contact Dell Computers directly at 1-800-284-1200. Dell will resolve problems within two business days. If unable to repair a laptop within two days Dell will provide a new one, at no cost. Further information regarding repairs is covered in the service warranty.

It is important to contact the CC before making any modifications to configuration of the laptop. Sites should contact Kathy Schulman prior to installing new software, setting up e-mail accounts, altering global windows settings or making any other changes in laptop configuration.

XIV. QUALITY CONTROL

The Coordinating Center will be utilizing three primary tools to ensure data integrity: certification/validation of the abstraction process; site visits and a series of QC reports. QC activities will be documented at the Coordinating Center in a QC plan.

A. Abstractor Training And Certification

The Coordinating Center will hold a central two day training for those study center staff that will be responsible for training field staff to abstract hospital records. The didactic component of the training will review the following areas:

- 1. an introduction to abstraction and issues concerning reliability and validity,
- 2. the role of the abstractor and interpretation of the record,
- 3. procedures for accessing the medical record,
- 4. the content of the medical record(s)
- 5. an in-depth review of the REACT abstract data collection instrument(s), the rationale for the questions, as well as instructions on how to record and edit responses.

Data Collectors will then practice by abstracting two sample medical records. Questions and problems with interpretation will then be reviewed. Data Collectors must successfully complete two medical record abstracts with scores greater than or equal to 90% for certification.

All study center abstractors will also be trained and certified by certified trainers prior to completing the Abstract Forms. The initial certification requires that during training Abstractors complete Data Collection Forms using a Medical Record provided by their Site Coordinator. These forms should then be reviewed question by question so that each Abstractor knows what the correct answer was and how this data was obtained.

Ideally, Abstractors should be sent home from training with two hard-copy sets of Data Collection Forms and Medical Records for completion. These Medical Records should be those that will be used by the Abstractor at the hospital they will be collecting data. However, if Site Coordinators are unable to adhere to this process due to resource constraints, the option exists that one of the two records abstracted may be a medical record from another hospital. For example, if a site has 10 Abstractors, the Site Coordinator has the option of having each of them review one medical record from their hospital and one additional medical record from a specified hospital. Accordingly, the SC would have to score a total of 11 records as opposed to 20 records.

Site Coordinators should review the abstraction for these two records and score them prior to study start on December 1st. Scores for each Abstractor should be sent to Kathy Schulman at NERI and arrangements made for additional training for any Abstractor whose score is less than 90%.

B. Abstractor Reliability Assessments

At least five times during the data collection period, NERI will send out a medical record and the accompanying Data Collection Forms and request that Abstractors complete the abstraction. Five actual medical records will be selected on patients hospitalized with acute coronary heart disease which also represent a range of severity of illness. These records will be abstracted by three study physicians and agreement on the gold standard for each record will be reached by consensus. Data Collectors will then be tested by abstracting these five cases using the REACT data collection forms. Abstracts will be required to the gold standard and a score of 90% agreement or better will be required. The results of these scores will be made available to Site Coordinators. This process will also be used to asses inter rater reliability or agreement among abstractor. The schedule for distribution of these medical records is as follows: June and October of 1996; January, May and September of 1997.

Finally, at least twice during the Data Collection period, Abstractors will be asked to abstract a record previously completed. It is anticipated that reabstraction requests will be distributed during September, 1996 and March, 1997. These dates may change as needed.

Site Coordinators should also note that the results of any of these abstractions may require that an Abstractor be recertified.

C. Regular Site Visits

Site visits will occur three times during the 22 month data collection period to ensure standard implementation of protocols. A team of site visitors will observe staff from each study center to evaluate adherence to protocol and to suggest modifications where necessary.

The primary goal of conducting a comprehensive training on protocols is to ensure optimal, standard collection of data. The primary intent of the site visit is to ensure that the primary goal of training has been achieved and has resulted in standard application of a clearly understood protocol. Although quality assessment and detection of protocol deviations are inherent in the site visit process, the approach is intended to be a mutually beneficial experience which focuses on both prevention and correction. Given this approach the following outlines areas of focus when conducting a site visit.

- To become familiar with the structure of each REACT Site
- To monitor each sites' implementation of the REACT Protocol
- To monitor REACT data collectors at all REACT study sites in order to assess standardization of data collection

A written report that summarizes the findings of the site visit will be distributed to the Study Center PI and the project office. Following distribution and review of the Site Visit Report, pending issues will be addressed during conference calls between the CC and the Study Center Staff.

The specific objectives of each site visit include the following:

- 1. Meet Study Coordinators and staff in each community, orient to REACT Consortium by touring hospitals in each community.
- 2. Discuss staff configuration, organization, and communication.
- 3. View Emergency Departments, Medical Records Room, and the location of study files and laptops.
- 4. Observe the abstraction and entry of a sample of ED and Medical Record Abstract Forms.
- 5. Validate a sample of ED Database and Locator Data.
- 6. Observe Data Collectors knowledge and use of CAMRAS
- 7. Monitor operational data flow by reviewing the following:
 - Observing Data Collectors through each step of the data collection/transfer and retrieval process
 - Observing the transfer of information from Site Coordinator to Data Collector
 - Observing the resolution process in place for questions and problems
 - Storage & Use of the ED Log List Report
 - Passive Consent Letters & process
- 8. Review Study Center plans for monitoring Data Collectors.

At the first site visit, every effort will be made to meet with every data collector at the hospital at which they collect data. For the first site visit, the Data Collector Checklist in Figure 22 will be completed for each data collector. The second and third site visit will include visits with several Data Collectors at each Study Center. The checklists for visits two and three will be developed and distributed prior to the each visit. The Data Collectors to be site visited will be selected by the CC, either at random or because of concerns about data quality. In addition to meeting with Data Collectors, the Site Visit will include time at the Study Center central office. The Study Center Checklist presented in Figure 23 will be completed and included in the Site Visit Report.

RAPID EARLY ACTION FOR CORONARY TREATMENT REACT SITE VISIT					
DATA COLLECTOR CHECKLI	ST				
Date of Site Visit:					
Site: Community:					
REACT NERI Representative(s):					
REACT Data Collector: Laptop #:					
A. OBSERVED THE FOLLOWING PARAMETERS:					
1. Completion of ED Database Form Hardcopy					
2. Completion of ED Database Form in CAMRAS					
3. Completion of Locator Form					
 Completion of ED Abstract Form Completion of In-Patient Medical Record Abstract 					
Form					

ADDITIONAL COMMENTS:

B. COMMUNICATION:

- 1. Communication Log Memos
- 2. Other CC correspondence

ADDITIONAL COMMENTS:

C. CAMRAS/LAPTOP:

- 1. Inspect data files on laptop
- 2. Review Log List Reports
- 3. Inspect condition of Laptop and accessories
- 4. Identify any outstanding problems

ADDITIONAL COMMENTS:

RAPID EARLY ACTION FOR CORONARY TREATMENT

REACT SITE VISIT

STUDY CENTER CHECKLIST

Date of Site Visit:

Site: _____

REACT NERI Representative(s): _____

A. COMMUNICATION:

- 1. DC with Site Coordinator
- 2. SC with Data Collector

ADDITIONAL COMMENTS:

B. ADMINISTRATIVE:

- 1. Storage of Confidential Materials:
- 2. Storage and Use of ED Log List Reports
- 3. Storage of Communication Log
- 4. Passive Consent/Refusal Documentation

ADDITIONAL COMMENTS:

D. QC Reports

A primary concern of REACT is to assure the quality of the data being collected and analyzed. The validity of the reports and results produced and published by the study will depend upon the integrity of the data submitted by sites, and upon the appropriateness, thoroughness, and correctness of the data processing and data analysis procedures carried out at the Coordinating Center.

A number of data management reports will be generated to assist in the maintenance of the data. These reports will include information on missing forms for study subjects and forms which have unresolved edit reports. These reports will be routinely monitored by the Measurement & QC Subcommittee and the NHLBI Project Administrator. Additionally, the DMS allows for the random selection of a percentage of entered data forms for re-entry. For those data that are entered centrally, the Coordinating Center will use 100% re-entry with new personnel adjusting the percentage downward, except for key identifiers, depending on performance. Additional reports will be developed on an ongoing basis as is necessary. The following details reports which will be generated on an ongoing basis:

- 1. *Accrual Report*: This report will provide information monthly on the number of completed cases by site and community, as well as detail on delay times and response rates.
- 2. *Sampling Fraction Report*: This report will be produced four weeks after the start of the study, eight weeks after the start of the study, at the end of baseline data collection and as needed thereafter. This report will be used internally only to adjust the sampling rate.
- 3. Variable Frequency Report: For each variable on the database, a tabulation of the frequency of occurrence of every distinct value will be obtained quarterly. This will help to identify many types of anomalies in the data such as: (a) illegal codes, (b) measurements given to more decimal places than provided by the measuring instrument, (c) digit preferences, (d) bimodality or other form of the distribution, and (e) outliers, i.e., extreme values distinctly separate from the rest of the distribution. Once an observation has been identified as a true outlier, the first step is to go back to the original records and determine whether a recording or keying error was made. If such a value is verified as correct, then the question of whether or not to include the value in the data analysis depends upon the nature of each analysis. There is no reason to exclude the value if the analysis is a count of the number of Participants having a value exceeding a given cut point. However, if means and standard deviations are being computed, or if correlation or regression analyses are being carried out, and the outlier value is such that it could have an undue impact on the mean and standard deviation, regression analysis, etc., then it should either be excluded or statistically transformed for purposes of the analysis. These frequencies will be used for internal QC only.

- 4. Data will be reviewed periodically for discrepancies in key fields. This report will be used to generate Edit Correction Forms. When preparing data reports, tables developed from a variety of analysis programs will be checked for consistency. A discrepancy of as little as one Participant among the denominators in different tables may be an indication of a much larger problem.
- 5. *Outstanding Locator Report*: This weekly report provides a detail listing of any Participant with an incomplete or missing Participant Locator Form four weeks after their ED Visit. These Participants will be in danger of falling outside the eight week timeline for the telephone follow-up calls. This will also be distributed cumulatively each quarter.
- 6. *Outstanding Abstract Report*: This weekly report provides a detail listing of any Participant with an incomplete or missing Abstract Form ten weeks after their ED Visit. Since the completion of the Abstract Data Collection Forms is dependent on the availability of the discharge summary, sites will seldom be able to control the number of cases which are detailed on this report. This report is to be used to assist in the allocation of resources for each site. This will also be distributed cumulatively each quarter.
- 7. *Data Quality Report* This report will provide feedback to Site Coordinators about Data Collector performance. The report will detail number of forms collected, average completion times, percent of outstanding forms, number of cases outside the 8 week window for telephone follow-up, percent of missing data in key fields and other data quality measures.
- 8. *Summary of Data Transferred:* This report will detail by laptop which data has been transferred each week.
- 9. *Special Reports:* Reports will be generated as needed to address special requests and areas of particular concern.

LOCATOR FORM

REACT PATIENT LOCATOR FORM

INSTRUCTIONS:

- Complete this information for each patient assigned for data collection by the REACT CC.
- This information should be entered directly onto the laptop and not recorded on hard copies.
- Information which is "Not Recorded" should be coded with "-8".

ENTER REACT STUDY ID #

SECTION A: GENERAL INFORMATION

A1.	DATE FORM COMPLETED: / / / / /
A2.	START TIME (MILITARY TIME): /
A3.	FORM VERSION DATE: 11/01/95
A4.	ABSTRACTOR'S INITIALS:
A5.	MEDICAL RECORD #:
	SECTION B: ELIGIBILITY
B1.	ZIPCODE OF RESIDENCE: - _
B2.	DATE OF BIRTH: $/ / / / Y Y Y W =$
B3.	TRANSFER FROM ANOTHER HOSPITAL
B3.	TRANSFER FROM ANOTHER HOSPITAL YES1
B3.	TRANSFER FROM ANOTHER HOSPITAL

REACT LOCATOR FORM QUESTION-BY-QUESTION SPECIFICATIONS

Question-by-Question specifications serve as instructions for completing information on a form. Data Collectors should refer to these instructions whenever they have a concern or inquiry about a question on this form. The Question-by-Question specifications for the Locator Form are as follows:

GENERAL INSTRUCTIONS

This information should be collected on all Patients selected for data collection by the REACT Coordinating Center. These Patients will be listed on your ED Log List Report. All information on this form must be directly entered onto the Laptop.

The information on this form may be obtained from the hospital's computerized Patient registration database and/or the Patient's Medical Record. From the Medical Record, Data Collectors should review the Patient registration or Admission Sheet, the Admission Notes, the Discharge Summary, and the Progress Note for the relevant information noted below.

For any of the following information which is not recorded in the hospital record sources, enter "<-8>" for "NOT RECORDED". When in doubt about which code is appropriate for a given question, the Data Collector should contact his/her Site Coordinator.

SECTION A: GENERAL INFORMATION

A1. <u>DATE FORM COMPLETED</u> - Enter the date that the Locator data was completed using a MM/DD/YY format. For example, November 1, 1995 should be documented as 11/01/95. If data entry was partially completed on one date and finished on another date, enter the date the Data Collector began to enter the data on this form.

A2. <u>START TIME</u> - Enter the actual time you began the form using military time. Military time begins at midnight with a time of 00:00 and continues hourly (01:00, 02:00 etc.) to noontime, which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ.

A3. <u>FORM VERSION DATE</u> - The form version date is preprinted on the form by the Coordinating Center and the laptop will default to the most current form version in use. The current form version date is 04/01/95. This version date was modified in the software updates of 11/29/95, 12/18/95, 1/18/96, 3/8/96 and 4/25/96.

A4. <u>ABSTRACTOR'S INITIALS</u> - Enter the first, middle and last initials of the Abstractor. If the Abstractor does not have or does not use a middle initial, enter a "-" in place of the middle initial.

A5. <u>MEDICAL RECORD NUMBER</u> - Enter the Medical Record number as indicated on the Patient's Medical Record. Each page of the Medical Record will be stamped with the Patient's Medical Record number.

REACT PATIENT LOCATOR FORM

INSTRUCTIONS:

- Complete this information for each patient assigned for data collection by the REACT CC.
- This information should be entered directly onto the laptop and not recorded on hard copies.
- Information which is "Not Recorded" should be coded with "-8".

ENTER REACT STUDY ID #

SECTION A: GENERAL INFORMATION

A1.	DATE FORM COMPLETED: / / / / /
A2.	START TIME (MILITARY TIME): /
A3.	FORM VERSION DATE: 11/01/95
A4.	ABSTRACTOR'S INITIALS:
A5.	MEDICAL RECORD #:
	SECTION B: ELIGIBILITY
B1.	ZIPCODE OF RESIDENCE: -
B2.	DATE OF BIRTH: $/ / / / Y Y Y Y =$
B3.	TRANSFER FROM ANOTHER HOSPITAL
	YES1
	NO2
	NOT RECORDED<-8>

SECTION B: ELIGIBILITY

B1. <u>**ZIP CODE OF RESIDENCE**</u> - Enter the Patient's zip code of residence. If zip codes for both a P.O. Box and a street address are provided, enter the zip code for the street address. If the only zip code available is for a P.O. Box, enter that zip code. If only the first 5 digits of the zip code are available, enter only those digits and press ENTER.

B2. DATE OF BIRTH - Enter the Patient's date of birth in MM/DD/YYYY format. For example, enter the birthdate February 5, 1958 as 02/05/1958. If no month or day of birth is available for a Patient born in 1958, for example, the Data Collector should enter -8/-8/1958.

B3. <u>**TRANSFER FROM ANOTHER HOSPITAL</u> - Enter "1" for "YES" if the Emergency Department Note or Admission Note indicates the Patient was transferred from another hospital. Enter "2" for "NO" if the record indicates that the Patient was NOT transferred from another hospital. Enter "<-8>" for "NOT RECORDED" if the record does not indicate whether the Patient was or was not transferred from another hospital.**</u>

Do not include any other type of institutional transfer except for those in which the Patient was transferred from another *hospital*. For example, if a Patient was instructed by his/her doctor, a clinic or an urgent care facility to go to the E.D., the Patient should <u>not</u> be considered transferred from another hospital. The only time a Patient should be considered transferred is when s/he was actually transferred from another **hospital**.

B4. INSTITUTIONALIZED - Enter "1" for "YES" if the Admission Note, Emergency Department Note or Patient's address information indicates that the Patient is presently living in an institutional setting (institutionalized) on either a temporary or a permanent basis. Examples of such settings include Nursing Homes, Rehabilitation Facilities, Psychiatric Facilities, Prisons, or In-Patient Chemical Dependency Units. This does not include Patients living in assisted living communities. Enter "2" for "NO" if the record indicates that the Patient is not currently institutionalized and **skip to B5.** Enter "<-8>" for "NOT RECORDED" if the record does not indicate whether or not the Patient is currently institutionalized and **skip to B5.**

B4a. <u>**TYPE OF INSTITUTION**</u> - Enter the type of institution where the Patient currently resides. If the Patient is in a "NURSING HOME", enter "1"; a "REHABILITATION FACILITY", enter "2"; a "PRISON", enter "3"; in another type of institution, enter "4" for "PSYCHIATRIC FACILITY"; or enter "5" for "OTHER" and enter the institution type verbatim in the specify field.

B5. <u>**TRAUMATIC ETIOLOGY**</u> - Enter "1" for "YES" if the Emergency Department Note or Admission Note indicates that the etiology of the chest pain or discomfort for this Patient is due to some form of trauma, for example, a car accident. Enter "2" for "NO" if the record specifies that the chest pain or discomfort was not due to trauma.

B4. INSTITUTIONALIZED

YES1	
NO 2	(GO TO B5)
NOT RECORDED	(GO TO B5)

B4a. TYPE OF INSTITUTION

NURSING HOME	1
REHABILITATION FACILITY	2
PRISON	3
PSYCHIATRIC FACILITY	4
OTHER (SPECIFY)	5

B5. TRAUMATIC ETIOLOGY OF CHEST PAIN/DISCOMFORT

YES	1
NO	2

B6. HOSPITAL DISCHARGE DIAGNOSIS

ACUTE MYOCARDIAL INFARCTION	1
UNSTABLE ANGINA	2
OTHER DIAGNOSIS	3
NOT APPLICABLE	4
NOT AVAILABLE/RECORDED	<-8>

B7. PATIENT ELIGIBLE FOR REACT STUDY

YES 1	l			
NO 2	2 (0	GO '	TO EN	D)

SECTION C: PATIENT INFORMATION

C1.	NAME:			,
	LAST		FIRST	M.I.
	MAILING: ADDRESS	STREET	,,AP	T. NO
			,	
		CITY	STATE	ZIP CODE

SECTION B: ELIGIBILITY

B1. <u>**ZIP CODE OF RESIDENCE**</u> - Enter the Patient's zip code of residence. If zip codes for both a P.O. Box and a street address are provided, enter the zip code for the street address. If the only zip code available is for a P.O. Box, enter that zip code. If only the first 5 digits of the zip code are available, enter only those digits and press ENTER.

B2. <u>**DATE OF BIRTH</u></u> - Enter the Patient's date of birth in MM/DD/YYYY format. For example, enter the birthdate February 5, 1958 as 02/05/1958. If no month or day of birth is available for a Patient born in 1958, for example, the Data Collector should enter -8/-8/1958.</u>**

B3. <u>**TRANSFER FROM ANOTHER HOSPITAL</u> - Enter "1" for "YES" if the Emergency Department Note or Admission Note indicates the Patient was transferred from another hospital. Enter "2" for "NO" if the record indicates that the Patient was NOT transferred from another hospital. Enter "<-8>" for "NOT RECORDED" if the record does not indicate whether the Patient was or was not transferred from another hospital.**</u>

Do not include any other type of institutional transfer except for those in which the Patient was transferred from another *hospital*. For example, if a Patient was instructed by his/her doctor, a clinic or an urgent care facility to go to the E.D., the Patient should <u>not</u> be considered transferred from another hospital. The only time a Patient should be considered transferred is when s/he was actually transferred from another **hospital**.

B4. INSTITUTIONALIZED - Enter "1" for "YES" if the Admission Note, Emergency Department Note or Patient's address information indicates that the Patient is presently living in an institutional setting (institutionalized) on either a temporary or a permanent basis. Examples of such settings include Nursing Homes, Rehabilitation Facilities, Psychiatric Facilities, Prisons, or In-Patient Chemical Dependency Units. This does not include Patients living in assisted living communities. Enter "2" for "NO" if the record indicates that the Patient is not currently institutionalized and **skip to B5.** Enter "<-8>" for "NOT RECORDED" if the record does not indicate whether or not the Patient is currently institutionalized and **skip to B5.**

B4a. <u>**TYPE OF INSTITUTION**</u> - Enter the type of institution where the Patient currently resides. If the Patient is in a "NURSING HOME", enter "1"; a "REHABILITATION FACILITY", enter "2"; a "PRISON", enter "3"; in another type of institution, enter "4" for "PSYCHIATRIC FACILITY"; or enter "5" for "OTHER" and enter the institution type verbatim in the specify field.

B5. <u>**TRAUMATIC ETIOLOGY**</u> - Enter "1" for "YES" if the Emergency Department Note or Admission Note indicates that the etiology of the chest pain or discomfort for this Patient is due to some form of trauma, for example, a car accident. Enter "2" for "NO" if the record specifies that the chest pain or discomfort was not due to trauma.

B4. INSTITUTIONALIZED

YES1	
NO 2	(GO TO B5)
NOT RECORDED	(GO TO B5)

B4a. TYPE OF INSTITUTION

NURSING HOME	1
REHABILITATION FACILITY	2
PRISON	3
PSYCHIATRIC FACILITY	4
OTHER (SPECIFY)	5

B5. TRAUMATIC ETIOLOGY OF CHEST PAIN/DISCOMFORT

YES	1
NO	2

B6. HOSPITAL DISCHARGE DIAGNOSIS

ACUTE MYOCARDIAL INFARCTION	1
UNSTABLE ANGINA	2
OTHER DIAGNOSIS	3
NOT APPLICABLE	4
NOT AVAILABLE/RECORDED	<-8>

B7. PATIENT ELIGIBLE FOR REACT STUDY

YES 1	l			
NO 2	2 (0	GO '	TO EN	D)

SECTION C: PATIENT INFORMATION

C1.	NAME:			,
	LAST		FIRST	M.I.
C2.	MAILING: ADDRESS	STREET	,,AP	T. NO
			,	
		CITY	STATE	ZIP CODE

B6. <u>**DISCHARGE DIAGNOSIS</u>** - Enter the code for the hospital discharge diagnosis which is documented in the Patient's Medical Record. This should be one of the discharge diagnoses listed for the Patient on the present admission, but may not necessarily be the first one listed. The primary source for the discharge diagnosis in the Medical Record is the Face Sheet/Standard Hospital Discharge Form. If the Face Sheet does not provide the discharge diagnosis, the Data Collector should check the Discharge Summary. If there is discrepant information between the Face Sheet and the Discharge Summary, the Data Collector should use the discharge diagnosis information reported on the Face Sheet. If neither the Face Sheet nor the Discharge Summary provide the discharge diagnosis, then the Data Collector should check the handwritten Physician's Discharge Note found in the Progress Note.</u>

If the hospital discharge diagnosis is an acute myocardial infarction of any type or location documented as anterior, lateral, inferior, or posterior wall myocardial infarction, right ventricular, subendocardial, transmural, Q-wave or Non Q-wave myocardial infarction, or as myocardial infarction, or the ICD code is documented as 410, then enter "1".

If the hospital discharge diagnosis is documented as unstable angina, chest pain, or non-specific chest pain, or the ICD code is documented as 411, then enter "2".

If myocardial infarction or unstable angina are not listed as one of the possible hospital discharge diagnoses for this Patient, enter "3" for "OTHER DIAGNOSIS". Examples of diagnoses that should be coded as "3" include chest pain respiratory and chest pain noncardiac. If the Patient was part of the sample that was released from the E.D., enter "4" for "NOT APPLICABLE". If the hospital discharge diagnosis is not available or not recorded in the Medical Record at the time the Locator is completed, enter "<-8>" for "NOT AVAILABLE/ RECORDED".

B7. <u>ELIGIBLE FOR REACT</u> - If the Patient meets all of the eligibility criteria for participation in REACT, enter "1" for "YES". The eligibility criteria for REACT are as follows:

- a) Patients must be at least thirty years of age on the date of their visit to the E.D.
- b) Chest pain, pressure, tightness or discomfort must not be traumatic in origin
- c) Patients must not be transferred from another hospital
- d) Patients must not be institutionalized
- e) Patients must reside in an pre-specified list of eligible zip codes
- f) Admitted Patients must have a hospital discharge diagnosis of myocardial infarction or unstable angina (if available)

If participants released from the ED do not meet one or more of the first 5 criteria (a-e), enter "2" for "NO", not eligible, and **skip to the END of this form**. If admitted patients do not meet one or more of the 6 eligibility criteria (a-f), enter "2" for "NO and **skip to the END of this form**.

B4. INSTITUTIONALIZED

YES1	
NO 2	(GO TO B5)
NOT RECORDED	(GO TO B5)

B4a. TYPE OF INSTITUTION

NURSING HOME	1
REHABILITATION FACILITY	2
PRISON	3
PSYCHIATRIC FACILITY	4
OTHER (SPECIFY)	5

B5. TRAUMATIC ETIOLOGY OF CHEST PAIN/DISCOMFORT

YES	1
NO	2

B6. HOSPITAL DISCHARGE DIAGNOSIS

ACUTE MYOCARDIAL INFARCTION	1
UNSTABLE ANGINA	2
OTHER DIAGNOSIS	3
NOT APPLICABLE	4
NOT AVAILABLE/RECORDED	<-8>

B7. PATIENT ELIGIBLE FOR REACT STUDY

YES 1	l			
NO 2	2 (0	GO '	TO EN	D)

SECTION C: PATIENT INFORMATION

C1.	NAME:			,
	LAST		FIRST	M.I.
C2.	MAILING: ADDRESS	STREET	,,AP	T. NO
			,	
		CITY	STATE	ZIP CODE

SECTION C: PATIENT INFORMATION

C1. <u>NAME</u> - Record Patient's full name: Last Name, First Name, and Middle Initial.

C2. <u>MAILING ADDRESS</u> - Record the Patient's complete current <u>mailing</u> address. Include street address, apartment number if applicable, city, state, and 5- or 9-digit zip code. A field has been added for those Patients with a lengthy street address. If this field is is not needed, enter <-1> for "NOT APPLICABLE".

C3. <u>HOME PHONE</u> - Enter the Patient's home telephone number, including the 3-digit area code.

C4. <u>SOCIAL SECURITY NUMBER</u> - Enter the Patient's 9-digit social security number. Enter "<-8>" if the Patient's social security number is not available.

C5. <u>**GENDER**</u> - Enter the Patient's gender or sex as it is recorded in the Patient's Medical Record or hospital's computerized Patient registration database. This is commonly abbreviated as F=female and M=male. If the Patient's gender is not identified or available, enter <-8> for "NOT RECORDED". Do not attempt to determine the Patient's gender from other information available in the Medical Record.

C6. <u>ETHNICITY</u> - Enter the Patient's ethnicity as it is recorded in the Patient's Medical Record or hospital's computerized Patient registration database. If the Patient belongs to more than one ethnic group listed in the response categories, enter "6" for "OTHER" and enter the ethnicity verbatim in the Specify field. Common abbreviations are C or W (Caucasian or White), B (Black), and H (Hispanic).

SECTION D: END OF FORM

D1. <u>END TIME</u> - Enter the actual time you ended the form using military time. Military time begins at midnight with a time of 00:00, continues hourly (01:00, 02:00 etc.) to noontime which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours.

C3. HOME PHONE: |_||_| - |_||_| - |_||_| - |_||_|

C4. SOCIAL SECURITY NO.: |__| |__| - |__| |__| - |__| |__|

C5. GENDER:

MALE	1
FEMALE	2
NOT RECORDED	<-8>

C6. ETHNICITY:

WHITE	1
BLACK	2
HISPANIC	3
NATIVE AMERICAN	4
ASIAN/ PACIFIC ISLANDER	5
OTHER (SPECIFY)	6

NOT RECORDED <--8>

SECTION D: END OF FORM

D1. END TIME (MILITARY TIME): ____ / ____

IF PATIENT WAS ELIGIBLE, COMPLETE REACT EMERGENCY DEPARTMENT RECORD ABSTRACT FORM .

IF PATIENT WAS <u>NOT</u> ELIGIBLE, NO FURTHER DATA COLLECTED.

SECTION C: PATIENT INFORMATION

C1. <u>NAME</u> - Record Patient's full name: Last Name, First Name, and Middle Initial.

C2. <u>MAILING ADDRESS</u> - Record the Patient's complete current <u>mailing</u> address. Include street address, apartment number if applicable, city, state, and 5- or 9-digit zip code. A field has been added for those Patients with a lengthy street address. If this field is is not needed, enter <-1> for "NOT APPLICABLE".

C3. <u>**HOME PHONE</u>** - Enter the Patient's home telephone number, including the 3-digit area code.</u>

C4. <u>SOCIAL SECURITY NUMBER</u> - Enter the Patient's 9-digit social security number. Enter "<-8>" if the Patient's social security number is not available.

C5. <u>**GENDER**</u> - Enter the Patient's gender or sex as it is recorded in the Patient's Medical Record or hospital's computerized Patient registration database. This is commonly abbreviated as F=female and M=male. If the Patient's gender is not identified or available, enter <-8> for "NOT RECORDED". Do not attempt to determine the Patient's gender from other information available in the Medical Record.

C6. <u>ETHNICITY</u> - Enter the Patient's ethnicity as it is recorded in the Patient's Medical Record or hospital's computerized Patient registration database. If the Patient belongs to more than one ethnic group listed in the response categories, enter "6" for "OTHER" and enter the ethnicity verbatim in the Specify field. Common abbreviations are C or W (Caucasian or White), B (Black), and H (Hispanic).

SECTION D: END OF FORM

D1. <u>END TIME</u> - Enter the actual time you ended the form using military time. Military time begins at midnight with a time of 00:00, continues hourly (01:00, 02:00 etc.) to noontime which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours.

ED LOG

REACT EMERGENCY DEPARTMENT DATABASE FORM QUESTION-BY-QUESTION SPECIFICATIONS

Question by question specifications serve as instructions for completing information on a form. Data Collectors should refer to these instructions whenever they have a concern or inquiry about a question on this form. The Question by Question specifications for the Emergency Department (ED) Database Form are as follows.

GENERAL INSTRUCTIONS

Information on this form should be completed for all patients presenting to the emergency departments of participating hospitals with a chief complaint of chest pain, pressure, tightness, or other chest discomfort such as burning, squeezing, stabbing, heaviness, pulling or aching in the chest. This means that if a patient presents to the ED in cardiac arrest, but does not present with any of the above symptoms, s/he is NOT eligible for participating hospitals. The information should be written onto the ED Database Forms provided by the Site Coordinator. Then the information from that hardcopy form should be data entered onto the laptops. Data Collectors should not predetermine REACT eligibility prior to recording patients on the ED Database Form without first consulting the Coordinating Center.

The ED Database Form also serves as a log of the assignment of Participant ID in REACT. After the information from an ED Database Form has been entered onto the laptops, the ED Database Form should be sent to the Site Coordinator who will file these forms in locked filing cabinets for future reference.

Data for the REACT ED Database Form should be collected on a weekly basis throughout the study. The start and end dates for each week of data collection, Saturday 12:01 AM and Friday 12:00 Midnight, respectively must be documented at the top of the first page. Additional pages should be attached as needed. If a Data Collector makes a data entry error on the ED Database Form s/he should strike a line through the ID number and skip to the next available ID. A Data Collector should never, under any circumstance, erase, white-out or write over an error. If a Data Collector accidently skips an entire page(s) of IDs and assigns IDs on the following pages, s/he should simply assign the unused IDs that were skipped in the most sequential manner possible. If a Data Collector is running low on ED Database Forms s/he must inform the Site Coordinator, who in turn, must contact Jodi Edmonds by the first of month to meet the order deadline.

REACT study Data Collectors will review the ED log (a hard copy or computerized database) of study hospitals for all patients with a chief complaint of chest pain, pressure, tightness, or other chest discomfort such as burning, squeezing, stabbing, heaviness, pulling or aching in the chest. For each such patient the Data Collector will provide the information described on the next page.

REACT Data Management Study

Collection period: __/__/ TO __/_/__

ED Database form for Site and Community: 1-1 Hospital: WHATEVER HOSPITAL.	
Report Date: 01/21/98	
Page 1	

Patient Name			Medical Record Number		1=Yes 2=No 3=Died in ED	1=MI or R/O MI 2=Unstable Angina	
	//	1-1-01-90001-6		//		·	
	//	1-1-01-90002-8		//			
	//_	1-1-01-90003-0		_/_/_			
	//_	1-1-01-90004-2		_/_/_			
	//_	1-1-01-90005-4		_/_/_			
	//_	1-1-01-90006-6		_/_/			
	//_	1-1-01-90007-8		_/_/_			
	//_	1-1-01-90008-0		_/_/			
	//	1-1-01-90009-2		//			
Data Collector Name:_			Page	of	,		

<u>PATIENT NAME</u> - List the first name, middle initial, and last name of the patient.

DATE OF BIRTH - List the patient's date of birth using the MM/DD/YY format. For example, if the patient was born on May 15, 1960, enter 05/15/60. If the date of birth is not recorded, enter the patient's age on the hard copy only.

<u>REACT ID NUMBER</u> - The ED Database Form provides a REACT study ID for each patient.

MEDICAL RECORD NUMBER - Enter the medical record number of the patient.

ED VISIT DATE - The date of the patient's visit to the emergency department must be entered as MM/DD/YY. For example, enter November 1, 1995 as 11/01/95.

<u>ADMISSION STATUS</u> - The admission status (whether the patient was admitted to the hospital) must be entered as either "1" for "Yes" (admitted to the hospital), "2" for "No" (not admitted and released from the ED alive), "3" for "Died" (patient died in the emergency department), "4" for "DOA" (patient was dead on arrival in the ED) or "5" for "Transfer" (patient was transferred from the ED to another hospital). Please note that if a patient refuses admission, his/her admission status should be entered as "2" for "Not Admitted". If a patient is issued an admission status which is neither admitted nor released, but the patient is admitted to the "observation room", enter "1" for "Admitted". Never record an admission status for a patient who is still in the ED while you are entering data into the ED Database form.

ADMISSION DIAGNOSIS - For those patients admitted to the hospital, enter the admission diagnosis as "1" for "M.I./R/O M.I." (any type of myocardial infarction which may be documented as myocardial infarction, acute myocardial infarction, anterior, inferior, lateral or posterior wall myocardial infarction, right ventricular, subendocardial, transmural, non-Qwave or Q-wave myocardial infarction or rule out/suspect myocardial infarction); "2" for "Unstable Angina" (which may be documented as unstable angina, angina, angina pain, acute coronary insufficiency, acute Coronary Heart Disease, or acute cardiac ischemia); or "3" for "Other" (for any other diagnosis documented). Enter "4" for "Not Applicable" if the patient was not admitted to the hospital, died in the emergency department, dead on arrival in the ED, or transferred to another hospital from the ED.

If the patient presents with multiple admission diagnoses, one of which is a REACT-eligible diagnosis (i.e., MI, R/O MI, or Unstable Angina), that is the diagnosis which should be entered. If the admission diagnosis is recorded as both MI/R/O MI and Unstable Angina, enter "1" for "MI/R/O MI". If the admission diagnosis is recorded as chestpain OR chestpain non-specific, enter "2" for "Unstable Angina". If the admission diagnosis is recorded as chestpain non-cardiac ro chestpain respiratory, enter "3" for OTHER. Please note this field can not be left blank and will not accept <-8>, "Not Available". The admission diagnosis must be entered.

Emergency Department Record Abstract

REACT EMERGENCY DEPARTMENT RECORD ABSTRACT QUESTION-BY-QUESTION SPECIFICATIONS

Question-by-Question specifications serve as instructions for completing information on a form. Data Collectors should refer to these instructions whenever they have a concern or inquiry about a question on this form. The Question-by-Question specifications for the Emergency Department Record Abstract form are as follows.

GENERAL INSTRUCTIONS

This form should be completed for Patients documented on the E.D. Log List provided by the REACT Coordinating Center that have been determined to be "study eligible", based on the Locator data. If the Patient was not study eligible, the E.D. Record Abstract Form should not be completed.

All information on this form must be directly entered onto the laptop. The information on this form is found primarily in the Patient's Medical Record and Emergency Department Record. Specifically, the Data Collector should review the following sections for the relevant information:

- the Nurse's and Physician's Emergency Department Note
- the Emergency Medical Services (EMS) Note/Run Sheet where applicable
- the Admission or Patient registration sheet
- the Discharge Summary
- the Discharge Progress Note
- the Face Sheet/Standard Discharge Form

The Note recorded by a Physician or Nurse will typically include four sections: the History of Presenting Illness, the Physical Examination, the Assessment, and the Plan. A Note recorded by a Nurse will sometimes refer to the History of Presenting Illness section as the Subjective section, and the Physical Examination section as the Objective section. The History of Presenting Illness/Subjective section of the Note is where the information reported by the patient is recorded. The Physical Examination/Objective section of the Note is where the vital signs such as blood pressure, pulse and any other results from the examination of the patient are recorded. The Assessment and Plan sections of the Note, which are sometimes combined, are used to record the Physician or Nurse's diagnostic conclusions and treatment plans, respectively.

Enter all clock time as military time using the conversion chart at the end of this form.

For any of the following information which is not recorded/available in these sources, enter "<-8>" for "NOT RECORDED". When in doubt about which code is appropriate for a given question, the Data Collector should contact his/her Site Coordinator.

REACT

EMERGENCY DEPARTMENT RECORD ABSTRACT FORM

AFFIX STUDY ID # LABEL

SECTION A: GENERAL INFORMATION

A1.	DATE F	FORM COMPLETED:	M	/	- [/]	<u>, </u>		
A2.	ABSTR	ACT START TIME (N	11LITARY	TIME):				
A3.	FORM	VERSION DATE:	04/01/96					
A4.	ABSTR	ACTOR'S INITIALS:						
A5.	MEDIC	AL RECORD #:						
A6.	SOURC	E OF PATIENT SAM	PLE (CIR	CLE ONE):			
		ENT ADMITTED TO E ENT RELEASED FRO					(GO 1	ГО А6b)
	A6a.	HOSPITAL DISCHA	RGE DIA	GNOSIS				
		ACUTE MYOCARD UNSTABLE ANGIN OTHER DIAGNOSIS	A (ICD C	ODE 411)			2	(B1) (B1) (B1)
	A6b.	ED CLINICAL IMPR	RESSION					
		<u>ICD C</u>	<u>ODE</u>			<u>DESCR</u>	IPTION	1
		A. 1ST _ B. 2ND _	_ • •					

SECTION A: GENERAL INFORMATION

A1. <u>DATE FORM COMPLETED</u> - Enter the date that the E.D. Record Abstract Form was completed using a MM/DD/YY format. For example, November 1, 1995 should be documented as 11/01/95. If data entry was partially completed on one date and finished on another date, enter the date the Data Collector began to enter the data on this form.

A2. <u>ABSTRACT START TIME</u> - Enter the actual time you began the abstract using military time. Military time begins at midnight with a time of 00:00, continues hourly (01:00, 02:00 etc.) to noontime which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ.

A3. <u>FORM VERSION DATE</u> - The form version date is preprinted on the form by the Coordinating Center and the laptop will default to the most current form version in use. The current form version date is 04/01/96. This version date was modified in the software updates 11/29/95, 12/18/95, 1/18/96, 3/8/96 and 04/25/96.

A4. <u>ABSTRACTOR'S INITIALS</u> - Enter the first, middle and last initials of the Abstractor. If the Abstractor does not have or does not use a middle initial, enter a "-" in place of the middle initial.

A5. <u>MEDICAL RECORD NUMBER</u> - Enter the Medical Record number as indicated on the Patient's Medical Record. Each page of the Medical Record will be stamped with the Patient's Medical Record number.

A6. <u>SOURCE OF PATIENT SAMPLE</u> - If the Patient was admitted to the hospital after presenting in the E.D., enter "1". If a Patient is recorded as neither admitted nor released, but is recorded as having been admitted to an "observation room", enter "1" for "PATIENT ADMITTED TO HOSPITAL". If the Patient was released from the E.D., enter "2" for "PATIENT RELEASED FROM E.D." and **skip to A6b**. Please note that the source of the patient sample may be altered if the Data Collector learns that the patients admission status was incorrectly recorded on the ED Database Form. Data Collectors should record the reason for the change in the override box.

REACT

EMERGENCY DEPARTMENT RECORD ABSTRACT FORM

AFFIX STUDY ID # LABEL

SECTION A: GENERAL INFORMATION

A1.	DATE F	FORM COMPLETED:	M M	/ D	- / <u></u>	_		
A2.	ABSTR	ACT START TIME (N	IILITARY	TIME):				
A3.	FORM	VERSION DATE:	04/01/96					
A4.	ABSTR	ACTOR'S INITIALS:						
A5.	MEDIC	AL RECORD #:						
A6.	SOURC	E OF PATIENT SAM	PLE (CIRC	LE ONE):			
		ENT ADMITTED TO E ENT RELEASED FRO					(GO 1	(O A6b)
	A6a.	HOSPITAL DISCHA	RGE DIA	GNOSIS				
		ACUTE MYOCARD UNSTABLE ANGIN OTHER DIAGNOSIS	A (ICD CC	DDE 411)	·····		2	(B1) (B1) (B1)
	A6b.	ED CLINICAL IMPR	RESSION					
		ICD C	<u>ODE</u>			DESCR	IPTION	<u>1</u>
		A. 1ST B. 2ND	_ • _ •					

A6a. <u>HOSPITAL DISCHARGE DIAGNOSIS</u> - Enter the code for the hospital discharge diagnosis which is documented in the Patient's Medical Record. This should be one of the hospital discharge diagnoses listed for the Patient on the present admission, but may not necessarily be the first one listed or the primary diagnosis. The primary source for the discharge diagnosis in the Medical Record is the Face Sheet/Standard Hospital Discharge Form. If the Face Sheet does not provide the discharge diagnosis, the Data Collector should check the Discharge Summary. If there is discrepant information between the Face Sheet and the Discharge Summary, the Data Collector should use the discharge diagnosis information reported on the Face Sheet. If neither the Face Sheet nor the Discharge Summary provide the discharge diagnosis, then the Data Collector should check the handwritten Physician's Discharge Note found in the Progress Note. For hospitals that use short discharge summaries with supplemental documents, Data Collectors may refer to coding summaries, FINs, and attestation sheets.

If the discharge diagnosis is an ACUTE MYOCARDIAL INFARCTION of any type or location, documented as anterior, lateral, inferior, or posterior wall myocardial infarction, right ventricular, subendocardial, transmural, Q-wave or non Q-wave myocardial infarction, or as myocardial infarction, or the ICD code is documented as 410, regardless of the extension following the decimal, then enter "1" and **skip to B1**.

If the hospital discharge diagnosis is documented as UNSTABLE ANGINA, chest pain, or non-specific chest pain, or the ICD code is documented as 411, regardless of the extension following the decimal, then enter "2" and **skip to B1**.

If the hospital discharge diagnosis is documented as ACUTE MYOCARDIAL INFARCTION <u>AND</u> UNSTABLE ANGINA, or the ICD code is documented as 410 and 411, enter "1", Acute MI and **skip to B1**.

If "MYOCARDIAL INFARCTION" or "UNSTABLE ANGINA" are not listed as one of the hospital discharge diagnoses for this Patient, enter "3" for "OTHER DIAGNOSIS" and **skip to B1**. Please note that this change is effective with the software update of 4/25/96. Prior to this change Data Collectors were required to enter the discharge diagnosis of the "OTHER DIAGNOSIS". CAMRAS has been programmed to skip the ICD code detail for the "OTHER DIAGNOSIS". Data Collectors should <u>not</u> collect this data if the Patient is discharged without either a 410 or 411 discharge diagnosis.

A6b. <u>E.D. CLINICAL IMPRESSION</u> - For those Patients that were released from the E.D., enter the ICD code for the Emergency Department Physician's diagnosis or clinical impression of the cause of the Patient's symptoms. This information should be found in the Patient's Emergency Department Record. If there is more than one diagnosis listed, enter only the first 2 documented in the Medical Record. If an ICD code is available its corresponding text description should not be entered. In such cases the programs will skip to the next ICD code field. If an ICD code is unavailable, but a description is available, the Data Collector should enter "<-8>" in the ICD code field for "NOT AVAILABLE". The Data Collector should then enter the ICD code text description in the field provided.
SECTION B: PATIENT INFORMATION

B1. EMPLOYMENT STATUS (CIRCLE ONE):

EMPLOYED	1
RETIRED	2
DISABLED	3
UNEMPLOYED	4
HOMEMAKER	5
NOT RECORDED	<-8>

B2. MARITAL STATUS (CIRCLE ONE):

MARRIED	1
LIVING WITH SIGNIFICANT OTHER	2
SINGLE	3
DIVORCED/SEPARATED	4
WIDOWED	5
NOT RECORDED	<-8>

B3. INSURANCE STATUS:

	YES	NO	NR
COMMERCIAL/INDEMNITY/PPO (NON HMO)	1	2	<-8>
HMO/GROUP	1	2	<-8>
MEDICAID	1	2	<-8>
MEDICARE	1	2	<-8>
STATE HEALTH INSURANCE	1	2	<-8>
COUNTY HEALTH INSURANCE	1	2	<-8>
PATIENT PAID/ SELF-PAY	1	2	<-8>
NO INSURANCE	1	2	<-8>
MILITARY INSURANCE	1	2	<-8>
OTHER (SPECIFY)	1	2	<-8>

SECTION C: ED INFORMATION

C1. ED ARRIVAL DATE:

$$-\underline{M} \underline{M} \overline{M} / \underline{D} \underline{D} \overline{D} / \underline{Y} \underline{Y}$$

C2. ED ARRIVAL TIME (MILITARY TIME):

SECTION B: PATIENT INFORMATION

B1. <u>EMPLOYMENT STATUS</u> - Enter the code which indicates the current employment status for the Patient. If the Medical Record indicates that the Patient works or has an employer recorded under Patient registration, enter "1" for "EMPLOYED". This includes "part-time" work or "under the table" work. If the Medical Record does not indicate employment status whatsoever, enter "<-8>" for "NOT RECORDED".

B2. <u>MARITAL STATUS</u> - Enter the code which indicates the Patient's current marital status. If the Patient's marital status is not indicated on the Medical Record, enter "<-8>" for "NOT RECORDED". Common abbreviations include M (married), S (single), D (divorced), and W (widowed).

B3. <u>INSURANCE STATUS</u> - Enter "1" for "YES", "2" for "NO", or "<-8>" for "NOT RECORDED" for each type of medical insurance listed. Include both primary and secondary insurance where applicable. If an insurance status checklist is used on the Patient registration form, those choices checked off should be entered as "1" for "YES" and those choices not checked off should be entered as "2" for "NO". If the Patient is currently insured by an insurance plan not listed in any of the response categories or if the Data Collector is unsure which category an insurance plan belongs, enter the name of the insurance plan in the specify field under "OTHER".

SECTION C: E.D. INFORMATION

C1. <u>E.D. ARRIVAL DATE</u> - Enter the date the Patient arrived at the Emergency Department in a MM/DD/YY format. For example, enter June 5, 1995 as 06/05/95. This should first be taken from the Emergency Department Note/Record. If not available in the Note/Record, it may be taken from the Patient registration information.

C2. <u>**E.D. ARRIVAL TIME**</u> - Enter the actual time the Patient arrived in the E.D. using military time. This should be taken from the Emergency Department Record or Patient registration information. If different times are noted in the Record take the earliest E.D. arrival time documented. Military time begins at midnight with a time of 00:00, continues hourly (01:00, 02:00 etc.) to noontime which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ.

C3. <u>MODE OF TRANSPORT TO E.D.</u> - Enter the code which indicates the mode of transport used by the Patient to get to the Emergency Department. If the Patient used a mode of transport not listed in the response categories for this question, record the mode of transport verbatim in the specify field under "OTHER". If the mode of transport is not recorded in the Medical Record, enter "<-8>" for "NOT RECORDED". If the mode of transport entered is "AMBULANCE/EMS" (code "1") or "HELICOPTER" (code "2"), proceed to C4. If the mode of transport recorded is any other response, code as indicated and **skip to C8.**

C4. <u>NAME OF AMBULANCE/EMS COMPANY</u> - Enter the name of the ambulance/EMS company which was used to transport the Patient to the Emergency Department. If the name of the ambulance/EMS company is not recorded in the Patient's Medical Record, enter "<-8>" in the space allotted for the company name.

C3. MODE OF TRANSPORT TO ED:

AMBULANCE/EMS1	
HELICOPTER	
PRIVATE CAR	(GO TO C8)
PUBLIC TRANSPORTATION4	(GO TO C8)
TAXI5	(GO TO C8)
OTHER6	(GO TO C8)
(SPECIFY)	
NOT RECORDED<-8>	(GO TO C8)

C4. NAME OF AMBULANCE/EMS COMPANY (SPECIFY BELOW):

NAME OF COMPANY	
C5. DATE EMS CALL PLACED: $\underline{M} \underline{M} / \underline{D} \underline{D} / \underline{Y} \underline{Y}$	
C6. TIME EMS CALL PLACED (MILITARY TIME):::	
C7. TIME OF ARRIVAL OF EMS ON SCENE (MILITARY TIME):::	
C8. INITIAL BLOOD PRESSURE IN EMERGENCY DEPARTMENT (SYSTOLIC/DIASTOLIC):	
/ MM HG	
C9. INITIAL HEART RATE IN EMERGENCY DEPARTMENT:	
BEATS/MIN	
SECTION D: PRESENTING SYMPTOM HISTORY	
D1. PRESENTING SYMPTOM HISTORY FROM E.D. NURSE'S NOTE (D2-I	D4A) :
AVAILABLE	D5)

SECTION B: PATIENT INFORMATION

B1. <u>EMPLOYMENT STATUS</u> - Enter the code which indicates the current employment status for the Patient. If the Medical Record indicates that the Patient works or has an employer recorded under Patient registration, enter "1" for "EMPLOYED". This includes "part-time" work or "under the table" work. If the Medical Record does not indicate employment status whatsoever, enter "<-8>" for "NOT RECORDED".

B2. <u>MARITAL STATUS</u> - Enter the code which indicates the Patient's current marital status. If the Patient's marital status is not indicated on the Medical Record, enter "<-8>" for "NOT RECORDED". Common abbreviations include M (married), S (single), D (divorced), and W (widowed).

B3. <u>INSURANCE STATUS</u> - Enter "1" for "YES", "2" for "NO", or "<-8>" for "NOT RECORDED" for each type of medical insurance listed. Include both primary and secondary insurance where applicable. If an insurance status checklist is used on the Patient registration form, those choices checked off should be entered as "1" for "YES" and those choices not checked off should be entered as "2" for "NO". If the Patient is currently insured by an insurance plan not listed in any of the response categories or if the Data Collector is unsure which category an insurance plan belongs, enter the name of the insurance plan in the specify field under "OTHER".

SECTION C: E.D. INFORMATION

C1. <u>E.D. ARRIVAL DATE</u> - Enter the date the Patient arrived at the Emergency Department in a MM/DD/YY format. For example, enter June 5, 1995 as 06/05/95. This should first be taken from the Emergency Department Note/Record. If not available in the Note/Record, it may be taken from the Patient registration information.

C2. <u>**E.D. ARRIVAL TIME**</u> - Enter the actual time the Patient arrived in the E.D. using military time. This should be taken from the Emergency Department Record or Patient registration information. If different times are noted in the Record take the earliest E.D. arrival time documented. Military time begins at midnight with a time of 00:00, continues hourly (01:00, 02:00 etc.) to noontime which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ.

C3. <u>MODE OF TRANSPORT TO E.D.</u> - Enter the code which indicates the mode of transport used by the Patient to get to the Emergency Department. If the Patient used a mode of transport not listed in the response categories for this question, record the mode of transport verbatim in the specify field under "OTHER". If the mode of transport is not recorded in the Medical Record, enter "<-8>" for "NOT RECORDED". If the mode of transport entered is "AMBULANCE/EMS" (code "1") or "HELICOPTER" (code "2"), proceed to C4. If the mode of transport recorded is any other response, code as indicated and **skip to C8.**

C4. <u>NAME OF AMBULANCE/EMS COMPANY</u> - Enter the name of the ambulance/EMS company which was used to transport the Patient to the Emergency Department. If the name of the ambulance/EMS company is not recorded in the Patient's Medical Record, enter "<-8>" in the space allotted for the company name.

C3. MODE OF TRANSPORT TO ED:

AMBULANCE/EMS1	
HELICOPTER	
PRIVATE CAR	(GO TO C8)
PUBLIC TRANSPORTATION4	(GO TO C8)
TAXI5	(GO TO C8)
OTHER6	(GO TO C8)
(SPECIFY)	
NOT RECORDED<-8>	(GO TO C8)

C4. NAME OF AMBULANCE/EMS COMPANY (SPECIFY BELOW):

NAME OF COMPANY	
C5. DATE EMS CALL PLACED: $\underline{M} \underline{M} \overline{M} / \underline{D} \underline{D} \overline{D} / \underline{Y} \overline{Y}$	
C6. TIME EMS CALL PLACED (MILITARY TIME):::	
C7. TIME OF ARRIVAL OF EMS ON SCENE (MILITARY TIME):	:
C8. INITIAL BLOOD PRESSURE IN EMERGENCY DEPARTMEN (SYSTOLIC/DIASTOLIC):	ſΤ
/ MM HG	
C9. INITIAL HEART RATE IN EMERGENCY DEPARTMENT:	
BEATS/MIN	
SECTION D: PRESENTING SYMPTOM HIST	ORY
D1. PRESENTING SYMPTOM HISTORY FROM E.D. NURSE'S N	NOTE (D2-D4A):
AVAILABLE	(GO TO D5)

C5. DATE EMS CALL PLACED - Enter the date that the Patient placed the call to the EMS using a MM/DD/YY format. For example, enter June 5, 1995 as 06/05/95.

C6. <u>**TIME EMS CALL PLACED**</u> - Enter the time that the Patient placed the call to EMS using military time. Military time begins at midnight with a time of 00:00, continues hourly (01:00, 02:00 etc.) to noontime which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ. If this information is not available in the Medical Record the Data Collector should contact the ambulance/EMS and obtain this information whenever possible.

C7. <u>TIME OF ARRIVAL OF EMS AT SCENE</u> - Enter the time the ambulance/EMS arrived at the scene in military time. Military time begins at midnight with a time of 00:00 and continues hourly (01:00, 02:00, etc.) to noontime, which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ. If this information is not available in the Medical Record the Data Collector should contact the ambulance/EMS and obtain this information whenever possible.</u>

C8. <u>INITIAL BLOOD PRESSURE IN E.D.</u> - Enter the Patient's first blood pressure (in mm Hg) taken in the Emergency Department as recorded in the Nurse's Note. Enter systolic pressure (140) over diastolic pressure (70) as follows 140/70 MM Hg.

If a Patient's blood pressure was taken from both arms simultaneously, only enter the blood pressure recorded for the <u>right</u> arm. If a blood pressure is not recorded because the Patient died in the E.D. before any blood pressure was taken, enter "<-8>" in the spaces allotted. If the initial blood pressure recorded while a Patient is in cardiac arrest is zero, the Data Collector should enter "0" as the initial blood pressure. A validation error will occur in which an override log reason should be entered stating "Patient in cardiac arrest". If a Patient presents, goes into cardiac arrest, and is resuscitated before a blood pressure is taken, the Data Collector should record the first blood pressure recorded in the E.D. as the initial blood pressure.

C9. INITIAL HEART RATE IN E.D. - Enter the Patient's first heart rate (beats/min) taken in the Emergency Department as recorded in the Nurse's Note. If a range is recorded for the initial heart rate, enter the midpoint value. For example, if a range of 40-60 beats/min is recorded, enter "50".

SECTION D: PRESENTING SYMPTOMS

D1. <u>E.D. NURSE'S PRESENTING SYMPTOM HISTORY</u> - Enter "1" for "AVAILABLE" if the Patient's presenting symptom history (i.e., the symptoms and timing of symptoms for this visit in D2-D4a) is available in the Subjective/History of Presenting Illness section of the E.D. Nurse's Note or the Nurse's triage Note. If the presenting symptom history is not recorded in the Subjective/History of Presenting Illness section of the E.D. Nurse's Note or of the triage Nurse's Note, enter "<-8>" for "NOT RECORDED" and **skip to D5**. Information about presenting symptom history recorded anywhere in the Medical Record, other than the E.D. Nurse's Note or the triage Nurse's Note (i.e., E.D. Physician's Note or Admitting Nurse's Note), should not be recorded in this section of the E.D. Abstract. Similarly, information recorded in the Objective/Physical Examination section of the E.D. Abstract.

D2. PRESENTING SYMPTOM(S):

		YES	NO	NR
A.	ABDOMINAL PAIN	1	2	<-8>
B.	ARM PAIN AND/OR SHOULDER PAIN	1	2	<-8>
C.	BACK PAIN	1	2	<-8>
D.	CHEST PAIN	1	2	<-8>
E.	CHEST PRESSURE	1	2	<-8>
F.	CHEST TIGHTNESS	1	2	<-8>
G.	CHEST DISCOMFORT (HEAVINESS/TENDERNESS BURNING)	1	2	<-8>
H.	COUGH	1	2	<-8>
I.	DIZZINESS/LIGHTHEADEDNESS	1	2	<-8>
J.	HEADACHE	1	2	<-8>
K.	INDIGESTION	1	2	<-8>
L.	JAW PAIN	1	2	<-8>
M.	LOSS OF CONSCIOUSNESS	1	2	<-8>
N.	NAUSEA	1	2	<-8>
О.	NECK PAIN	1	2	<-8>
P.	NUMBNESS/TINGLING IN ARM OR HAND	1	2	<-8>
Q.	PALPITATIONS/ RAPID HEART RATE	1	2	<-8>
R.	SHORTNESS OF BREATH/DYSPNEA	1	2	<-8>
S.	SWEATING/DIAPHORESIS	1	2	<-8>
Τ.	VOMITING	1	2	<-8>
U.	WEAKNESS/FATIGUE/FAINTNESS	1	2	<-8>
V.	OTHER: (SPECIFY)	1	2	<-8>

D3. DATE OF ACUTE ONSET OF SYMPTOMS:

 $\overline{MM} / \overline{DD} / \overline{VY}$

D4. TIME OF ACUTE ONSET OF SYMPTOMS (MILITARY TIME) : _____ : ____ : ____

COMPLETE D4A ONLY IF D4 IS "NOT RECORDED"

D4a. DURATION OF ACUTE SYMPTOMS (TIME FROM ONSET OF SYMPTOMS TO ARRIVAL IN ED):

|___| HOURS AND/OR |___| MINUTES

D2. PRESENTING SYMPTOM(S) - These symptoms should be abstracted from the E.D. Nurse's Note or E.D. Nurse's triage section Note, which should also be initialed by the E.D. Nurse. Enter the appropriate code for "NO", "YES" or "NOT RECORDED" for <u>all</u> symptoms (a-v). For example, if a Patient experienced chest pain, chest pain should be entered as "1" for "YES", a presenting symptom. If the E.D. Nurse's Note states a symptom is "questionable", the Data Collector should still enter "1" for "YES". Symptoms should be coded "2" for "NO" only if the Note specifically states they were not experienced by the Patient. For example, the Patient had chest pain, but no shortness of breath. Other terminology used to indicate a Patient did not present with a particular symptom includes "negative" or "no prior history". If the note states "no radiation", Data Collectors should code arm, back, jaw and neck pain as "2" for "NO". Symptoms that are not mentioned should be coded as "<-8>" for "NOT RECORDED".

The Data Collector should **enter all** symptoms noted in the E.D. Nurse's Note regardless of whether or not these symptoms were noted as acute (see D3 for a definition of acute symptoms). If symptoms other than those listed in response choices "a-u" are recorded, enter "1" for "YES" under subquestion **V**, "**OTHER**" and record the symptom(s) verbatim in the specify field. Common abbreviations include SOB (shortness of breath), C/P (chest pain), N & V (nausea and vomiting), HR (heart rate), and LOC (loss of consciousness).

D3. DATE OF ONSET OF ACUTE SYMPTOMS - In general, the onset of **acute** symptoms occurs when the Patient's signs or symptoms of ischemic heart disease begin abruptly or become severe, intense or constant as opposed to intermittent and causes the Patient to be aware of their start or change. **Acute** symptoms have some definable start point characterized by suddenness, a change or alteration in on-going symptoms such as increased intensity, or the emergence of a new symptom in an already existing symptom set. The Data Collector should enter the date of onset of **acute** symptoms in the MM/DD/YY format. For example, enter June 5, 1995 as 06/05/95. If the date recorded is incomplete, Data Collectors should enter <-8> where information is not available. For example, if the data recorded is June, 1995, the Data Collector should enter

06/-8/95.

D4. <u>**TIME OF ONSET OF ACUTE SYMPTOMS**</u> - In general, the onset of **acute** symptoms occurs when the Patient's signs or symptoms of ischemic heart disease begin abruptly or become severe, intense or constant as opposed to intermittent and causes a person to be aware of their start or change. **Acute** symptoms have some definable start point characterized by suddenness, a change or alteration in on-going symptoms such as increased intensity, or the emergence of a new symptom in an already existing symptom set. If a range of time is noted by the Nurse, such as "about 10:00 AM to 10:30 AM", use the midpoint of the time interval, i.e., 10:15 AM.

Enter the time of onset of acute symptoms, as recorded in the Note, using military time. Military time begins at midnight with a time of 00:00, continues hourly (01:00, 02:00 etc.) to noontime which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ. If ambiguous statements, such as "around dinner time" are recorded, enter the statement in the override box verbatim. If no time is recorded in the Patient's Medical Record, enter a "<-8>" and proceed to D4a. Otherwise, **skip to D5**.

D2. PRESENTING SYMPTOM(S):

		YES	NO	NR
A.	ABDOMINAL PAIN	1	2	<-8>
B.	ARM PAIN AND/OR SHOULDER PAIN	1	2	<-8>
C.	BACK PAIN	1	2	<-8>
D.	CHEST PAIN	1	2	<-8>
E.	CHEST PRESSURE	1	2	<-8>
F.	CHEST TIGHTNESS	1	2	<-8>
G.	CHEST DISCOMFORT (HEAVINESS/TENDERNESS BURNING)	1	2	<-8>
H.	COUGH	1	2	<-8>
I.	DIZZINESS/LIGHTHEADEDNESS	1	2	<-8>
J.	HEADACHE	1	2	<-8>
K.	INDIGESTION	1	2	<-8>
L.	JAW PAIN	1	2	<-8>
M.	LOSS OF CONSCIOUSNESS	1	2	<-8>
N.	NAUSEA	1	2	<-8>
О.	NECK PAIN	1	2	<-8>
P.	NUMBNESS/TINGLING IN ARM OR HAND	1	2	<-8>
Q.	PALPITATIONS/ RAPID HEART RATE	1	2	<-8>
R.	SHORTNESS OF BREATH/DYSPNEA	1	2	<-8>
S.	SWEATING/DIAPHORESIS	1	2	<-8>
Τ.	VOMITING	1	2	<-8>
U.	WEAKNESS/FATIGUE/FAINTNESS	1	2	<-8>
V.	OTHER: (SPECIFY)	1	2	<-8>

D3. DATE OF ACUTE ONSET OF SYMPTOMS:

 $\overline{MM} / \overline{DD} / \overline{VY}$

D4. TIME OF ACUTE ONSET OF SYMPTOMS (MILITARY TIME) : _____ : ____ : ____

COMPLETE D4A ONLY IF D4 IS "NOT RECORDED"

D4a. DURATION OF ACUTE SYMPTOMS (TIME FROM ONSET OF SYMPTOMS TO ARRIVAL IN ED):

|___| HOURS AND/OR |___| MINUTES

COMPLETE D4a ONLY IF D4 IS "NOT RECORDED"

D4a. <u>**DURATION OF ACUTE SYMPTOMS</u>** - Complete this question only if the time of onset of **acute** symptoms is not recorded in D4 and the duration of acute symptoms is noted in the Medical Record. The duration of **acute** symptoms refers to the length of time from the onset of **acute** symptoms to arrival in the E.D.. Enter only the range 0-59 minutes for MINUTES and enter 1 HOUR for 60 minutes. Enter a leading 0 in the first space of hours as needed. For example, if the symptoms started one hour before arrival in the E.D., enter 01 HOURS and 00 MINUTES. If the symptoms started 2 and one-half hours before arrival in the E.D., enter 02 HOURS and 30 MINUTES. If this information is not recorded in the Medical Record, enter "<-8>".</u>

D5. <u>**E.D. PHYSICIAN'S PRESENTING SYMPTOM HISTORY</u> - Enter "1" for "AVAILABLE" if the Patient's presenting symptom history (i.e., the symptoms and timing of symptoms for this visit in D6-D8a) is available in the History of Presenting Illness section of the E.D. Physician's Note. If the presenting symptom history is not recorded in the History of Presenting Illness section of the E.D. Physician's Note, enter "<-8>" for "NOT RECORDED" and skip to E1. Information about the presenting symptom history recorded anywhere in the Medical Record, other than the E.D. Physician's Note (i.e., Nurse's Note, Attending Physician's Note), should not be recorded in this section of the E.D. Physician's Note should not be considered or reported in this section of the E.D. Abstract.**</u>

D6. <u>**PRESENTING SYMPTOM(S)**</u> - These symptoms should be abstracted from the E.D. Physician's Note. Enter the appropriate code for "NO", "YES" or "NOT RECORDED" for <u>all</u> symptoms (a-v). For example, if a Patient experienced chest pain, chest pain should be entered as "1" for "YES", a presenting symptom. If the E.D. Physician's Note records a symptom is "questionable", the Data Collector should still enter the symptom as "1" for "YES". Symptoms should be coded "2" for "NO" only if the Note specifically states they were not experienced by the Patient. For example, the Patient had chest pain, but no shortness of breath. Other terminology used to indicate a Patient did not present with a particular symptom includes "negative" or "no prior history". If the note states "no radiation", Data Collectors should code arm, back, jaw and neck pain as "2" for "NO". Symptoms that are not mentioned should be coded as "<-8>" for "NOT RECORDED".

The Data Collector should enter **all symptoms** noted in the E.D. Physician's Note regardless of whether or not these symptoms were noted as acute. If symptoms other than those listed in response choices "a-u" are recorded enter "1" for "YES" under subquestion **V**, "**OTHER**" and record the symptom(s), verbatim, in the specify field. Common abbreviations include SOB (shortness of breath), C/P (chest pain), N & V (nausea and vomiting), HR (heart rate), and LOC (loss of consciousness).

D5. PRESENTING SYMPTOM HISTORY FROM E.D. PHYSICIAN'S NOTE (D6-D8A):

AVAILABLE	1	
NOT RECORDED	<-8>	(GO TO END)

D6. PRESENTING SYMPTOM(S):

		YES	NO	NR
A.	ABDOMINAL PAIN	1	2	<-8>
B.	ARM PAIN AND/OR SHOULDER PAIN	1	2	<-8>
C.	BACK PAIN	1	2	<-8>
D.	CHEST PAIN	1	2	<-8>
E.	CHEST PRESSURE	1	2	<-8>
F.	CHEST TIGHTNESS	1	2	<-8>
G.	CHEST DISCOMFORT (HEAVINESS/TENDERNESS BURNING)	1	2	<-8>
H.	COUGH	1	2	<-8>
I.	DIZZINESS/LIGHTHEADEDNESS	1	2	<-8>
J.	HEADACHE	1	2	<-8>
K.	INDIGESTION	1	2	<-8>
L.	JAW PAIN	1	2	<-8>
M.	LOSS OF CONSCIOUSNESS	1	2	<-8>
N.	NAUSEA	1	2	<-8>
О.	NECK PAIN	1	2	<-8>
P.	NUMBNESS/TINGLING IN ARM OR HAND	1	2	<-8>
Q.	PALPITATIONS/ RAPID HEART RATE	1	2	<-8>
R.	SHORTNESS OF BREATH/DYSPNEA	1	2	<-8>
S.	SWEATING/DIAPHORESIS	1	2	<-8>
Τ.	VOMITING	1	2	<-8>
U.	WEAKNESS/FATIGUE/FAINTNESS	1	2	<-8>
V.	OTHER:(SPECIFY)	1	2	<-8>

D7. DATE OF ACUTE ONSET OF SYMPTOMS:

 $-\underline{M} \underline{M} \overline{M} / \underline{D} \underline{D} \overline{D} / \underline{V} \underline{Y} \underline{Y}$

D8. TIME OF ACUTE ONSET OF SYMPTOMS (MILITARY TIME) : _____ : ____ : _____

COMPLETE D8A ONLY IF D8 IS "NOT RECORDED"

D7. DATE OF ONSET OF ACUTE SYMPTOMS - In general, the onset of **acute** symptoms occurs when the Patient's signs or symptoms of ischemic heart disease begin abruptly or become severe, intense or constant, as opposed to intermittent, and causes a person to be aware of their start or change. **Acute** symptoms have some definable start point characterized by suddenness, a change or alteration in on-going symptoms such as increased intensity, or the emergence of a new symptom an already existing symptom set. The Data Collector should enter the date of onset of acute symptoms in the MM/DD/YY format. For example, enter June 5, 1995 as 06/05/95. If the date recorded is incomplete, Data Collectors should enter <-8> where information is not available. For example, if the data recorded is June, 1995, the Data Collector should enter 06/-8/95.

D8. <u>**TIME OF ONSET OF ACUTE SYMPTOMS**</u> - In general, the onset of **acute** symptoms occurs when the Patient's signs or symptoms of ischemic heart disease begin abruptly or become severe, intense or constant, as opposed to intermittent, and cause the Patient to be aware of their start or change. Acute symptoms have some definable start point characterized by suddenness, a change or alteration in on-going symptoms such as increased intensity, or the emergence of a new symptom in an already existing symptom set. If a range of time is noted by the Physician, such as "about 10:00 AM to 10:30 AM", use the midpoint of the time interval, i.e., 10:15 AM.

Enter the time of onset of acute symptoms, as recorded in the Note, using military time. Military time begins at midnight with a time of 00:00 and continues hourly (01:00, 02:00, etc.) to noontime, which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ. If ambiguous statements, such as "around dinner time" are recorded, enter the statement in the override box verbatim. If no time is recorded in the Patient's Medical Record, enter a "<-8>" and proceed to question D4a. Otherwise, **skip to E1**.

COMPLETE D8a ONLY IF D8 IS "NOT RECORDED".

D8a. <u>**DURATION OF ACUTE SYMPTOMS</u>** - Complete this question only if the time of **acute** onset of symptoms is not recorded in D8 and the duration of **acute** symptoms is noted in the Medical Record. This refers to the time from the onset of **acute** symptoms to arrival in the E.D.. Enter only the range 0-59 minutes for MINUTES and enter 1 HOUR for 60 minutes. Enter a leading "0" in the first space of hours as needed. For example, if the symptoms started one hour before arrival in the E.D., enter 01 HOURS and 00 MINUTES. If the symptoms started 2 and one-half hours before arrival in the E.D., enter 02 HOURS and 30 MINUTES. If this information is not recorded in the Medical Records, enter "<-8>".</u>

SECTION E: ABSTRACT END TIME

E1. <u>ABSTRACT END TIME</u> - Record the time the Data Collector completed the E.D. Record Abstract form using military time. Military time begins at midnight with a time of 00:00 and, continues hourly (01:00, 02:00 etc.) to noontime, which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ.

D8a. DURATION OF ACUTE SYMPTOMS (TIME FROM ONSET OF SYMPTOMS TO ARRIVAL IN ED):

|___| HOURS AND/OR |___| MINUTES

SECTION E: END OF ABSTRACT

E1. ABSTRACT END TIME (MILITARY TIME): _____: ____:

IF PATIENT HAD A DISCHARGE DIAGNOSIS ACUTE MYOCARDIAL INFARCTION OR UNSTABLE ANGINA (ICD CODE 410 OR 411) COMPLETE THE REACT IN-PATIENT MEDICAL RECORD ABSTRACT FORM OTHERWISE NO FURTHER DATA COLLECTED. **D7. DATE OF ONSET OF ACUTE SYMPTOMS** - In general, the onset of **acute** symptoms occurs when the Patient's signs or symptoms of ischemic heart disease begin abruptly or become severe, intense or constant, as opposed to intermittent, and causes a person to be aware of their start or change. **Acute** symptoms have some definable start point characterized by suddenness, a change or alteration in on-going symptoms such as increased intensity, or the emergence of a new symptom an already existing symptom set. The Data Collector should enter the date of onset of acute symptoms in the MM/DD/YY format. For example, enter June 5, 1995 as 06/05/95. If the date recorded is incomplete, Data Collectors should enter <-8> where information is not available. For example, if the data recorded is June, 1995, the Data Collector should enter 06/-8/95.

D8. <u>**TIME OF ONSET OF ACUTE SYMPTOMS**</u> - In general, the onset of **acute** symptoms occurs when the Patient's signs or symptoms of ischemic heart disease begin abruptly or become severe, intense or constant, as opposed to intermittent, and cause the Patient to be aware of their start or change. Acute symptoms have some definable start point characterized by suddenness, a change or alteration in on-going symptoms such as increased intensity, or the emergence of a new symptom in an already existing symptom set. If a range of time is noted by the Physician, such as "about 10:00 AM to 10:30 AM", use the midpoint of the time interval, i.e., 10:15 AM.

Enter the time of onset of acute symptoms, as recorded in the Note, using military time. Military time begins at midnight with a time of 00:00 and continues hourly (01:00, 02:00, etc.) to noontime, which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ. If ambiguous statements, such as "around dinner time" are recorded, enter the statement in the override box verbatim. If no time is recorded in the Patient's Medical Record, enter a "<-8>" and proceed to question D4a. Otherwise, **skip to E1**.

COMPLETE D8a ONLY IF D8 IS "NOT RECORDED".

D8a. <u>**DURATION OF ACUTE SYMPTOMS</u>** - Complete this question only if the time of **acute** onset of symptoms is not recorded in D8 and the duration of **acute** symptoms is noted in the Medical Record. This refers to the time from the onset of **acute** symptoms to arrival in the E.D.. Enter only the range 0-59 minutes for MINUTES and enter 1 HOUR for 60 minutes. Enter a leading "0" in the first space of hours as needed. For example, if the symptoms started one hour before arrival in the E.D., enter 01 HOURS and 00 MINUTES. If the symptoms started 2 and one-half hours before arrival in the E.D., enter 02 HOURS and 30 MINUTES. If this information is not recorded in the Medical Records, enter "<-8>".</u>

SECTION E: ABSTRACT END TIME

E1. <u>ABSTRACT END TIME</u> - Record the time the Data Collector completed the E.D. Record Abstract form using military time. Military time begins at midnight with a time of 00:00 and, continues hourly (01:00, 02:00 etc.) to noontime, which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ.

MILITARY TIME CONVERSION CHART

CLOCK TIME	MILITARY TIME
12:00 midnight to 12:59	00:00 to 00:59
1:00 a.m. to 1:59 a.m.	01:00 to 01:59
2:00 a.m. to 2:59 a.m.	02:00 to 02:59
3:00 a.m. to 3:59 a.m.	03:00 to 03:59
4:00 a.m. to 4:59 a.m.	04:00 to 04::59
5:00 a.m. to 5:59 a.m.	05:00 to 05:59
6:00 a.m. to 6:59 a.m.	06:00 to 06:59
7:00 a.m. to 7:59 a.m.	07:00 to 07:59
8:00 a.m. to 8:59 a.m.	08:00 to 08:59
9:00 a.m. to 9:59 a.m.	09:00 to 09:59
10:00 a.m. to 10:59 a.m.	10:00 to 10:59
11:00 a.m. to 11:59 a.m.	11:00 to 11:59
12:00 p.m. to 12:59 p.m.	12:00 to 12:59
1:00 p.m. to 1:59 p.m.	13:00 to 13:59
2:00 p.m. to 2:59 p.m.	14:00 to 14:59
3:00 p.m. to 3:59 p.m.	15:00 to 15:59
4:00 p.m. to 4:59 p.m.	16:00 to 16:59
5:00 p.m. to 5:59 p.m.	17:00 to 17:59
6:00 p.m. to 6:59 p.m.	18:00 to 18:59
7:00 p.m. to 7:59 p.m.	19:00 to 19:59
8:00 p.m. to 8:59 p.m.	20:00 to 20:59
9:00 p.m. to 9:59 p.m.	21:00 to 21:59
10:00 p.m. to 10:59 p.m.	22:00 to 22:59
11:00 p.m. to 11:59 p.m.	23:00 to 23:59
12:00 midnight	next day

In-Patient Medical Record Abstract

REACT IN-PATIENT MEDICAL RECORD ABSTRACT FORM QUESTION-BY-QUESTION SPECIFICATIONS

Question-by-Question specifications serve as instructions for completing information on a form. Data Collectors should refer to these instructions whenever they have a concern or inquiry about a question on this form. The Question-by-Question specifications for the In-Patient Medical Record Abstract form are as follows.

GENERAL INSTRUCTIONS

This information must be completed on all admitted patients who are eligible and have been selected to participate in REACT.

All information on this form must be directly entered onto the laptop. The information on this form can be found in the Patient's Medical Record. Specifically, Data Collectors should review the following sections for the relevant information.

- the Admission or Patient registration sheet
- the Nurse's Admission Note
- the Attending Physician's Note
- laboratory tests and procedures
- Nurse's medication sheets and/or unit flow sheets
- the Discharge Summary
- the Face Sheet/Standard Hospital Discharge Form

The Note recorded by a Physician or Nurse will typically include four sections: the History of Presenting Illness, the Physical Examination, the Assessment, and the Plan. A Note recorded by a Nurse will sometimes refer to the History of Presenting Illness section as the Subjective section, and the Physical Examination section as the Objective section. The History of Presenting Illness/Subjective section of the Note is where the information reported by the patient is recorded. The Physical Examination/Objective section of the Note is where the vital signs such as blood pressure, pulse and any other results from the examination of the patient are recorded The Assessment and Plan sections of the Note, which are sometimes combined, are used to record the Physician or Nurse's diagnostic conclusions and treatment plans, respectively. For those hospitals that do not issue Discharge Summaries for Patients admitted for observation and/or less than 48 hours, Data Collectors may use the entire Medical Record to obtain necessary data for questions which specify the Discharge Summary as the data source. However, it is the responsibility of Data Collectors to determine whether Discharge Summaries will be issued for selected cases. Only for such cases where hospital procedure mandates that no Discharge Summary be issued will Data Collectors be allowed to use other sources within a Patient's Medical Record.

Enter all clock time as military time using the conversion chart at the end of this form.

For any of the following information which is not recorded/available in these sources, enter "<-8>" for "NOT RECORDED". When in doubt about which code is appropriate for a given question, the Data Collector should contact his/her Site Coordinator.

<u>REACT</u> IN-PATIENT MEDICAL RECORD ABSTRACT FORM

AFFIX STUDY ID # LABEL SECTION A: GENERAL INFORMATION A1. DATE FORM COMPLETED: _____M ___ / ____D ___ / ____Y ___ A2. ABSTRACT START TIME (MILITARY TIME): A2a. START TIME 1: _____: ____: A2b. START TIME 2: _____÷____ A3. FORM VERSION DATE: 04/01/96 A4. ABSTRACTOR'S INITIALS: A5. MEDICAL RECORD #: **SECTION B: HOSPITAL INFORMATION**

B1.	HOSPITAL ADMISSION DATE:	/	/	Y Y
B2.	HOSPITAL DISCHARGE DATE:	/	/	Y Y

SECTION A: GENERAL INFORMATION

A1. DATE FORM COMPLETED - Enter the date that the In-Patient Medical Record Abstract data was completed using a MM/DD/YY format. For example, November 1, 1995 should be documented as 11/01/95. If data entry was partially completed on one date and finished on another date, enter the date the Data Collector began to enter the data on this form.

A2a-b. <u>ABSTRACT START TIME</u> - Record the actual time you began the abstract using military time. Military time begins at midnight with a time of 00:00 and continues hourly (01:00, 02:00 etc.) to noontime, which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ.

Please note that two start times have been provided. If the Medical Record Abstract is completed in one session, "<-1>" for "NOT APPLICABLE" will appear in the START TIME 2 field. If a second session is required, the Data Collector should enter the second start time in the START TIME 2 field.

A3. <u>FORM VERSION DATE</u> - The form version date is preprinted on the form by the Coordinating Center and the laptop will default to the most current form version in use. The current form version date is 04/01/96. This version date was modified in the software updates of 11/29/95, 12/18/95, 1/18/96, 3/8/96 and 4/25/96.

A4. <u>ABSTRACTOR'S INITIALS</u> - Enter the first, middle and last initials of the Abstractor. If the Abstractor does not have or does not use a middle initial, enter a "-" in place of the middle initial.

A5. <u>MEDICAL RECORD NUMBER</u> - Enter the Medical Record number as indicated on the Patient's Medical Record. Each page of the Medical Record will be stamped with the Patient's Medical Record number.

SECTION B: HOSPITAL INFORMATION

B1. <u>**HOSPITAL ADMISSION DATE**</u> - Enter the date the Participant was <u>admitted</u> to the hospital using a MM/DD/YY format. For example, if the Patient was admitted on May 5, 1996, enter 05/05/96.

B2. <u>HOSPITAL DISCHARGE DATE</u> - Enter the date the Patient was discharged from the hospital using a MM/DD/YY format. For example, if the Patient was discharged on May 15, 1996, enter 05/15/96. If the date recorded is incomplete, Data Collectors should enter <-8> where information is not available. For example, if the data recorded is June, 1995, the Data Collector should enter 06/-8/95.

B3. <u>PATIENT DISPOSITION</u> - Enter the code which reflects the Patient's disposition upon discharge. If the Patient was "DISCHARGED FROM THE HOSPITAL ALIVE" enter "1"; if the Patient was "TRANSFERRED TO ANOTHER HOSPITAL", enter "2"; and if the Patient "DIED DURING ADMISSION", enter "3". If Patient was "RELEASED FROM THE HOSPITAL ALIVE" or "DIED DURING ADMISSION", skip to B4.

TRANSFERI	RED TO ANOTHER HOSPI	
B3a. NAME OF H	OSPITAL:	
B3b. ADDRESS:	City	State
B4. DISCHARGE DIAGN	OSES:	
ICD (CODE	DESCRIPTION
A. PRIMARY:	•	
B. SECONDARY:	•	
C. TERTIARY:	•	
D. 4TH:	•	
E. 5TH:	•	
F. 6TH:	•	
G. 7TH:	•	
H. 8TH:	•	
I. 9TH:	•	
J. 10TH:	•	
K. 11TH:	•	
L. 12TH:	•	
M. 13TH:	•	
N. 14TH:	•	
O. 15TH:		

SECTION C: MEDICAL HISTORY

C1. PAST HISTORY OF CORONARY HEART DISEASE (ANT MENTION OF A HISTORY OF

CHD, ANGINA PECTORIS, PTCA, CABG):

YES	1
NO	2
NOT RECORDED	<-8>

SECTION A: GENERAL INFORMATION

A1. DATE FORM COMPLETED - Enter the date that the In-Patient Medical Record Abstract data was completed using a MM/DD/YY format. For example, November 1, 1995 should be documented as 11/01/95. If data entry was partially completed on one date and finished on another date, enter the date the Data Collector began to enter the data on this form.

A2a-b. <u>ABSTRACT START TIME</u> - Record the actual time you began the abstract using military time. Military time begins at midnight with a time of 00:00 and continues hourly (01:00, 02:00 etc.) to noontime, which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ.

Please note that two start times have been provided. If the Medical Record Abstract is completed in one session, "<-1>" for "NOT APPLICABLE" will appear in the START TIME 2 field. If a second session is required, the Data Collector should enter the second start time in the START TIME 2 field.

A3. <u>FORM VERSION DATE</u> - The form version date is preprinted on the form by the Coordinating Center and the laptop will default to the most current form version in use. The current form version date is 04/01/96. This version date was modified in the software updates of 11/29/95, 12/18/95, 1/18/96, 3/8/96 and 4/25/96.

A4. <u>ABSTRACTOR'S INITIALS</u> - Enter the first, middle and last initials of the Abstractor. If the Abstractor does not have or does not use a middle initial, enter a "-" in place of the middle initial.

A5. <u>MEDICAL RECORD NUMBER</u> - Enter the Medical Record number as indicated on the Patient's Medical Record. Each page of the Medical Record will be stamped with the Patient's Medical Record number.

SECTION B: HOSPITAL INFORMATION

B1. <u>**HOSPITAL ADMISSION DATE**</u> - Enter the date the Participant was <u>admitted</u> to the hospital using a MM/DD/YY format. For example, if the Patient was admitted on May 5, 1996, enter 05/05/96.

B2. <u>HOSPITAL DISCHARGE DATE</u> - Enter the date the Patient was discharged from the hospital using a MM/DD/YY format. For example, if the Patient was discharged on May 15, 1996, enter 05/15/96. If the date recorded is incomplete, Data Collectors should enter <-8> where information is not available. For example, if the data recorded is June, 1995, the Data Collector should enter 06/-8/95.

B3. <u>PATIENT DISPOSITION</u> - Enter the code which reflects the Patient's disposition upon discharge. If the Patient was "DISCHARGED FROM THE HOSPITAL ALIVE" enter "1"; if the Patient was "TRANSFERRED TO ANOTHER HOSPITAL", enter "2"; and if the Patient "DIED DURING ADMISSION", enter "3". If Patient was "RELEASED FROM THE HOSPITAL ALIVE" or "DIED DURING ADMISSION", skip to B4.

TRANSFERI	RED TO ANOTHER HOSPIT	AL
B3a. NAME OF H	OSPITAL:	
B3b. ADDRESS:	City	State
B4. DISCHARGE DIAGN	OSES:	
<u>ICD (</u>	CODE	DESCRIPTION
A. PRIMARY:	•	
B. SECONDARY:	•	
C. TERTIARY:	•	
D. 4TH:	•	
E. 5TH:	•	
F. 6TH:	•	
G. 7TH:	•	
H. 8TH:		
I. 9TH:	•	
J. 10TH:		
K. 11TH:		
L. 12TH:		
M. 13TH:		
N. 14TH:	• •	
O. 15TH:	•	

SECTION C: MEDICAL HISTORY

C1. PAST HISTORY OF CORONARY HEART DISEASE (ANT MENTION OF A HISTORY OF

CHD, ANGINA PECTORIS, PTCA, CABG):

YES	1
NO	2
NOT RECORDED	<-8>

B3a. <u>NAME OF HOSPITAL</u> - For Patients who were transferred to another hospital, enter the name of the hospital to which they were transferred.

B3b. <u>ADDRESS</u> - For Patients who were transferred to another hospital, enter the city and state where the hospital to which they were transferred is located.

B4. <u>HOSPITAL DISCHARGE DIAGNOSIS</u> - Enter the ICD codes for the first 15 hospital discharge diagnoses which are recorded in the Patient's Medical Record in the order they are documented in the Record. The primary source for the discharge diagnosis in the medical record is the Face Sheet/Standard Hospital Discharge Form. If the Face Sheet does not provide the discharge diagnosis, the Data Collector should check the Discharge Summary. If there is discrepant information between the Face Sheet and the Discharge Summary, the Data Collector should use the discharge diagnosis information reported on the Face Sheet. For hospitals that use short discharge summaries with supplemental documents, Data Collectors may refer to coding summaries, FINs, and attestation sheets.

If the Medical Record indicates that the first hospital discharge diagnosis is myocardial infarction, enter code "410.00" under ICD CODE. If an ICD code is available its corresponding description should not be entered. In such cases the program will skip to the next ICD code field. However, if the ICD code is unavailable, but a text description is available, the Data Collector should enter "<-8>" for "NOT AVAILABLE" in the ICD code field. CAMRAS will skip to the text description field where the text description for the discharge diagnosis should be recorded. Enter discharge diagnoses exactly as they are recorded in the Patient's Medical Record. For example, if "previous history of CAD" is recorded as a discharge diagnosis, enter it as a discharge diagnosis. Do not enter spaces or dashes in the ICD Code fields. Only enter the digits of the code and always insert the decimal where appropriate. For example, the ICD Code for myocardial infarction should be entered as 410.00.

SECTION C: MEDICAL RECORD INFORMATION

C1. <u>PAST MEDICAL HISTORY</u> - Enter the code which corresponds to the Patient's past medical history (PMH) as indicated in the attending physician's H&P and the Discharge Summary. Please note the software update of 4/25/96 has overridden previous instructions to use consulting physicians notes for past medical history. Only the physician's H&P and the Discharge Summary should be used to complete this question. DO NOT use the consulting physicians notes. Enter "1" for "YES" if the Medical Record indicates that the Patient has a prior history of coronary heart disease, angina, angioplasty, or bypass. If a qualifier is listed before a disorder, i.e., possible history of heart disease, enter "YES". If the patient's Medical Record cites a history of cardiac arrest, CAD, or MI, enter "1". Enter "2" for "NO", *only* if the Medical Record specifically states that the Patient has no prior history of the disorder/surgical intervention. For example, if the H&P indicates no history of CHD or heart disease, enter "2" for "NO". Enter "<-8>" for "NOT RECORDED" if there is no mention of the Patient having or not having a prior history of the disorder.

C2. PAST HISTORY OF MI (EXCLUDING PRESENT ADMISSION):

YES	1
NO	2
NOT RECORDED	<-8>

SECTION D: PRESENTING SYMPTOM HISTORY

D1. PRESENTING SYMPTOM HISTORY FROM ATTENDING PHYSICIAN'S **ADMISSION NOTE (D1a-D1d):**

AVAILABLE1	
NOT RECORDED<8>	(GO TO D2)

D1a. PRESENTING SYMPTOM(S):

		YES	NO	NR
A.	ABDOMINAL PAIN	1	2	<-8>
B.	ARM PAIN AND/OR SHOULDER PAIN	1	2	<-8>
C.	BACK PAIN	1	2	<-8>
D.	CHEST PAIN	1	2	<-8>
E.	CHEST PRESSURE	1	2	<-8>
F.	CHEST TIGHTNESS	1	2	<-8>
G.	CHEST DISCOMFORT (HEAVINESS/TENDERNESS	1	2	<-8>
	BURNING)			
H.	COUGH	1	2	<-8>
I.	DIZZINESS/LIGHTHEADEDNESS	1	2	<-8>
J.	HEADACHE	1	2	<-8>
K.	INDIGESTION	1	2	<-8>
L.	JAW PAIN	1	2	<-8>
M.	LOSS OF CONSCIOUSNESS	1	2	<-8>
N.	NAUSEA	1	2	<-8>
0.	NECK PAIN	1	2	<-8>
P.	NUMBNESS/TINGLING IN ARM OR HAND	1	2	<-8>
Q.	PALPITATIONS/ RAPID HEART RATE	1	2	<-8>
R.	SHORTNESS OF BREATH/DYSPNEA	1	2	<-8>
S.	SWEATING/DIAPHORESIS	1	2	<-8>
Τ.	VOMITING	1	2	<-8>
U.	WEAKNESS/FATIGUE/FAINTNESS	1	2	<-8>
V.	OTHER:(SPECIFY)	1	2	<-8>

D1b. DATE OF ACUTE ONSET OF SYMPTOMS:

 $-\underline{M} \underline{M} \overline{M} / \underline{D} \underline{D} \overline{D} / \underline{V} \underline{Y} \underline{Y}$

D1c. TIME OF ACUTE ONSET OF SYMPTOMS (MILITARY TIME) : _____ : ____ : ____

C2. <u>**PAST HISTORY OF MI**</u> - Enter "1" for "YES" if the Patient's Medical Record (as indicated in the Discharge Summary or any Admission Note) indicates a prior history of myocardial infarction (MI) or heart attack, excluding any MI on the present admission. Enter "2" for "NO" *only* if the Medical Record specifically states that the Patient has no prior history of MI. Enter "<-8>" for "NOT RECORDED", if the Medical Record contains no mention of the Patient having or not having a prior history of MI.

If the Medical Record states "possible prior MI of any location", the Data Collector should enter "1" for "YES".

SECTION D: SYMPTOM HISTORY

D1. <u>ATTENDING PHYSICIAN'S PRESENTING SYMPTOM HISTORY</u> - Enter "1" for "AVAILABLE" if the Patient's presenting symptom history (i.e., the symptoms and timing of symptoms for this visit in D1-D1d) is available in the History of Presenting Illness section of the Attending Physician's Note. If the presenting symptom history is not recorded in the History of Presenting Illness section of the Attending Physician's Note, enter "<-8>" for "NOT RECORDED" and **skip to D2**. Information about presenting symptom history recorded anywhere in the medical record other than the Attending Physician's Note (i.e. E.D. Physician's Note or Admitting Nurse's Note) should not be recorded in this section of the In-patient Medical Record Abstract. Similarly, information recorded or reported in this section of the Medical Record Abstract.

The Resident's Note can <u>only</u> be used as a supplement to the Attending Physician's Note (if information is noted in the Resident's Note that is not recorded in the Attending Physician's Note or in the absence of an Attending Physician's Note). If there is discrepant information between the Resident's Note and the Attending Physician's Note (for example, Resident's Note states Patient reports headache and the Attending Physician's Note states patient reports no headache), the Data Collector should use the information reported in the Attending Physician's Note.

C2. PAST HISTORY OF MI (EXCLUDING PRESENT ADMISSION):

YES	1
NO	2
NOT RECORDED	<-8>

SECTION D: PRESENTING SYMPTOM HISTORY

D1. PRESENTING SYMPTOM HISTORY FROM ATTENDING PHYSICIAN'S **ADMISSION NOTE (D1a-D1d):**

AVAILABLE1	
NOT RECORDED<8>	(GO TO D2)

D1a. PRESENTING SYMPTOM(S):

		YES	NO	NR
A.	ABDOMINAL PAIN	1	2	<-8>
B.	ARM PAIN AND/OR SHOULDER PAIN	1	2	<-8>
C.	BACK PAIN	1	2	<-8>
D.	CHEST PAIN	1	2	<-8>
E.	CHEST PRESSURE	1	2	<-8>
F.	CHEST TIGHTNESS	1	2	<-8>
G.	CHEST DISCOMFORT (HEAVINESS/TENDERNESS	1	2	<-8>
	BURNING)			
H.	COUGH	1	2	<-8>
I.	DIZZINESS/LIGHTHEADEDNESS	1	2	<-8>
J.	HEADACHE	1	2	<-8>
K.	INDIGESTION	1	2	<-8>
L.	JAW PAIN	1	2	<-8>
М.	LOSS OF CONSCIOUSNESS	1	2	<-8>
N.	NAUSEA	1	2	<-8>
0.	NECK PAIN	1	2	<-8>
P.	NUMBNESS/TINGLING IN ARM OR HAND	1	2	<-8>
Q.	PALPITATIONS/ RAPID HEART RATE	1	2	<-8>
R.	SHORTNESS OF BREATH/DYSPNEA	1	2	<-8>
S.	SWEATING/DIAPHORESIS	1	2	<-8>
Τ.	VOMITING	1	2	<-8>
U.	WEAKNESS/FATIGUE/FAINTNESS	1	2	<-8>
V.	OTHER:(SPECIFY)	1	2	<-8>

D1b. DATE OF ACUTE ONSET OF SYMPTOMS:

 $-\underline{M} \underline{M} \overline{M} / \underline{D} \underline{D} \overline{D} / \underline{V} \underline{Y} \underline{Y}$

D1c. TIME OF ACUTE ONSET OF SYMPTOMS (MILITARY TIME) : _____ : ____ : ____

D1a. <u>**PRESENTING SYMPTOM(S)**</u> - These symptoms should be abstracted from the Subjective/History of Present Illness section of the Attending Physician's Admission Note. Enter the appropriate code for "NO", "YES" or "NOT RECORDED" for <u>all</u> symptoms (a-v). For example, if a Patient experienced chest pain, chest pain should be entered as "1" for "YES", a presenting symptom. If the Attending Physician's Note records a symptom as "questionable", the Data Collector should still enter "1" for "YES". Symptoms should be coded "2" for "NO" only if the Note specifically states that they were not experienced by the Patient. For example, the Patient had chest pain, but no shortness of breath. Other terminology used to indicate a Patient did not present with a particular symptom includes "negative" or "no prior history". If the note states "no radiation", Data Collectors should code arm, back, jaw and neck pain as "2" for "NO". Symptoms that are not mentioned in the Attending Physician's Note should be coded as "<-8>" for "NOT RECORDED".

The Data Collector should **enter all symptoms** noted in the Attending Physician's Admission Note regardless of whether or not these symptoms were noted as acute (see D1b for a definition of acute symptoms). If symptoms, other than those listed in response choices "a-u", are recorded enter "1" for "YES" under subquestion **V**, "**OTHER**" and record the symptom(s) verbatim in the specify field. Common abbreviations include SOB (shortness of breath), C/P (chest pain), N & V (nausea and vomiting), HR (heart rate), and LOC (loss of consciousness).

D1b. <u>**DATE OF ONSET OF ACUTE SYMPTOMS</u> - In general, the onset of acute** symptoms occurs when the Patient's signs or symptoms of ischemic heart disease begin abruptly or become severe, intense or constant as opposed to intermittent, and causes a person to be aware of their start or change. **Acute** symptoms have some definable start point characterized by suddenness, a change or alteration in on-going symptoms such as increased intensity, or the emergence of a new symptom in an already existing symptom set. These symptoms should be abstracted from the Subjective/History of Present Illness section of the Attending Physician's Admission Note. The Data Collector should enter the date of onset of **acute** symptoms in the MM/DD/YY format. For example, enter June 5, 1995 as 06/05/95. If the date recorded is incomplete, Data Collectors should enter <-8> where information is not available. For example, if the date recorded is June, 1995, the Data Collector should enter 06/-8/95.</u>

D1c. <u>**TIME OF ONSET OF ACUTE SYMPTOMS**</u> - In general, the onset of **acute** symptoms occurs when the Patient's signs or symptoms of ischemic heart disease begin abruptly or become severe, intense or constant as opposed to intermittent, and causes a person to be aware of their start or change. Acute symptoms have some definable start point characterized by suddenness, a change or alteration in on-going symptoms such as increased intensity, or the emergence of a new symptom in an already existing symptom set. These symptoms should be abstracted from the Subjective/History of Present Illness section of the Attending Physician's Admission Note.

Enter the time of onset of acute symptoms as recorded in the Note using military time. Military time begins at midnight with a time of 00:00 and continues hourly (01:00, 02:00, etc.) to noontime which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours, and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ. If a range of time is noted by the Physician, such as "about 10:00 AM to 10:30 AM", use the midpoint of the time interval, i.e., 10:15 AM. If ambiguous statements, such as "around dinner time", are recorded enter the statement, verbatim, in the override box. If no time is recorded in the Patient's Medical Record, enter a "<-8>" and proceed to question D1d, otherwise, **skip to D2**.

COMPLETE D1d ONLY IF D1c IS "NOT RECORDED"

D1d. DURATION OF ACUTE SYMPTOMS (TIME FROM ONSET OF SYMPTOMS TO ARRIVAL IN ED):

|____ HOURS AND/OR |____ MINUTES

D2. PRESENTING SYMPTOM HISTORY FROM NURSES'S ADMISSION NOTE (D2a-D2d):

AVAILABLE1		
NOT RECORDED<8	3>	(GO TO E1)

D2a. PRESENTING SYMPTOM(S):

		YES	NO	NR
A.	ABDOMINAL PAIN	1	2	<-8>
B.	ARM PAIN AND/OR SHOULDER PAIN	1	2	<-8>
C.	BACK PAIN	1	2	<-8>
D.	CHEST PAIN	1	2	<-8>
E.	CHEST PRESSURE	1	2	<-8>
F.	CHEST TIGHTNESS	1	2	<-8>
G.	CHEST DISCOMFORT (HEAVINESS/TENDERNESS BURNING)	1	2	<-8>
H.	COUGH	1	2	<-8>
I.	DIZZINESS/LIGHTHEADEDNESS	1	2	<-8>
J.	HEADACHE	1	2	<-8>
K.	INDIGESTION	1	2	<-8>
L.	JAW PAIN	1	2	<-8>
M.	LOSS OF CONSCIOUSNESS	1	2	<-8>
N.	NAUSEA	1	2	<-8>
О.	NECK PAIN	1	2	<-8>
P.	NUMBNESS/TINGLING IN ARM OR HAND	1	2	<-8>
Q.	PALPITATIONS/ RAPID HEART RATE	1	2	<-8>
R.	SHORTNESS OF BREATH/DYSPNEA	1	2	<-8>
S.	SWEATING/DIAPHORESIS	1	2	<-8>
Τ.	VOMITING	1	2	<-8>
U.	WEAKNESS/FATIGUE/FAINTNESS	1	2	<-8>
V.	OTHER:(SPECIFY)	1	2	<-8>

D2b. DATE OF ACUTE ONSET OF SYMPTOMS:

 $-\overline{M}\overline{M}$ / $-\overline{D}\overline{D}$ / $-\overline{Y}\overline{Y}$

D2c. TIME OF ACUTE ONSET OF SYMPTOMS (MILITARY TIME): _____: ____:

COMPLETE D1d ONLY IF D1c IS "NOT RECORDED".

D1d. <u>**DURATION OF ACUTE SYMPTOMS</u>** - Complete this question only if the time of onset of **acute** symptoms is not recorded in D1c and the duration of **acute** symptoms is noted in the Admission Note. This refers to the time from the onset of **acute** symptoms to arrival in the E.D.. Enter only the range 0-59 minutes for MINUTES and enter 1 HOUR for 60 minutes. Enter a leading 0 in the first space of hours as needed. For example, if the symptoms started one hour before arrival in the E.D., enter 01 HOURS and 00 MINUTES. If the symptoms started 2 and one-half hours before arrival in the E.D., enter 02 HOURS and 30 MINUTES. These symptoms should be abstracted from the Subjective/History of Present Illness section of the Attending Physician's Admission Note. If this information is not recorded in the Medical Record, enter</u>

D2. <u>ADMITTING NURSE'S PRESENTING SYMPTOM HISTORY</u> - Enter "1" for "AVAILABLE" if the Patient's presenting symptom history (i.e., the symptoms and timing of symptoms for this visit in D2-D2d) is available in the Subjective/History of Presenting Illness section of the Admitting Nurse's Note. If the presenting symptom history is not recorded in the Subjective/History of Presenting Illness section of the Admitting Nurse's Note, enter "<-8>" for "NOT RECORDED" and **skip to Section E**. Information about presenting symptom history recorded anywhere in the Medical Record, other than the Admitting Nurse's Note (i.e., E.D. Physician's Note or E.D. Nurse's Note), should not be recorded in this section of the In-patient Medical Record Abstract. Similarly, information recorded in the Objective/Physical Examination section of the Admitting Nurse's Note should not be considered or reported in this section of the Medical Record Abstract.

D2a. PRESENTING SYMPTOM(S) - This information should be abstracted from the Subjective/History of Present Illness section of the Nurse's Admission Note. Enter the appropriate code for "NO", "YES" or "NOT RECORDED" for <u>all</u> symptoms (a-v). For example, if a Patient experienced chest pain, chest pain should be entered as "1" for "YES", a presenting symptom. If the Admitting Nurse's Note records a symptom as "questionable", the Data Collector should still enter "1" for "YES". Symptoms should be coded "2" for "NO" only if the Note specifically states that they were not experienced by the Patient. For example, the Patient had chest pain, but no shortness of breath. Other terminology used to indicate a Patient did not present with a particular symptom includes "negative" or "no prior history". If the note states "no radiation", Data Collectors should code arm, back, jaw and neck pain as "2" for "NO". Symptoms that are not mentioned in the Admitting Nurse's Note should be coded as "<-8>" for "NOT RECORDED".

The Data Collector should **enter all symptoms** noted in the Admitting Nurse's Admission Note regardless of whether or not these symptoms were noted as acute (see D2b for a definition of acute symptoms). If symptoms, other than those listed in response choices "a-v", are recorded enter "1" for "YES" under subquestion V, **"OTHER"** and record the symptom(s) verbatim in the specify field. Common abbreviations include SOB (shortness of breath), C/P (chest pain), N & V (nausea and vomiting), HR (heart rate), and LOC (loss of consciousness).

COMPLETE D1d ONLY IF D1c IS "NOT RECORDED"

D1d. DURATION OF ACUTE SYMPTOMS (TIME FROM ONSET OF SYMPTOMS TO ARRIVAL IN ED):

|____ HOURS AND/OR |____ MINUTES

D2. PRESENTING SYMPTOM HISTORY FROM NURSES'S ADMISSION NOTE (D2a-D2d):

AVAILABLE	1	
NOT RECORDED	<-8>	(GO TO E1)

D2a. PRESENTING SYMPTOM(S):

		YES	NO	NR
A.	ABDOMINAL PAIN	1	2	<-8>
B.	ARM PAIN AND/OR SHOULDER PAIN	1	2	<-8>
C.	BACK PAIN	1	2	<-8>
D.	CHEST PAIN	1	2	<-8>
E.	CHEST PRESSURE	1	2	<-8>
F.	CHEST TIGHTNESS	1	2	<-8>
G.	CHEST DISCOMFORT (HEAVINESS/TENDERNESS	1	2	<-8>
	BURNING)			
H.	COUGH	1	2	<-8>
I.	DIZZINESS/LIGHTHEADEDNESS	1	2	<-8>
J.	HEADACHE	1	2	<-8>
K.	INDIGESTION	1	2	<-8>
L.	JAW PAIN	1	2	<-8>
M.	LOSS OF CONSCIOUSNESS	1	2	<-8>
N.	NAUSEA	1	2	<-8>
0.	NECK PAIN	1	2	<-8>
P.	NUMBNESS/TINGLING IN ARM OR HAND	1	2	<-8>
Q.	PALPITATIONS/ RAPID HEART RATE	1	2	<-8>
R.	SHORTNESS OF BREATH/DYSPNEA	1	2	<-8>
S.	SWEATING/DIAPHORESIS	1	2	<-8>
Τ.	VOMITING	1	2	<-8>
U.	WEAKNESS/FATIGUE/FAINTNESS	1	2	<-8>
V.	OTHER:(SPECIFY)	1	2	<-8>

D2b. DATE OF ACUTE ONSET OF SYMPTOMS:

 $-\overline{M}\overline{M}$ / $-\overline{D}\overline{D}$ / $-\overline{Y}\overline{Y}$

D2c. TIME OF ACUTE ONSET OF SYMPTOMS (MILITARY TIME): _____: ____:

D2b. <u>**DATE OF ONSET OF ACUTE SYMPTOMS</u> - In general, the onset of acute** symptoms occurs when the Patient's signs or symptoms of ischemic heart disease begin abruptly or become severe, intense or constant as opposed to intermittent, and cause a person to be aware of their start or change. **Acute** symptoms have some definable start point characterized by suddenness, a change or alteration in on-going symptoms such as increased intensity, or the emergence of a new symptom in an already existing symptom set. This information should be abstracted from the Subjective/History of Present Illness section of the Nurse's Admission Note. The Data Collector should enter the date of onset of acute symptoms in the MM/DD/YY format. For example, enter June 5, 1995 as 06/05/95. If the date recorded is incomplete, Data Collectors should enter <-8> where information is not available. For example, if the data recorded is June, 1995, the Data Collector should enter 06/-8/95.</u>

D2c. <u>**TIME OF ONSET OF ACUTE SYMPTOMS**</u> - In general, the onset of acute symptoms occurs when the Patient's signs or symptoms of ischemic heart disease begin abruptly or become severe, intense or constant as opposed to intermittent, and cause a person to be aware of their start or change. Acute symptoms have some definable start point characterized by suddenness, a change or alteration in on-going symptoms such as increased intensity, or the emergence of a new symptom in an already existing symptom set. This information should be abstracted from the Subjective/History of Present Illness section of the Nurse's Admission Note.

Enter the time of onset of acute symptoms as recorded in the Note using military time. Military time begins at midnight with a time of 00:00 and continues hourly (01:00, 02:00, etc.) to noontime, which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours, and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ. If a range of time is noted by the Nurse, such as "about 10:00 AM to 10:30 AM, use the midpoint of the time interval, i.e., 10:15 AM. If ambiguous statements, such as "around dinner time" are recorded enter the statement, verbatim, in the override box.If no time is recorded in the Patient's Medical Record, enter a

"<-8>" and proceed to question D2d. Otherwise, **skip to E1**.

COMPLETE D2d ONLY IF D2c IS "NOT RECORDED".

D2d. <u>**DURATION OF ACUTE SYMPTOMS</u>** - Complete this question only if the time of onset of **acute** symptoms is not recorded in D2c and the duration of **acute** symptoms is noted in the Resident's Admission Note. This refers to the time from the onset of **acute** symptoms to arrival in the E.D.. This information should be abstracted from the Subjective/History of Present Illness section of the Nurse's Admission Note. Enter only the range 0-59 minutes for MINUTES and enter 1 HOUR for 60 minutes. Enter a leading 0 in the first space of hours as needed. For example if the symptoms started one hour before arrival in the E.D., enter 01 HOURS and 00 MINUTES. If the symptoms started 2 and one-half hours before arrival in the E.D., enter 02 HOURS and 30 MINUTES. If this information is not recorded in the Medical Record, enter "<-8>".</u>

D2d. DURATION OF ACUTE SYMPTOMS (TIME FROM ONSET OF SYMPTOMS TO ARRIVAL IN ED):

|___| HOURS AND/OR |___| MINUTES

COMPLETE SECTIONS E AND F FOR PATIENTS WITH 410/411 <u>ONLY</u>. IF PATIENT IS *NOT* A 410/411 GO TO G1.

SECTION E: LABORATORY DATA

		E1. <u>PATIENT'S</u> PEAK SERUM FINDINGS	E2. HOSPITAL'S UPPER LIMIT OF NORMAL
A.	TOTAL CK (U/L)	U/L	U/L
B.	TOTAL CK (IU/L)	IU/L	IU/L
C.	TOTAL LDH (MG/DL)	MG/L	MG/L
D.	TOTAL LDH (U/L)	U/L	U/L
E.	TOTAL LDH (IU/L)	IU/L	IU/L
F.	TOTAL LDH (IU/ML)	IU/ML	IU/ML
G.	TROPONIN_I	NG/DL	NG/DL

D2b. <u>**DATE OF ONSET OF ACUTE SYMPTOMS</u> - In general, the onset of acute** symptoms occurs when the Patient's signs or symptoms of ischemic heart disease begin abruptly or become severe, intense or constant as opposed to intermittent, and cause a person to be aware of their start or change. **Acute** symptoms have some definable start point characterized by suddenness, a change or alteration in on-going symptoms such as increased intensity, or the emergence of a new symptom in an already existing symptom set. This information should be abstracted from the Subjective/History of Present Illness section of the Nurse's Admission Note. The Data Collector should enter the date of onset of acute symptoms in the MM/DD/YY format. For example, enter June 5, 1995 as 06/05/95. If the date recorded is incomplete, Data Collectors should enter <-8> where information is not available. For example, if the data recorded is June, 1995, the Data Collector should enter 06/-8/95.</u>

D2c. <u>**TIME OF ONSET OF ACUTE SYMPTOMS**</u> - In general, the onset of acute symptoms occurs when the Patient's signs or symptoms of ischemic heart disease begin abruptly or become severe, intense or constant as opposed to intermittent, and cause a person to be aware of their start or change. Acute symptoms have some definable start point characterized by suddenness, a change or alteration in on-going symptoms such as increased intensity, or the emergence of a new symptom in an already existing symptom set. This information should be abstracted from the Subjective/History of Present Illness section of the Nurse's Admission Note.

Enter the time of onset of acute symptoms as recorded in the Note using military time. Military time begins at midnight with a time of 00:00 and continues hourly (01:00, 02:00, etc.) to noontime, which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours, and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ. If a range of time is noted by the Nurse, such as "about 10:00 AM to 10:30 AM, use the midpoint of the time interval, i.e., 10:15 AM. If ambiguous statements, such as "around dinner time" are recorded enter the statement, verbatim, in the override box.If no time is recorded in the Patient's Medical Record, enter a

"<-8>" and proceed to question D2d. Otherwise, **skip to E1**.

COMPLETE D2d ONLY IF D2c IS "NOT RECORDED".

D2d. <u>**DURATION OF ACUTE SYMPTOMS</u>** - Complete this question only if the time of onset of **acute** symptoms is not recorded in D2c and the duration of **acute** symptoms is noted in the Resident's Admission Note. This refers to the time from the onset of **acute** symptoms to arrival in the E.D.. This information should be abstracted from the Subjective/History of Present Illness section of the Nurse's Admission Note. Enter only the range 0-59 minutes for MINUTES and enter 1 HOUR for 60 minutes. Enter a leading 0 in the first space of hours as needed. For example if the symptoms started one hour before arrival in the E.D., enter 01 HOURS and 00 MINUTES. If the symptoms started 2 and one-half hours before arrival in the E.D., enter 02 HOURS and 30 MINUTES. If this information is not recorded in the Medical Record, enter "<-8>".</u>

D2d. DURATION OF ACUTE SYMPTOMS (TIME FROM ONSET OF SYMPTOMS TO ARRIVAL IN ED):

|___| HOURS AND/OR |___| MINUTES

COMPLETE SECTIONS E AND F FOR PATIENTS WITH 410/411 <u>ONLY</u>. IF PATIENT IS *NOT* A 410/411 GO TO G1.

SECTION E: LABORATORY DATA

		E1. <u>PATIENT'S</u> PEAK SERUM FINDINGS	E2. HOSPITAL'S UPPER LIMIT OF NORMAL
A.	TOTAL CK (U/L)	U/L	U/L
B.	TOTAL CK (IU/L)	IU/L	IU/L
C.	TOTAL LDH (MG/DL)	MG/L	MG/L
D.	TOTAL LDH (U/L)	U/L	U/L
E.	TOTAL LDH (IU/L)	IU/L	IU/L
F.	TOTAL LDH (IU/ML)	IU/ML	IU/ML
G.	TROPONIN_I	NG/DL	NG/DL

COMPLETE SECTIONS E AND F FOR PATIENTS WITH 410/411 ONLY.

SECTION E: LABORATORY DATA

E1a-f. <u>PATIENT'S PEAK SERUM FINDINGS</u> - Enter the Patient's highest or peak enzyme level for those laboratory tests identified in questions a-f. This should be the highest value recorded for each enzyme during the first 72 hours of their admission (72 hours after arrival in ED) as reported in the laboratory section of the chart.

Round up if the (k+1) significant digit is 6, 7, 8 or 9; round down if the (k+1) significant digit is 1, 2, 3 or 4; and round to the nearest even number if the (k+1) significant digit is 5. For example, if we want only two significant digits in this measurement, then 62.5 becomes 62, 62.7 becomes 63, and 62.3 becomes 62. If a value is reported as being "less than x", Data Collectors should interpret the value as being a range between "0 and x" and enter the midpoint. For example, if a CK value is recorded as "less than 5 U/L" enter 2.5, which is the midpoint between 0 and 5...

Values should be entered for total Creatinine Kinase as CK-Total, CK, or CPK reported in U/L and IU/L; and Lactic Dehydrogenase as LDH reported in MG/DL, U/L, IU/L, AND IU/ML.

Do <u>not</u> convert any values recorded in different units then those listed on the form. If an enzyme level is not recorded, enter "<-8>" for "NOT RECORDED". If more spaces are available then needed, Data Collectors should enter leading zeros. For example, if a patients Total CK (IU/L) is 177, Data Collectors should enter 0177.

SECTION F: CLINICAL DATA

F1. <u>MEDICATIONS ADMINISTERED</u> - Please note that if the Patient's Medical Record indicates that the Patient is in a clinical trial involving the medication the Data Collector should **not** enter "1" for "YES" in the subquestions below.

F1A. <u>**THROMBOLYTIC THERAPY</u>** - This question asks about the administration of various types of thrombolytic therapy. Medications administered during hospitalization, including those administered in the ED, can be found either in the ED Record, Nurse's Medication Note or the ICU/CCU flowsheets. If these are missing, the Data Collector should review the doctors orders. For each specific medication listed - Streptokinase, TPA, APSAC, and Urokinase - indicate whether the medication was administered, via Intravenous (IV) or Intracoronary (IC). If a thrombolytic therapy, not listed in F1a, was administered enter "1" for "YES" under "OTHER" and specify. Enter "2" for "NO" if the Medical Record clearly states that there was no administration of the medication during the hospitalization. Enter "<-8>" for "NOT RECORDED" if the Medical Record makes no mention of whether or not the medication was administered. If the medication was administered, proceed to enter the date and time (in military time) it was started under columns II and III respectively.</u>

SECTION F: CLINICAL DATA

F1. MEDICATIONS ADMINISTERED:

		YES	NO	NR	DATE STARTED	START TIME
A.	THROMBOLYTIC THERAPY					
1.	STREPTOKINASE	1	2	<-8>	//	:
2.	TPA (ACTIVASE OR ALTEPLASE)	1	2	<-8>	//	::
3.	APSAC (EMINASE OR ANTISTREPLASE)	1	2	<-8 >	//	:
4.	UROKINASE	1	2	<-8>	//	:
5.	OTHER MEDICATION (SPECIFY):	1		<-8>	//	:
B.	CLINICAL TRIAL USING THROMBOLYTIC THERAPY: (SPECIFY NAME OF STUDY)	1		<-8>		

F2. SURGICAL OR THERAPEUTIC INTERVENTIONS DURING HOSPITALIZATION: (CIRCLE THE CODE FOR YES, OR NR=NOT RECORDED FOR ALL QUESTIONS; IF YES RECORD DATE AND TIME. IF NO GO TO NEXT QUESTION)

		YES	NR	DATE RECEIVED	TIME RECEIVED
Α	CARDIAC	1	<-8>		·
11.	ANGIOPLASTY (PTCA)	-	Ũ		·
B.	CORONARY ARTERY	1	<-8>	//	:
	BYPASS GRAFT (CABG)				
COMPLETE SECTIONS E AND F FOR PATIENTS WITH 410/411 ONLY.

SECTION E: LABORATORY DATA

E1a-f. <u>PATIENT'S PEAK SERUM FINDINGS</u> - Enter the Patient's highest or peak enzyme level for those laboratory tests identified in questions a-f. This should be the highest value recorded for each enzyme during the first 72 hours of their admission (72 hours after arrival in ED) as reported in the laboratory section of the chart.

Round up if the (k+1) significant digit is 6, 7, 8 or 9; round down if the (k+1) significant digit is 1, 2, 3 or 4; and round to the nearest even number if the (k+1) significant digit is 5. For example, if we want only two significant digits in this measurement, then 62.5 becomes 62, 62.7 becomes 63, and 62.3 becomes 62. If a value is reported as being "less than x", Data Collectors should interpret the value as being a range between "0 and x" and enter the midpoint. For example, if a CK value is recorded as "less than 5 U/L" enter 2.5, which is the midpoint between 0 and 5...

Values should be entered for total Creatinine Kinase as CK-Total, CK, or CPK reported in U/L and IU/L; and Lactic Dehydrogenase as LDH reported in MG/DL, U/L, IU/L, AND IU/ML.

Do <u>not</u> convert any values recorded in different units then those listed on the form. If an enzyme level is not recorded, enter "<-8>" for "NOT RECORDED". If more spaces are available then needed, Data Collectors should enter leading zeros. For example, if a patients Total CK (IU/L) is 177, Data Collectors should enter 0177.

SECTION F: CLINICAL DATA

F1. <u>MEDICATIONS ADMINISTERED</u> - Please note that if the Patient's Medical Record indicates that the Patient is in a clinical trial involving the medication the Data Collector should **not** enter "1" for "YES" in the subquestions below.

F1A. <u>**THROMBOLYTIC THERAPY</u>** - This question asks about the administration of various types of thrombolytic therapy. Medications administered during hospitalization, including those administered in the ED, can be found either in the ED Record, Nurse's Medication Note or the ICU/CCU flowsheets. If these are missing, the Data Collector should review the doctors orders. For each specific medication listed - Streptokinase, TPA, APSAC, and Urokinase - indicate whether the medication was administered, via Intravenous (IV) or Intracoronary (IC). If a thrombolytic therapy, not listed in F1a, was administered enter "1" for "YES" under "OTHER" and specify. Enter "2" for "NO" if the Medical Record clearly states that there was no administration of the medication during the hospitalization. Enter "<-8>" for "NOT RECORDED" if the Medical Record makes no mention of whether or not the medication was administered. If the medication was administered, proceed to enter the date and time (in military time) it was started under columns II and III respectively.</u>

SECTION F: CLINICAL DATA

F1. MEDICATIONS ADMINISTERED:

		YES	NO	NR	DATE STARTED	START TIME
A.	THROMBOLYTIC THERAPY					
1.	STREPTOKINASE	1	2	<-8>	//	:
2.	TPA (ACTIVASE OR ALTEPLASE)	1	2	<-8>	//	:
3.	APSAC (EMINASE OR ANTISTREPLASE)	1	2	<-8>	//	:
4.	UROKINASE	1	2	<-8>	//	::
5.	OTHER MEDICATION (SPECIFY):	1		<-8>	//	:
B.	CLINICAL TRIAL USING THROMBOLYTIC THERAPY: (SPECIFY NAME OF STUDY)	1		<-8 >		

F2. SURGICAL OR THERAPEUTIC INTERVENTIONS DURING HOSPITALIZATION: (CIRCLE THE CODE FOR YES, OR NR=NOT RECORDED FOR ALL QUESTIONS; IF YES RECORD DATE AND TIME. IF NO GO TO NEXT QUESTION)

		YES	NR	DATE	TIME
				RECEIVED	RECEIVED
A.	CARDIAC	1	<-8>	//	::
	ANGIOPLASTY (PTCA)				
B.	CORONARY ARTERY	1	<-8>	/ /	:
	BYPASS GRAFT (CABG)				

F1B. <u>CLINICAL TRIAL USING THROMBOLYTIC THERAPY</u> - Data Collectors should look in the Medical Record for evidence that the Patient participated in a clinical trial using thrombolytic therapy during the course of their hospitalization. This may be documented in the Nurse's Medication Note, ICU/CCU flowsheets, Admission Note, doctors orders, or on a completed informed consent. Enter "1" for "YES" if the Medical Record indicates that the Patient participated in such a study during this hospitalization. Enter "<-8>", for "NOT RECORDED" if the Medical Record makes no mention of participation in such a study. If the Patient participated in such a trial, specify the name of the study.

F2. <u>**DIAGNOSTIC/SURGICAL/THERAPEUTIC PROCEDURES</u> - The procedures listed in subquestions a-b may be found in the section of the Medical Record which documents procedure reports. For each procedure, enter "1" for "YES" if the Patient had the specific diagnostic/surgical procedure or therapeutic intervention listed and proceed to enter the first available date and time (in military time) these procedures/interventions were received. If any procedure was conducted more than once during the hospitalization, enter the date and time that the first procedure was conducted. Enter "<-8>" for "NOT RECORDED" if the Medical Record makes no mention of whether or not the Patient received the identified diagnostic/surgical procedure or therapeutic intervention.</u></u>**

The procedures include A) any type of coronary angioplasty including balloon dilatation or percutaneous transluminal coronary angioplasty (PTCA), atherectomy, rotablation, laser angioplasty and coronary stenting; and B) coronary artery bypass surgery (CABG) or bypass surgery.

SECTION G: ABSTRACT END TIME

G1. <u>ABSTRACT END TIME</u> - Record the time the Data Collector completed the Medical Record Abstract form using military time. Military time begins at midnight with a time of 00:00 and continues hourly (01:00, 02:00, etc.) to noontime, which is recorded as 12:00 hours. Thereafter, military time is calculated by adding the time of day to 12, for example, 1:00 p.m. is 13:00 hours, 5:00 p.m. is 17:00 hours and 11:00 p.m. is 23:00 hours. See the conversion chart at the end of this QxQ.

Please note that two end times have been provided. If the Medical Record Abstract is completed in one session, "<-1>" for "NOT APPLICABLE" will appear in the END TIME 2 field. If a second session is required, the Data Collector should enter the second end time in the END TIME 2 field.

SECTION G: END OF ABSTRACT

MILITARY TIME CONVERSION CHART

CLOCK TIME	MILITARY TIME
12:00 midnight to 12:59	00:00 to 00:59
1:00 a.m. to 1:59 a.m.	01:00 to 01:59
2:00 a.m. to 2:59 a.m.	02:00 to 02:59
3:00 a.m. to 3:59 a.m.	03:00 to 03:59
4:00 a.m. to 4:59 a.m.	04:00 to 04::59
5:00 a.m. to 5:59 a.m.	05:00 to 05:59
6:00 a.m. to 6:59 a.m.	06:00 to 06:59
7:00 a.m. to 7:59 a.m.	07:00 to 07:59
8:00 a.m. to 8:59 a.m.	08:00 to 08:59
9:00 a.m. to 9:59 a.m.	09:00 to 09:59
10:00 a.m. to 10:59 a.m.	10:00 to 10:59
11:00 a.m. to 11:59 a.m.	11:00 to 11:59
12:00 p.m. to 12:59 p.m.	12:00 to 12:59
1:00 p.m. to 1:59 p.m.	13:00 to 13:59
2:00 p.m. to 2:59 p.m.	14:00 to 14:59
3:00 p.m. to 3:59 p.m.	15:00 to 15:59
4:00 p.m. to 4:59 p.m.	16:00 to 16:59
5:00 p.m. to 5:59 p.m.	17:00 to 17:59
6:00 p.m. to 6:59 p.m.	18:00 to 18:59
7:00 p.m. to 7:59 p.m.	19:00 to 19:59
8:00 p.m. to 8:59 p.m.	20:00 to 20:59
9:00 p.m. to 9:59 p.m.	21:00 to 21:59
10:00 p.m. to 10:59 p.m.	22:00 to 22:59
11:00 p.m. to 11:59 p.m.	23:00 to 23:59
12:00 midnight	next day

Transferred Patients Medical Record Abstract

<u>REACT</u> <u>TRANSFER PATIENTS MEDICAL RECORD ABSTRACT FORM</u>

	AFFIX STUDY ID # LABEL
	SECTION A: GENERAL INFORMATION
A1.	DATE FORM COMPLETED:M /D /YY
A2.	FORM VERSION DATE: 5/7/97
A3.	ABSTRACTOR'S INITIALS:
A4.	TRANSFER HOSPITAL MEDICAL RECORD #:
A5.	TRANSFER HOSPITAL NAME:
A6.	ABSTRACT START TIME (MILITARY TIME) : :
	SECTION B: TRANSFER HOSPITAL INFORMATION
B1.	HOSPITAL ADMISSION DATE: $\underline{MM} / \underline{DD} / \underline{YY}$
B2.	HOSPITAL DISCHARGE DATE: <u>MM</u> / <u>DD</u> / <u>YY</u>
B3.	PATIENT DISPOSITION: (CIRCLE ONE)
	RELEASED FROM HOSPITAL ALIVE



SECTION C: LABORATORY DATA

		C1. <u>PATIENT'S</u> PEAK SERUM FINDINGS	C2. HOSPITAL'S UPPER LIMIT OF NORMAL
A.	TOTAL CK (U/L)	U/L	U/L
B.	TOTAL CK (IU/L)	IU/L	IU/L
C.	TOTAL LDH (MG/DL)	MG/DL	MG/DL
D.	TOTAL LDH (U/L)	U/L	U/L
E.	TOTAL LDH (IU/L)	IU/L	IU/L
F.	TOTAL LDH (IU/ML)	IU/ML	IU/ML
G.	TROPONIN I	NG/ML	NG/ML

SECTION D: CLINICAL DATA

D1. MEDICATIONS ADMINISTERED:

		YES	NO	NR	DATE STARTED	START TIME
A.	THROMBOLYTIC THERAPY					
1.	STREPTOKINASE	1	2	<-8>	//	:
2.	TPA (ACTIVASE OR ALTEPLASE)	1	2	<-8>	//	:
3.	APSAC (EMINASE OR ANTISTREPLASE)	1	2	<-8 >	//	:
4.	UROKINASE	1	2	<-8>	//	:
5.	OTHER THROMBOLYTIC (SPECIFY):	1		<-8>	//	:
_						
В.	CLINICAL TRIAL USING THROMBOLYTIC THERAPY: (SPECIFY NAME OF STUDY)	1		<-8>		

D2. SURGICAL OR THERAPEUTIC INTERVENTIONS DURING HOSPITALIZATION: (CIRCLE THE CODE FOR YES, OR NR=NOT RECORDED FOR ALL QUESTIONS; IF YES RECORD DATE AND TIME. IF NO GO TO NEXT QUESTION)

		YES	NR	DATE RECEIVED	TIME RECEIVED
A.	CORONARY ANGIOPLASTY (PTCA)	1	<-8>	//	:
B.	CORONARY ARTERY BYPASS GRAFT (CABG)	1	<-8>	//	:

SECTION E: END OF ABSTRACT

E1. ABSTRACT END TIME (MILITARY TIME) : ____ : ____ : ____

EMS CALL MONITORING LOG

REACT EMERGENCY MEDICAL SERVICE CALL MONITORING LOG ALABAMA

Record the total number of calls received at each emergency medical service listed below for each of the following months. Mail the original form to Norina Coppinger at the REACT Coordinating Center. Keep a photocopy of this form for your records. Site Coordinators will need to consider how long EMS services retain these data in completing this form.

 FORM VERSION: 04/01/96
 DATE FORM SENT TO NERI:

NAME OF PERSON COMPLETING FORM:

DATE OF EMS SERVICE:

EMS NAME	CODE	JUNE. 1997	JULY. 1997	AUG. 1997	SEP. 1997
Angel Fire Dept.	1-01				
Careline	1-02				
Peidmont Rescue Squad	1-03				
Calhoun County EMS	1-04				
Opelika Fire and Rescue Service	1-05				
City of Auburn Fire Dept.	1-06				
East Alabama Medical Center	1-07				
Huntsville EMS	1-08				
Northstar	1-09				
Tuscaloosa County EMS	1-10				
Carroll's Creek Volunteer Fire Dept.	1-11				
Coaling Fire Dept. Business Office	1-12				
Duncanville Volunteer Fire Dept.	1-13				
City of Northport Fire Dept.	1-14				
Suburban Emergency Medical Service	1-15				
Tuscaloosa Fire Emergency	1-16				
Jim Walter Resources Inc.	1-17				

Yellow Creek Volunteer Fire Dept	1-18		
Other(Please Specify)	1-19		
Other(Please Specify)	1-20		

REACT EMERGENCY MEDICAL SERVICE CALL MONITORING LOG MASSACHUSETTS

Record the total number of calls received at each emergency medical service listed below for each of the following months. Mail the original form to Norina Coppinger at the REACT Coordinating Center. Keep a photocopy of this form for your records. Site Coordinators will need to consider how long EMS services retain these data in completing this form.

FORM VERSION: 04/01/96 DATE FORM SENT TO NERI:

NAME OF PERSON COMPLETING FORM:

DATE OF EMS SERVICE:

EMS NAME	CODE	JUNE. 1997	JULY. 1997	AUG. 1997	SEP. 1997
Westfield Fire Department	2-01				
West Springfield Fire Department	2-02				
Dalton Fire Dept & Comm Ctr	2-03				
Trinity EMS(Lowell)	2-04				
Worcester EMS(UMass EMS)	2-05				
Pittsfield Fire Department	2-06				
Other(Please Specify)	2-07				
Other(Please Specify)	2-08				

REACT EMERGENCY MEDICAL SERVICE CALL MONITORING LOG MINNESOTA

Record the total number of calls received at each emergency medical service listed below for each of the following months. Mail the original form to Norina Coppinger at the REACT Coordinating Center. Keep a photocopy of this form for your records. Site Coordinators will need to consider how long EMS services retain these data in completing this form.

 FORM VERSION: 04/01/96
 DATE FORM SENT TO NERI:

NAME OF PERSON COMPLETING FORM:

DATE OF EMS SERVICE: FROM 06/01/97 TO 09/30/97

EMS NAME	CODE	JUNE. 1997	JULY. 1997	AUG. 1997	SEP. 1997
Eau Claire City Ambulance Rescue	3-01				
Gold Cross Ambulance	3-02				
Osseo Ambulance	3-03				
Chippewa Falls City Fire Protection	3-04				
FM Ambulance	3-05				
Cassleton Ambulance	3-06				
Hunter Ambulance	3-07				
Kindred Ambulance	3-08				
Page Ambulance	3-09				
Barnesville Ambulance	3-10				
Tri-State Ambulance	3-11				
Med-Star Ambulance	3-12				
Sparta Ambulance	3-13				
La Crosse Fire Dept.	3-14				
Sioux Falls Ambulance	3-15				
Garretson Ambulance	3-16				
Dell Rapids Ambulance	3-17				
Humboldt Ambulance	3-18				

Lennox Ambulance	3-19	
Canton-Inwood Ambulance	3-20	
Hudson Ambulance	3-21	
Beresford Ambulance	3-22	
Centerville Ambulance	3-23	
Other(Please Specify)	3-24	

REACT EMERGENCY MEDICAL SERVICE CALL MONITORING LOG TEXAS

Record the total number of calls received at each emergency medical service listed below for each of the following months. Mail the original form to Norina Coppinger at the REACT Coordinating Center. Keep a photocopy of this form for your records. Site Coordinators will need to consider how long EMS services retain these data in completing this form.

FORM VERSION: 04/01/96 DATE FORM SENT TO NERI: _____

NAME OF PERSON COMPLETING FORM:

DATE OF EMS SERVICE:

EMS NAME	CODE	JUNE. 1997	JULY. 1997	AUG. 1997	SEP. 1997
Brownsville EMS	4-01				
Laredo EMS	4-02				
ETMC EMS	4-03				
Calcasieu Parish Communications District	4-04				
Other(Please Specify)	4-05				
Other(Please Specify)	4-06				
Other(Please Specify)	4-07				

REACT EMERGENCY MEDICAL SERVICE CALL MONITORING LOG WASHINGTON

Record the total number of calls received at each emergency medical service listed below for each of the following months. Mail the original form to Norina Coppinger at the REACT Coordinating Center. Keep a photocopy of this form for your records. Site Coordinators will need to consider how long EMS services retain these data in completing this form.

FORM VERSION: 04/01/96 DATE FORM SENT TO NERI: _____

NAME OF PERSON COMPLETING FORM:

DATE OF EMS SERVICE:

EMS NAME	CODE	JUNE. 1997	JULY. 1997	AUG. 1997	SEP. 1997
King County Fire District #4	5-01				
King County Fire District #16	5-02				
Seattle Fire Department	5-03				
Medic One Thurston County	5-04				
Other(Please Specify)	5-05				
Other(Please Specify)	5-06				
Other(Please Specify)	5-07				

REACT EMERGENCY MEDICAL SERVICE CALL MONITORING LOG OREGON

Record the total number of calls received at each emergency medical service listed below for each of the following months. Mail the original form to Norina Coppinger at the REACT Coordinating Center. Keep a photocopy of this form for your records. Site Coordinators will need to consider how long EMS services retain these data in completing this form.

FORM VERSION: 04/01/96 DATE FORM SENT TO NERI: _____

NAME OF PERSON COMPLETING FORM:

DATE OF EMS SERVICE:

EMS NAME	CODE	JUNE. 1997	JULY. 1997	AUG. 1997	SEP. 1997
City of Eugene Fire/EMS	5-09				
Springfield Fire	5-10				
Tualatin Valley Fire and Rescue	5-11				
Other(Please Specify)	5-12				
Other(Please Specify)	5-13				
Other(Please Specify)	5-14				

RDD COMMUNITY SURVEY



REACT

COMMUNITY SURVEY

TELEPHONE INTERVIEW

RESPOND	ENT ID:				_	
DATE:	MONTH	DAY	YEAR			
INTERVIE	WER ID:					
START TI	ME:	:	1.	AM	2.	PM

READ TO ALL RESPONDENTS TO BE INTERVIEWED BY TELEPHONE

I am calling on behalf of [UNIVERSITY]. The University is participating in a study to learn more about people with chest pain or similar symptoms who seek medical care.

Before we begin, let me remind you that your participation is voluntary and will help us learn more about the treatment of heart disease. You may ask to stop the interview at any time. If there is a question that you cannot or do not wish to answer, please tell me and I will go on to the next question.

Any information that you provide is strictly confidential. Only members of an independent research staff will see or hear your responses.

If you have any questions or concerns about the survey, you may call the Principal Investigator at [UNIVERSITY] [PI NAME AND NUMBER], or Sharyne Donfield of Institutional Review Board at the New England Research Institutes. IF THE RESPONDENT EXPRESSES DESIRE TO DO SO, STATE: The toll free number for NERI is 1-800-775-6374. There will be absolutely no charge to you.

I, THE INTERVIEWER HAVE READ THIS STATEMENT TO THE RESPONDENT _____INITIALS OF THE INTERVIEWER

SECTION C: EXPOSURE, INFORMATION, SOURCES

The first few questions are about the media and health.

- C1. Newspapers, radio and television often carry information about health. In your opinion, do you think the amount of information on health in the media has increased, decreased, or stayed about the same during the <u>past year</u>?
 - 1. INCREASED
 - 2. DECREASED
 - 3. SAME
 - d. DON'T KNOW
 - r. REFUSED
- C2. Thinking back now over the <u>past month</u>, what kinds of messages about health do you recall in the media or from other sources such as people you talk with?
 [PROBE: PROBE FOR UP TO FIVE MESSAGES.]
 [ENTER TEXT AND CODE MESSAGES FROM "CODES FOR EVALUATION SURVEY."]



FOR EACH MESSAGE LISTED ABOVE:

C2a. You mentioned [MESSAGE a.]. Where did you hear, read or see this? [CIRCLE "1" NO OR "2" YES FOR ALL SOURCES OR TYPES OF MEDIA THAT APPLY BELOW.]

	SOURCE	NO	YES
1.	BILLBOARDS	1	2
2.	BOOK	1	2
3.	CHURCH	1	2
4.	CIVIC ORGANIZATION	1	2
5.	DOCTOR	1	2
6.	FAMILY MEMBER	1	2
7.	FRIEND, CO-WORKER	1	2
8.	HOSPITAL	1	2
9.	MAILING	1	2
10.	MAGAZINE	1	2
11.	MALL EVENT	1	2
12.	NEWSPAPER	1	2
13.	OTHER HEALTH PROFESSIONAL	1	2
14.	OTHER HEALTHCARE ORGANIZATION	1	2
15.	PAMPHLET	1	2
16.	PHARMACY POSTER/FLIER	1	2
17.	POSTER	1	2
18.	RADIO	1	2
19.	SCHOOL, CLASS, LECTURE	1	2
20.	SELF-HELP CLINIC OR GROUP	1	2
21.	SIGNS	1	2
22.	SOCIAL, RECREATION GROUP	1	2
23.	TELEVISION	1	2
24.	OTHER (SPECIFY):	1	2

C2b. You mentioned [MESSAGE b.]. Where did you hear, read or see this? [CIRCLE "1" NO OR "2" YES FOR ALL SOURCES OR TYPES OF MEDIA THAT APPLY BELOW.]

	SOURCE	NO	YES
1.	BILLBOARDS	1	2
2.	BOOK	1	2
3.	CHURCH	1	2
4.	CIVIC ORGANIZATION	1	2
5.	DOCTOR	1	2
6.	FAMILY MEMBER	1	2
7.	FRIEND, CO-WORKER	1	2
8.	HOSPITAL	1	2
9.	MAILING	1	2
10.	MAGAZINE	1	2
11.	MALL EVENT	1	2
12.	NEWSPAPER	1	2
13.	OTHER HEALTH PROFESSIONAL	1	2
14.	OTHER HEALTHCARE ORGANIZATION	1	2
15.	PAMPHLET	1	2
16.	PHARMACY POSTER/FLIER	1	2
17.	POSTER	1	2
18.	RADIO	1	2
19.	SCHOOL, CLASS, LECTURE	1	2
20.	SELF-HELP CLINIC OR GROUP	1	2
21.	SIGNS	1	2
22.	SOCIAL, RECREATION GROUP	1	2
23.	TELEVISION	1	2
24.	OTHER (SPECIFY):	1	2

C2c. You mentioned [MESSAGE c.]. Where did you hear, read or see this? [CIRCLE "1" NO OR "2" YES FOR ALL SOURCES OR TYPES OF MEDIA THAT APPLY BELOW.]

	SOURCE	NO	YES
1.	BILLBOARDS	1	2
2.	BOOK	1	2
3.	CHURCH	1	2
4.	CIVIC ORGANIZATION	1	2
5.	DOCTOR	1	2
6.	FAMILY MEMBER	1	2
7.	FRIEND, CO-WORKER	1	2
8.	HOSPITAL	1	2
9.	MAILING	1	2
10.	MAGAZINE	1	2
11.	MALL EVENT	1	2
12.	NEWSPAPER	1	2
13.	OTHER HEALTH PROFESSIONAL	1	2
14.	OTHER HEALTHCARE ORGANIZATION	1	2
15.	PAMPHLET	1	2
16.	PHARMACY POSTER/FLIER	1	2
17.	POSTER	1	2
18.	RADIO	1	2
19.	SCHOOL, CLASS, LECTURE	1	2
20.	SELF-HELP CLINIC OR GROUP	1	2
21.	SIGNS	1	2
22.	SOCIAL, RECREATION GROUP	1	2
23.	TELEVISION	1	2
24.	OTHER (SPECIFY):	1	2

C2d. You mentioned [MESSAGE d.]. Where did you hear, read or see this? [CIRCLE "1" NO OR "2" YES FOR ALL SOURCES OR TYPES OF MEDIA THAT APPLY BELOW.]

	SOURCE	NO	YES
1.	BILLBOARDS	1	2
2.	BOOK	1	2
3.	CHURCH	1	2
4.	CIVIC ORGANIZATION	1	2
5.	DOCTOR	1	2
6.	FAMILY MEMBER	1	2
7.	FRIEND, CO-WORKER	1	2
8.	HOSPITAL	1	2
9.	MAILING	1	2
10.	MAGAZINE	1	2
11.	MALL EVENT	1	2
12.	NEWSPAPER	1	2
13.	OTHER HEALTH PROFESSIONAL	1	2
14.	OTHER HEALTHCARE ORGANIZATION	1	2
15.	PAMPHLET	1	2
16.	PHARMACY POSTER/FLIER	1	2
17.	POSTER	1	2
18.	RADIO	1	2
19.	SCHOOL, CLASS, LECTURE	1	2
20.	SELF-HELP CLINIC OR GROUP	1	2
21.	SIGNS	1	2
22.	SOCIAL, RECREATION GROUP	1	2
23.	TELEVISION	1	2
24.	OTHER (SPECIFY):	1	2

C2e. You mentioned [MESSAGE e.]. Where did you hear, read or see this? [CIRCLE "1" NO OR "2" YES FOR ALL SOURCES OR TYPES OF MEDIA THAT APPLY BELOW.]

	SOURCE	NO	YES
1.	BILLBOARDS	1	2
2.	BOOK	1	2
3.	CHURCH	1	2
4.	CIVIC ORGANIZATION	1	2
5.	DOCTOR	1	2
6.	FAMILY MEMBER	1	2
7.	FRIEND, CO-WORKER	1	2
8.	HOSPITAL	1	2
9.	MAILING	1	2
10.	MAGAZINE	1	2
11.	MALL EVENT	1	2
12.	NEWSPAPER	1	2
13.	OTHER HEALTH PROFESSIONAL	1	2
14.	OTHER HEALTHCARE ORGANIZATION	1	2
15.	PAMPHLET	1	2
16.	PHARMACY POSTER/FLIER	1	2
17.	POSTER	1	2
18.	RADIO	1	2
19.	SCHOOL, CLASS, LECTURE	1	2
20.	SELF-HELP CLINIC OR GROUP	1	2
21.	SIGNS	1	2
22.	SOCIAL, RECREATION GROUP	1	2
23.	TELEVISION	1	2
24.	OTHER (SPECIFY):	1	2

SECTION D: PERSONAL HEALTH CONCERNS AND BEHAVIORAL INTENTIONS

Now I'd like to ask you questions about some health situations.

D1. What one health condition or health problem is of greatest concern to you personally right now?

[ASK FOR ONLY <u>ONE</u> RESPONSE. IF MORE THAN ONE RESPONSE, PROBE BY ASKING WHICH IS HIS/HER GREATEST CONCERN. ENTER TEXT AND CODE RESPONSE.] TEXT CODE



D2. If you thought someone was having a heart attack, what would you do? [CIRCLE "1" NO OR "2" YES FOR ALL ACTIONS THAT APPLY BELOW.] [IF RESPONSE "a. GET HELP" IS GIVEN, PROBE: Could you be more specific?] [PROBE: Anything else?]

	-	NO	YES
1.	ADMINISTER CPR	1	2
2.	ADVISE THEM TO GET TO HOSPITAL	1	2
3.	ADVISE THEM TO CALL THEIR PHYSICIAN	1	2
4.	ADVISE THEM TO LIE DOWN	1	2
5.	ADVISE THEM TO TAKE ASPIRIN OR OTHER MEDICINE	1	2
6.	CALL 911/OR AMBULANCE	1	2
7.	CALL SPOUSE/FAMILY MEMBER	1	2
8.	CALL THEIR DOCTOR, CLINIC	1	2
9.	DRIVE THEM TO HOSPITAL	1	2
10.	GET HELP	1	2
11.	MAKE THEM COMFORTABLE	1	2
12.	OTHER (SPECIFY):	1	2

D3. How sure are you that you would call an ambulance or dial 911, if you thought someone was having a heart attack? Are you very sure, pretty sure, a little sure or not at all sure ?

Very Sure Pretty Sure A Little Sure Not At All Sure DK/NO REFUSE	1	2	3	4	 r
OPINION	Very Sure	Pretty Sure	A Little Sure	Not At All Sure	REFUSEI

D3a. [IF NOT AT ALL SURE] Why not?

D4. If someone asked you not to call an ambulance or 911, how sure are you that you would still call if you thought that person was having a heart attack? Are you very sure, pretty sure, a little sure or not at all sure?

1	2	3	4	d	r
Very Sure	Pretty Sure	A Little Sure	Not At All Sure	DK/NO	REFUSED
				OPINION	
			[WD NOT CALL]		

SECTION E: SELF -EFFICACY

E1. How sure are you that you could recognize the signs and symptoms of a heart attack in someone else? Are you very sure, pretty sure, a little sure or not at all sure?

1	2	3	4	d	r
Very Sure	Pretty Sure	A Little Sure	Not At All Sure	DK/NO	REFUSED
				OPINION	

E2. How sure are you that you could recognize the signs and symptoms of a heart attack in yourself? Are you very sure, pretty sure, a little sure or not at all sure?

1	2	3	4	d	r
Very Sure	Pretty Sure	A Little Sure	Not At All Sure	DK/NO	REFUSED
-	-			OPINION	

E3. How sure are you that you could tell the difference between the signs or symptoms of a heart attack and other medical problems? Are you very sure, pretty sure, a little sure or not at all sure?

1	2	3	4	d	r
Very Sure	Pretty Sure	A Little Sure	Not At All Sure	DK/NO	REFUSED
-	-			OPINION	

E4. How sure are you that you could get help for someone if you thought they were having a heart attack? Are you very sure, pretty sure, a little sure or not at all sure?

1	2	3	4	d	r
Very Sure	Pretty Sure	A Little Sure	Not At All Sure	DK/NO	REFUSED
-	-			OPINION	

E5. How sure are you that you could get help for yourself if you thought you were having a heart attack? Are you very sure, pretty sure, a little sure or not at all sure?

1	2	3	4	d	r
Very Sure	Pretty Sure	A Little Sure	Not At All Sure	DK/NO	REFUSED
				OPINION	

SECTION F: PERSONAL RISK PERCEPTION

F1. Compared to other [INSERT Women OR Men DEPENDING ON THEIR GENDER] your age, how likely do you think it is that you could have a heart attack in the next five years? Would that be <u>much less likely</u>, <u>somewhat less likely</u>, <u>about the same</u>, <u>somewhat more likely</u>, or <u>much more likely</u> than other [INSERT Women OR Men DEPENDING ON THEIR GENDER] your age?

1	2	3	4	5	d	r
Much Less	Somewhat	About the	Somewhat	Much More	DK	REFUSED
Likely	Less Likely	Same	More Likely	Likely		

SECTION G: BEHAVIORAL REHEARSAL/INTERPERSONAL DISCUSSION

G1. Have you ever talked with anyone about planning what to do in case you were having a heart attack?

1. NO → GO TO H1

d. DON'T KNOW 🗲 GO TO H1

- 2. YES r. REFUSED \rightarrow GO TO H1
- G1a. Whom did you talk with? [RECORD IN COLUMN A "1" OR "2" FOR EACH RESPONSE.]
- G1b. Did you talk with them within the past 3 months? [RECORD IN COLUMN A "1" OR "2" FOR EACH RESPONSE.]

		I	4	I	3
		NO	YES	NO	YES
1.	CO-WORKER/COLLEAGUE	1	2	1	2
2.	FRIEND	1	2	1	2
3.	HEALTH EDUCATOR	1	2	1	2
4.	NEIGHBOR	1	2	1	2
5.	NURSE	1	2	1	2
6.	OTHER FAMILY MEMBER (SPECIFY):	1	2	1	2
7.	OTHER HEALTH PROFESSIONAL	1	2	1	2
8.	PHYSICIAN	1	2	1	2
9.	SPOUSE	1	2	1	2
10.	OTHER (SPECIFY):	1	2	1	2

SECTION H: PROGRAM AWARENESS/NAME RECALL

- H1. In the past month, have you heard about any programs in your community that encourage people to get immediate medical care if they think they might be having a heart attack?
 - 1. NO → GO TO H1c

d. DON'T KNOW → GO TO H1c

2. YES ↓

r. REFUSED **→** GO TO H1c

H1a. Where do you recall hearing about that program? [CIRCLE "1" NO OR "2" YES FOR ALL SOURCES THAT APPLY BELOW.]

	SOURCE	NO	YES
1.	BILLBOARDS	1	2
2.	BOOK	1	2
3.	CHURCH	1	2
4.	CIVIC ORGANIZATION	1	2
5.	DOCTOR	1	2
6.	FAMILY MEMBER	1	2
7.	FRIEND, CO-WORKER	1	2
8.	HOSPITAL	1	2
9.	MAILING	1	2
10.	MAGAZINE	1	2
11.	MALL EVENT	1	2
12.	NEWSPAPER	1	2
13.	OTHER HEALTH PROFESSIONAL	1	2
14.	OTHER HEALTHCARE ORGANIZATION	1	2
15.	PAMPHLET	1	2
16.	PHARMACY POSTER/FLIER	1	2
17.	POSTER	1	2
18.	RADIO	1	2
19.	SCHOOL, CLASS, LECTURE	1	2
20.	SELF-HELP CLINIC OR GROUP	1	2
21.	SIGNS	1	2
22.	SOCIAL, RECREATION GROUP	1	2
23.	TELEVISION	1	2
24.	OTHER (SPECIFY):	1	2

H1b. Can you recall the name of the program? [PROBE FOR NAME, SLOGAN]

1. Heart Attack REAC	T → GO TO SECTION I	d.	CAN'T RECALL/ DON'T KNOW	→ GO TO SECTION I
2. ANY OTHER NAM (Specify):	ſE	r.	REFUSED	→ GO TO SECTION I

H1c. Here are three [NAMES/SLOGANS]. Do you recognize any of these?

		NO	YES
1.	COMMITT	1	2
2.	Heart Attack React	1	2
3.	Heart Alert	1	2

SECTION I: KNOWLEDGE

11. Now I'd like to read you some statements about heart health. Tell me whether each of the following statements is true, false, or you don't know:

		TRUE	FALSE	DK	REF
a.	Heart disease is the most common cause of death in women in the United States.	1	2	d	r
b.	Almost all heart attacks occur in people over age 65.	1	2	d	r
c.	Hospitals have drugs that reduce the damage done when a heart attack occurs.	1	2	d	r
d.	Younger African Americans have a greater danger of heart attacks than younger Whites.	1	2	d	r
e.	Younger Hispanic-Americans have a greater danger of heart attacks than younger Whites.	1	2	d	r

SECTION J: BELIEFS

Now I will read you some statements of opinion. Please tell me how you feel about each statement, do you strongly agree, agree, disagree, or strongly disagree? Here's the first statement.

[NOTE: IF RESPONDENT HAS DIFFICULTY, ASK: Do you <u>strongly agree</u> (agree, disagree, strongly disagree) that you would be embarrassed, etc.]

J1. Most people who think they're having a heart attack should drive themselves to the hospital.

Do you:

1	2	3	4	d	r
Strongly Agree	Agree	Disagree	Strongly	DK	REFUSED
			disagree		

J2. Most people who have heart attacks have crushing, severe chest pain. Do you:

1	2	3	4	d	r
Strongly Agree	Agree	Disagree	Strongly	DK	REFUSED
			disagree		

J3. Women rarely have heart attacks. Do you:

1	2	3	4	d	r
Strongly Agree	Agree	Disagree	Strongly disagree	DK	REFUSED

J4. If I have chest pain that doesn't stop after 15 minutes, I should get to the hospital as soon as possible. Do you:

1	2	3	4	d	r
Strongly Agree	Agree	Disagree	Strongly	DK	REFUSED
			disagree		

J5. I would be embarrassed to go to the hospital if I thought I was having a heart attack but I wasn't. Do you:

1	2	3	4	d	r
Strongly Agree	Agree	Disagree	Strongly	DK	REFUSED
			disagree		

J6. If I thought I was having a heart attack, I would wait until I was <u>very sure</u> before going to the hospital. Do you:

1	2	3	4	d	r
Strongly Agree	Agree	Disagree	Strongly	DK	REFUSED
			disagree		

J7. If I thought I was having a heart attack, I would rather have someone drive me to the hospital than have an ambulance come to my home. Do you:

1	2	3	4	d	r
Strongly Agree	Agree	Disagree	Strongly	DK	REFUSED
			disagree		

J8. Because of the cost of medical care, I would want to be absolutely sure I was having a heart attack before going to the hospital. Do you:

1	2	3	4	d	r
Strongly Agree	Agree	Disagree	Strongly	DK	REFUSED
			disagree		

J9. If I'm having chest pain and I'm not very sure if it's a heart attack, I should go to the hospital. Do you:

1	2	3	4	d	r
Strongly Agree	Agree	Disagree	Strongly	DK	REFUSED
			disagree		

J10. If I thought I was having a heart attack, I would go to the hospital right away. Do you:

1	2	3	4	d	r
Strongly Agree	Agree	Disagree	Strongly disagree	DK	REFUSED

Now I'd like to ask you about the signs and symptoms of a heart attack.

J11. What would you say are the signs or symptoms that someone may be having a heart attack? [CIRCLE "1" OR "2" FOR ALL THAT APPLY BELOW.] [PROBE: Anything else?]

		NO	YES
1.	ABDOMINAL PAIN	1	2
2.	ARM PAIN OR SHOULDER PAIN	1	2
3.	BACK PAIN	1	2
4.	CHEST PAIN	1	2
5.	CHEST PRESSURE	1	2
6.	CHEST TIGHTNESS	1	2
7.	CHEST DISCOMFORT [HEAVINESS, BURNING, TENDERNESS]	1	2
8.	COUGH	1	2
9.	DIZZINESS, LIGHTHEADEDNESS	1	2
10.	DON'T KNOW	1	2
11.	FEEL LOUSY/GENERAL BLAHNESS	1	2
12.	HEADACHE	1	2
13.	HEARTBURN/INDIGESTION/STOMACH PROBLEM	1	2
14.	IMPENDING DOOM	1	2
15.	JAW PAIN	1	2
16.	LOSS OF CONSCIOUSNESS/FAINTING	1	2
17.	NAUSEA/VOMITING	1	2
18.	NECK PAIN	1	2
19.	NUMBNESS/TINGLING IN ARM OR HAND	1	2
25.	PALE, ASHEN, LOSS/CHANGE OF COLOR	1	2
20.	PALPITATIONS/RAPID HEART RATE	1	2
21.	SHORTNESS OF BREATH/DIFFICULTY BREATHING	1	2
22.	SWEATING	1	2
23.	WEAKNESS/FATIGUE/FAINTNESS	1	2
24.	OTHER (SPECIFY):	1	2

J11a. Of the heart attack signs or symptoms you just mentioned, which one would you say is the most

important?

[CODE THE NUMBER FROM THE ABOVE TABLE CORRESPONDING TO THE MOST

IMPORTANT SYMPTOM STATED. CODE ONLY ONE NUMBER.]



SECTION K: PERSONAL HEALTH STATUS/HISTORY

The next few questions ask about your health.

K1. In general, would you say your health is:

	1 Excellent	2 Very Good	3 Good	4 Fair	5 Poor	d DON'T KNOW	r REFUSED	
K2.	Have you ever	had a heart attac	k?					
	1. NO			d. DON'T KN	WOW			
	2. YES			r. REFUSED				
K3.	Have your spou	use, your parents	, or a brother	or sister ever ha	d a heart atta	ck?		
	1. NO			d. DON'T KN	WOW			
	2. YES			r. REFUSED				
K4.	K4. Have any of your other relatives or close friends ever had a heart attack?							
	1. NO			d. DON'T KN	NOW			
	2. YES			r. REFUSED				
K5.	Have you ever been told by a doctor that you	have a heart condition?						
-----	--	---						
	1. NO	d. DON'T KNOW						
	2. YES	r. REFUSED						
K6.	Have you ever been told by a doctor that you	have diabetes?						
	1. NO	d. DON'T KNOW						
	2. YES	r. REFUSED						
K7.	Have you ever been told by a doctor that you	have high blood pressure?						
	1. NO	d. DON'T KNOW						
	2. YES	r. REFUSED						
K8.	Have you ever been told by a doctor that you	have high blood cholesterol?						
	1. NO	d. DON'T KNOW						
	2. YES	r. REFUSED						
K9.	Have you ever smoked cigarettes?							
	1. NO → GO TO SECTION L L	d. DON'T KNOW \rightarrow GO TO SECTION						
	2. YES	r. REFUSED → GO TO SECTION L						

VO-	TT			· · · · · · · ·	e past week?
куя	Have you	smoked a	cioarene	in the	e nast week /
11)u.	11000000	Sinonea a	orgarono	III UII	

1. NO	d. DON'T KNOW
2. YES	r. REFUSED

SECTION L: DEMOGRAPHICS

I have a few final questions. Please bear with me, but I am required to ask this:

L1. Could you please tell me if you are male or female?



L3. Do you consider yourself to be Hispanic or Latino? [PROBE: Of Spanish origin or descent?]

NO	1
YES	2

L4. Please tell me which group best describes your racial background:

White	1
Black/African American	2
Native American	3
Asian/Pacific Islander	4
OTHER	5
(SPECIFY):	

L5. What is the highest grade or year of school that you have completed?

ENTER HIGHEST GRADE COMPLETED OR NUMBER OF YEARS OF SCHOOL COMPLETED IF LESS THAN HIGH SCHOOL

COMPLETED HIGH SCHOOL	12
SOME COLLEGE	13
COMPLETED COLLEGE	14
SOME GRADUATE SCHOOL	15
COMPLETED GRADUATE SCHOOL	16
SOME TECHNICAL SCHOOL	17
COMPLETED TECHNICAL SCHOOL	18
SOME PROFESSIONAL SCHOOL	19
COMPLETED PROFESSIONAL SCHOOL	20
OTHER	21
(SPECIFY):	

L6. Please tell me the category that describes your <u>total</u> household income, <u>before taxes</u>, in the past year?

Less than \$10,000	1
\$10,000 - \$24,999	2
\$25,000 - \$39,999	3
\$40,000 - \$54,999	4
\$55,000 - \$69,999	5
\$70,000 or more	6
DON'T KNOW	d
REFUSED	r

L7. How long have you lived in your community?



- L8. What is your present marital status? [PROBE: READ CATEGORIES 1-5.]
 - 1. MARRIED
 - 2. LIVING WITH SIGNIFICANT OTHER/SOMEONE OTHER THAN A ROOMMATE
 - 3. DIVORCED/SEPARATED
 - 4. SINGLE
 - 5. WIDOWED
 - d. DON'T KNOW
 - r. REFUSED
- L9. Are you currently working for pay? [NOTE: INCLUDES SELF-EMPLOYED OR ON **TEMPORARY** DISABILITY LEAVE.]
 - 1. NO d. DON'T KNOW
 - 2. YES → GO TO L10 r. REFUSED
 - L9a. Which of the following best describes you? [CIRCLE ONE]
 - 1. Homemaker
 - 2. Retired
 - 3. Disabled
 - 4. Student
 - 5. Not currently employed
 - d. DON'T KNOW
 - r. REFUSED
- L10. Including yourself, how many people age 18 or older live in this household?

NUMBER OF PEOPLE:



L11....Which of the following kinds of health insurance do you have now?

		NO	YES	DK	REFUSED
a.	Medicare (the federal health insurance for people 65 or older or who are disabled)?	1	2	d	r
b.	Medicare supplement (additional insurance to Medicare that you buy yourself, such as Medex, Medigap, or AARP)?	1	2	d	r
c.	Medicaid (the state program for persons with incomes below a certain level)?	1	2	d	r
d.	Commercial or Private Insurance (such as Blue Cross, Ætna, Prudential, or Hancock)?	1	2	d	r
e.	An HMO (a Health Maintenance Organization) or an IPA (an Individual Practice Association)?	1	2	d	r
f.	VA benefits, CHAMPUS?	1	2	d	r
g.	Student Health Plan?	1	2	d	r
h.	Other state medical assistance or free care programs?	1	2	d	r
i.	Or something else. What is it? (SPECIFY):	1	2	d	r

NOTE: SKIP TO L12 IF "NO" TO ALL OF a-i ABOVE.

L11a. Does your insurance plan pay part of the following:

		NO	YES	DK	REFUSED
a.	Ambulance Service	1	2	d	r
b.	Visits to the Emergency Department	1	2	d	r

L12. Do you have a regular doctor or group of doctors?

1. NO \rightarrow GO TO L13 d. DON'T KNOW \rightarrow GO TO L13

2. YES

r. REFUSED → GO TO L13

L12a. Did you visit your doctor in the past year?

- 1. NO d. DON'T KNOW
- 2. YES r. REFUSED
- L13. Have you ever seen a cardiologist (a heart doctor)?
 - 1. NO \rightarrow GO TO L14 d. DON'T KNOW \rightarrow GO TO L14
 - 2. YES

r. REFUSED → GO TO L14

L13a. When was your most recent visit to this heart doctor? [PROBE: Your best guess will do.]



L14. Besides the number I dialed, are there any other non-business telephone numbers in this home?

1. NO	d. DON'T KNOW
2. YES	r. REFUSED

SECTION M: END OF SURVEY

Thank you very much for your help. Good bye.

M1. END TIME: : 1. AM 2. PM	M1.	END TIME:			:			1. AN	1	2. PM
-----------------------------	-----	-----------	--	--	---	--	--	-------	---	-------

N1.	Please rate how comfortable the Respondent was during the interview.							
	Not at all comfortable			Very	comfortable			
	1	2	3	4	5			
N2.	Please rate how coop	perative the Respo	ondent was durir	ng the interview.				
	Not at all cooperative			Very coopera				
	1	2	3	4	5			
N 3.	In general, how diff	icult was it for the	e Respondent to	answer the intervi	ew questions?			
	Not at all difficult			Ver				
	1	2	3	4	5			
N4.	Did the Respondent	have difficulty an	swering any of	the questions?				
	1. NO		2.	YES \rightarrow Which	ones?			
N5.	Do you feel that the	Respondent gave	inaccurate or m	isleading informati	on on any of the questi	ons?		
	1. NO				ones?			
N6.	Were there any unus concentrating or the	sual circumstances re were frequent in	at the time of t	he interview (e.g.,	R had difficulty hearing	r >>		
	1. NO		2.		e			
N7.	Did the Respondent	have a language o	or literacy proble	em?				
	1. NO		2.	YES \rightarrow Which q	uestions were affected?			

SECTION N: INTERVIEWER COMMENTS

IN-PATIENT FOLLOW-UP TELEPHONE SURVEY



R E A C T IN-PATIENT TELEPHONE FOLLOW-UP SURVEY

TELEPHONE INTERVIEW	July 3, 1996
RESPONDENT ID:	-
DATE: MONTH DAY YEAR	
INTERVIEWER ID:	
START TIME: 1. AM 2. P	Μ

READ TO ALL RESPONDENTS TO BE INTERVIEWED BY TELEPHONE

I am calling on behalf of [UNIVERSITY]*. The University is participating in a study to learn more about people with chest pain or similar symptoms who seek medical care.

Before we begin, let me remind you that your participation is voluntary and will help us learn more about the treatment of heart disease. You may ask to stop the interview at any time. If there is a question that you cannot or do not wish to answer, please tell me and I will go on to the next question.

Any information that you provide is strictly confidential. Only research staff will see your responses. For quality assurance, my supervisor may monitor this call.

If you have any questions or concerns about the survey, you may call the [CONTACT PERSON] at [UNIVERSITY]*, or Sharyne Donfield of our Institutional Review Board at the New England Research Institutes. The toll free number for NERI is 1-800-775-6374 x523. There will be absolutely no charge to you.

*SEE LIST

Data Entered: 1/4

INTRODUCTION

I'll be asking about your visit to [HOSPITAL] on [DATE OF EVENT], then I'll ask you more general questions about heart health and yourself.

SECTION A: SITUATIONAL CONTEXT

A1. What problems or complaints did you experience that led you to go to the Emergency Room?

[PROBE: Anything else?] [CIRCLE "1" OR "2" FOR EACH RESPONSE.]

leuve	LE I OK 2 FOR EACH RESPONSE.]	NO	YES
a.	ABDOMINAL PAIN	1	2
b.	ARM PAIN OR SHOULDER PAIN	1	2
c.	BACK PAIN	1	2
d.	CHEST PAIN	1	2
e.	CHEST PRESSURE	1	2
f.	CHEST TIGHTNESS	1	2
g.	CHEST DISCOMFORT(HEAVINESS, BURNING, TENDERNESS)	1	2
h.	COUGH	1	2
i.	DIZZINESS, LIGHTHEADEDNESS	1	2
j.	FEEL LOUSY/GENERAL BLAHNESS	1	2
k.	HEADACHE	1	2
1.	HEARTBURN/INDIGESTION/STOMACH PROBLEM	1	2
m.	IMPENDING DOOM	1	2
n.	JAW PAIN	1	2
0.	LOSS OF CONSCIOUSNESS/FAINTING	1	2
p.	NAUSEA/VOMITING	1	2
q.	NECK PAIN	1	2
r.	NUMBNESS/TINGLING IN ARM OR HAND	1	2
s.	PALPITATIONS/RAPID HEART RATE	1	2
t.	SHORTNESS OF BREATH/DIFFICULTY BREATHING	1	2
u.	SWEATING	1	2
v.	WEAKNESS/FATIGUE/FAINTNESS	1	2
W.	OTHER (SPECIFY):	1	2

NO VES

A2. When did the problems that led you to go to the Emergency Room start? [PROBE: On what date and time?]

DATE:				
	MONTH	DAY	YEAR	
 IF RESPONDENT "ED VISIT DATE" OF problems may go on for the Emergency Room - 	GIVES A DAT N CONTACT R or a long time.	ECORD, SAY But, what happe	ORE THAN 1 W : "Yes, I unders ened that made y	tand that the
2) IF RESPONDENT start the same day that IF RESPONDENT SA RECORD. IF RESPO before?"	you went to the YS SAME DAY	Emergency Ro Y, RECORD D	oom, the day before ATE LISTED O	ore, or was it earlier?" N CONTACT
TIME:	:		1. AM	2. PM
A2a. [IF UNABLI minutes before complaints start?" Of arrive at the Emerger	e you arrived at R "How long at	the Emergency	Room did the pr	roblems or
INTERVIEWER NOTES: 0				

A3. Before calling the ambulance or going to the hospital, did you take any action or do anything for these problems or complaints?
[CIRCLE "1" OR "2" FOR EACH RESPONSE.]
[PROBE IF NECESSARY: Call or talk to anyone? Take medication? Did you do anything else?] [PROBE: Anything else?]

		NO	YES
a.	DRINK ALCOHOL	1	2
b.	TAKE ANTACID	1	2
c.	TAKE ASPIRIN/OTHER PAIN MEDICATION	1	2
d.	TAKE NITROGLYCERIN	1	2
e.	TAKE TRANQUILIZER OR RELAXING DRUG	1	2
f.	TAKE OTHER MEDICATION (SPECIFY):	1	2
g.	TALK TO COWORKER	1	2
h.	TALK TO DOCTOR	1	2
i.	TALK TO FAMILY MEMBER	1	2
j.	TALK TO FRIEND	1	2
k.	TALK TO HOSPITAL PERSONNEL	1	2
1.	TALK TO NURSE	1	2
m.	TALK TO OTHER PERSON (SPECIFY):	1	2
n.	CALLED DOCTOR	1	2
0.	CALLED HEALTH CARE PLAN	1	2
p.	CALL OTHER (SPECIFY):	1	2
q.	ACCEPTED SYMPTOMS/SITUATION	1	2
r.	DID NOTHING TO COPE/RESPOND TO SYMPTOMS	1	2
S.	DISENGAGED SELF FROM SYMPTOMS BY DOING/THINKING SOMETHING ELSE	1	2
t.	IGNORED SYMPTOMS	1	2
u.	REDEFINED SYMPTOMS/SITUATION AS NOT THREATENING	1	2
v.	REST/STOP ACTIVITY	1	2
W.	WAITED TO SEE WHAT WOULD HAPPEN	1	2
x.	OTHER ACTIVITY (SPECIFY):	1	2

A4. What did you <u>think</u> was causing the problems or complaints that led you to go to the Emergency Room?
[CIRCLE "1" OR "2" FOR EACH RESPONSE.]
[PROBE: Anything else?]

-		NO	YES
a.	ANGINA	1	2
b.	ANXIETY	1	2
c.	ARTHRITIS	1	2
d.	BREATHING OR LUNG PROBLEM	1	2
e.	DON'T KNOW/NO IDEA	1	2
f.	FLU/COLD	1	2
g.	HEART ATTACK	1	2
h.	HEARTBURN/INDIGESTION/STOMACH PROBLEM	1	2
i.	HEART PROBLEM/HEART CONDITION	1	2
j.	MUSCLE INJURY/PAIN	1	2
k.	OVEREXERTION	1	2
1.	ULCER	1	2
m.	OTHER (SPECIFY):	1	2

- A5. Were you alone when the **decision** was made to go to the Emergency Room?
 - 1. NO 2. YES
 - A5a. Who made the **decision** to go to the Emergency Room? [RECORD IN COLUMN A5a "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anyone else?]
 - A5b. Did anyone encourage or support your decision to go to the Emergency Room? [RECORD IN COLUMN A5b "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anyone else?]

		A5a. DECISION		A5b. ENC	OURAGE
		NO	YES	NO	YES
a.	CASUAL ACQUAINTANCE	1	2	1	2
b.	CO-WORKER	1	2	1	2
c.	HOSPITAL PERSONNEL	1	2	1	2
d.	NEIGHBOR	1	2	1	2
e.	NOBODY	1	2	1	2
f.	OTHER FAMILY	1	2	1	2
g.	PARAMEDICS	1	2	1	2
h.	PHYSICIAN	1	2	1	2
i.	PHYSICIAN'S OFFICE STAFF	1	2	1	2
j.	SPOUSE	1	2	1	2
k.	STRANGER	1	2	1	2
1.	YOURSELF	1	2	1	2
m.	OTHER (SPECIFY):	1	2	1	2

A6. Did you or someone else call 911 or an ambulance?

 1. NO →
 A6c. Were there any particular reasons why you did not call 911 ambulance?

 or an
 [CIRCLE "1" OR "2" FOR EACH RESPONSE.]

[PROBE: Anything else?]

		NO	YES
a.	COST/NO INSURANCE	1	2
b.	FASTER ALTERNATIVE FOR GETTING TO THE HOSPITAL	1	2
c.	EMBARRASSED TO CALL 911	1	2
d.	SYMPTOMS NOT SEVERE/WORRISOME ENOUGH	1	2
e.	OTHER (SPECIFY):	1	2

Г

2. YES

Ţ

A6a. On what date and time, did you call 911 or an ambulance?



INTERVIEWER NOTE

1) IF RESPONDENT GIVES A DATE THAT IS MORE THAN 1 WEEK PRIOR TO "ED VISIT DATE" ON CONTACT RECORD, SAY: "Yes, I understand that the problems may go on for a long time. **But**, what happened that made you **call** 911 or an ambulance to go to the Emergency Room - that's the date we're looking for."

2) IF RESPONDENT CANNOT PROVIDE ANY DATE AT ALL: "Did you call 911 or an ambulance on the same day that you went to the Emergency Department, the day before, or was it earlier?" IF RESPONDENT SAYS SAME DAY, RECORD DATE LISTED ON CONTACT RECORD. IF RESPONDENT SAYS EARLIER ASK: "When?" OR "How many days before?"

A6b. [IF UNABLE TO PROVIDE CLOCK TIME, PROBE: "How many hours or minutes before you arrived at the Emergency Room did you call 911 or an ambulance?" OR "How long after you called 911 or an ambulance did you arrive at the Emergency Room?"]



INTERVIEWER NOTE:

IF TIME PERIOD IS BEFORE TIME PROVIDED IN A2 SERIES (PAGE 3): [PROBE: Let me see, when I asked when the problems that led you to the Emergency Room started you said [DATE AND TIME]...[REPEAT A6a.]] A7. On what date and time did you leave for the Emergency Room?



- A8. How did you get to the Emergency Room?
 - 1. ARRIVED BY AMBULANCE
 - 2. HELICOPTER
 - 3. ARRIVED BY FIRE OR POLICE DEPARTMENT
 - 4. DROVE MYSELF (PRIVATE CAR)
 - 5. SOMEONE DROVE ME (PRIVATE CAR)
 - 6. TOOK PUBLIC TRANSPORTATION (TAXI, BUS, ETC.)
 - 7. OTHER (SPECIFY):

A9. We've been talking about the problems or complaints that led you to go to the Emergency Room. In the week before you went to the Emergency Room, did you have any other related symptoms?

- 1. NO → GO TO SECTION B.
- 2. YES → GO TO A9a.

A9a. What were those symptoms? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anything else?]

		NO	YES
a.	ABDOMINAL PAIN	1	2
b.	ARM PAIN OR SHOULDER PAIN	1	2
c.	BACK PAIN	1	2
d.	CHEST PAIN	1	2
e.	CHEST PRESSURE	1	2
f.	CHEST TIGHTNESS	1	2
g.	CHEST DISCOMFORT(HEAVINESS, BURNING, TENDERNESS)	1	2
h.	COUGH	1	2
i.	DIZZINESS, LIGHTHEADEDNESS	1	2
j.	FEEL LOUSY/GENERAL BLAHNESS	1	2
k.	HEADACHE	1	2
1.	HEARTBURN/INDIGESTION/STOMACH PROBLEM	1	2
m.	IMPENDING DOOM	1	2
n.	JAW PAIN	1	2
0.	LOSS OF CONSCIOUSNESS/FAINTING	1	2
p.	NAUSEA/VOMITING	1	2
q.	NECK PAIN	1	2
r.	NUMBNESS/TINGLING IN ARM OR HAND	1	2
S.	PALPITATIONS/RAPID HEART RATE	1	2
t.	SHORTNESS OF BREATH/DIFFICULTY BREATHING	1	2
u.	SWEATING	1	2
v.	WEAKNESS/FATIGUE/FAINTNESS	1	2
W.	OTHER (SPECIFY):	1	2

-

What did you <u>think</u> was causing <u>these</u> earlier symptoms? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] A10. [PROBE: Anything else?]

L	BE. Anything else?	NO	YES
a.	ANGINA	1	2
b.	ANXIETY	1	2
c.	ARTHRITIS	1	2
d.	BREATHING OR LUNG PROBLEM	1	2
e.	DON'T KNOW/NO IDEA	1	2
f.	FLU/COLD	1	2
g.	HEART ATTACK	1	2
h.	HEARTBURN/INDIGESTION/STOMACH PROBLEM	1	2
i.	HEART PROBLEM/HEART CONDITION	1	2
j.	MUSCLE INJURY/PAIN	1	2
k.	OVEREXERTION	1	2
1.	ULCER	1	2
m.	OTHER (SPECIFY):	1	2

SECTION B: BARRIERS/FACILITATORS TO CARE SEEKING

Many things could affect a person's decision to go to the hospital. A variety of things could speed you up or slow you down. Thinking back to when you experienced the symptoms we were talking about, I'd like to ask you about the things that affected your decision to go to the hospital.

B1. Did any factors or things cause you to go quickly to the hospital?

- 1. NO → GO TO B2.
- 2. YES

B1a. What were those factors? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anything that somebody said or anything that you felt?] [PROBE: Anything else?]

		NO	YES
a.	ADVICE FROM DOCTOR OR HEALTH CARE PROVIDER	1	2
b.	ADVICE FROM FAMILY MEMBERS	1	2
c.	ADVICE FROM FRIENDS OR COWORKERS	1	2
d.	CERTAINTY THAT THE CAUSE OF SYMPTOMS WAS A HEART ATTACK	1	2
e.	HAD MEDICAL INSURANCE	1	2
f.	HAD SIMILAR SYMPTOMS BEFORE	1	2
g.	HAD TOO MANY RESPONSIBILITIES TO RISK NOT BEING SEEN	1	2
h.	KNEW I HAD A SERIOUS ILLNESS/PROBLEM	1	2
i.	PAIN GOT WORSE	1	2
j.	SYMPTOMS WERE SEVERE OR VERY DISTURBING	1	2
k.	OTHER (SPECIFY):	1	2

Γ

B2. Did any factors or things cause you to **wait** to go to the hospital?

1. NO \rightarrow **GO TO SECTION C.**

2. YES ↓

B2a. What were those factors? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anything that someone said or anything you felt?] [PROBE: Anything else?]

		NO	YES
a.	ADVICE FROM DOCTOR OR HEALTH CARE PROVIDER	1	2
b.	ADVICE FROM FAMILY MEMBERS	1	2
c.	ADVICE FROM FRIENDS OR COWORKERS	1	2
d.	AFRAID OF POSSIBLE TREATMENTS	1	2
e.	CHILDCARE	1	2
f.	COST OF MEDICAL CARE	1	2
g.	DID NOT THINK SYMPTOMS WERE RELATED TO HEART DISEASE	1	2
h.	EMBARRASSED ABOUT BEING A FALSE ALARM	1	2
i.	FEAR OF HOSPITALS/DOCTORS	1	2
j.	HAD SIMILAR SYMPTOMS BEFORE THAT WENT AWAY	1	2
k.	LACK OF CONFIDENCE IN HOSPITAL STAFF	1	2
1.	LACK OF MEDICAL INSURANCE	1	2
m.	NOT SERIOUS/ SEVERE SYMPTOMS/ ILLNESS/ PROBLEMS	1	2
n.	WAIT TO HEAR BACK FROM HEALTH CARE PROVIDER/PLAN	1	2
0.	WOULD LOSE PAY FROM WORK	1	2
p.	OTHER (SPECIFY):	1	2

г

1

SECTION C: THE HOSPITALIZATION AND CARDIAC REHABILITATION

Now I have some questions I would like to ask you about your hospitalization on [DATE].

- C1. While you were in the hospital, did anyone talk with you about the signs and symptoms of a heart attack?
 - 1. NO \rightarrow GO TO C2. -8. DON'T KNOW \rightarrow GO TO C2.

2. YES

-2. REFUSED → GO TO C2.

Г

1

C1a. Who was it? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anyone else?]

		NO	YES
a.	CARDIAC REHABILITATION STAFF	1	2
b.	CORONARY CARE UNIT STAFF	1	2
c.	COWORKER/COLLEAGUE	1	2
d.	DOCTOR	1	2
e.	DON'T KNOW/DON'T REMEMBER	1	2
f.	EMERGENCY ROOM STAFF	1	2
g.	FRIEND	1	2
h.	NEIGHBOR	1	2
i.	NURSE	1	2
j.	OTHER FAMILY MEMBER	1	2
k.	OTHER HEALTH PROFESSIONAL	1	2
1.	SPOUSE	1	2
m.	OTHER (SPECIFY):	1	2

- C2. While you were in the hospital, did anyone talk with you about the importance of getting to the hospital quickly if you thought you might be having a heart attack in the future?
 - 1. NO → GO TO C3.

-8. DON'T KNOW → GO TO C3.

Г

Τ

٦

2. YES

-2. REFUSED → GO TO C3.

C2a. Who was it? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anyone else?]

		NO	YES
a.	CARDIAC REHABILITATION STAFF	1	2
b.	CORONARY CARE UNIT STAFF	1	2
c.	COWORKER/COLLEAGUE	1	2
d.	DOCTOR	1	2
e.	DON'T KNOW/DON'T REMEMBER	1	2
f.	EMERGENCY ROOM STAFF	1	2
g.	FRIEND	1	2
h.	NEIGHBOR	1	2
i.	NURSE	1	2
j.	OTHER FAMILY MEMBER	1	2
k.	OTHER HEALTH PROFESSIONAL	1	2
1.	SPOUSE	1	2
m.	OTHER (SPECIFY):	1	2

C3. While you were in the hospital, did anyone give you anything to read or show you a video about heart attacks?

1. NO-8. DON'T KNOW2. YES-2. REFUSED

IF R FROM TUSCALOOSA (ID# BEGINS IN "1-1") ONLY; SKIP TO D1.

C4. In terms of your experience with the hospital staff, how would you rate each of the following? [REPEAT RESPONSE CHOICES FOR EACH EXPLANATION.]

[RECORD "8" FOR NO EXPLANATION GIVEN.]

	How was	Excellent	Very Good	Good	Fair	Poor	NA
a.	The explanation of what caused your problems.	1	2	3	4	5	8
b.	The explanation of what was done for you.	1	2	3	4	5	8
c.	The explanation of what to do if your problems returned after you left the hospital.	1	2	3	4	5	8

SECTION D: BEHAVIORAL REHEARSAL AND PROVIDER/BYSTANDER INTERACTION

- D1. Before your recent hospital stay, had you ever talked with anyone about planning what to do in case you were having a heart attack?
 - 1. NO \rightarrow GO TO E1. -8. DON'T KNOW \rightarrow GO TO E1.
 - 2. YES ↓

-2. REFUSED → GO TO E1.

- D1a. Whom did you talk with? [RECORD IN COLUMN A "1" OR "2" FOR EACH RESPONSE.]
- D1b. Did you talk with them during the 6 months before your hospital stay? [RECORD IN COLUMN B "1" OR "2" FOR EACH RESPONSE.]

		Α		I	3
		NO	YES	NO	YES
1.	CO-WORKER/COLLEAGUE	1	2	1	2
2.	FRIEND	1	2	1	2
3.	NEIGHBOR	1	2	1	2
4.	NURSE	1	2	1	2
5.	OTHER FAMILY MEMBER	1	2	1	2
6.	OTHER HEALTH PROFESSIONAL	1	2	1	2
7.	PHYSICIAN	1	2	1	2
8.	SPOUSE	1	2	1	2
9.	OTHER (SPECIFY):	1	2	1	2

SECTION E: POST-HOSPITAL DISCHARGE

Now,	I would like to ask you a few questions about	at what happened after you left the hospital.				
E1.	Since you left the hospital, have you gone to a cardiac rehabilitation program?					
	1. NO	-8. DON'T KNOW				
	2. YES	-2. REFUSED				
E2. your	Since you left the hospital, has a case mana home?	ager, nurse, or nurse practitioner visited you at				
	1. NO	-8. DON'T KNOW				
	2. YES	-2. REFUSED				
E3.	Since you left the hospital, have you met w	with a cardiologist or heart doctor?				
	1. NO	-8. DON'T KNOW				
	2. YES	-2. REFUSED				
E4.	Since you left the hospital, have you seen y	your primary care doctor?				
	1. NO	-8. DON'T KNOW				

2. YES -2. REFUSED

E5. Since you left the hospital, did anyone talk with you about the signs and symptoms of a heart attack to watch for in the future?

1. NO → GO TO E6.

-8. DON'T KNOW → GO TO E6.

Г

٦

2. YES ♥ -2. REFUSED → GO TO E6.

E5a. Who was it? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anyone else?]

		NO	YES
a.	CARDIAC REHABILITATION STAFF PERSON	1	2
b.	CASE MANAGER	1	2
c.	COWORKER/COLLEAGUE	1	2
d.	DOCTOR - CARDIOLOGIST, HEART	1	2
e.	DOCTOR - PRIMARY CARE, GENERAL PRACTITIONER	1	2
f.	DOCTOR - CANNOT SPECIFY	1	2
g.	DON'T KNOW/DON'T REMEMBER	1	2
h.	FRIEND	1	2
i.	NEIGHBOR	1	2
j.	NURSE OR NURSE PRACTITIONER	1	2
k.	OTHER FAMILY MEMBER	1	2
1.	OTHER HEALTH PROFESSIONAL	1	2
m.	SPOUSE	1	2
n.	OTHER (SPECIFY):	1	2

E6. Since you left the hospital, did anyone talk with you about the importance of getting to the hospital quickly in the future if you thought you might be having a heart attack?

1. NO \rightarrow GO TO SECTION F. SECTION F. -8. DON'T KNOW **→ GO TO**

2. YES

J

-2. REFUSED → GO TO SECTION F.

Г

E6a. Who was it? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anyone else?]

		NO	YES
a.	CARDIAC REHABILITATION STAFF PERSON	1	2
b.	CASE MANAGER	1	2
c.	COWORKER/COLLEAGUE	1	2
d.	DOCTOR - CARDIOLOGIST, HEART	1	2
e.	DOCTOR - PRIMARY CARE, GENERAL PRACTITIONER	1	2
f.	DOCTOR - CANNOT SPECIFY	1	2
g.	DON'T KNOW/DON'T REMEMBER	1	2
h.	FRIEND	1	2
i.	NEIGHBOR	1	2
j.	NURSE OR NURSE PRACTITIONER	1	2
k.	OTHER FAMILY MEMBER	1	2
1.	OTHER HEALTH PROFESSIONAL	1	2
m.	SPOUSE	1	2
n.	OTHER (SPECIFY):	1	2

SECTION F: PREPARATION AND SYMPTOM KNOWLEDGE

F1. Have you talked with a spouse (husband or wife) or family member about what you would do if you thought you were having a heart attack?

1. NO	-8. DON'T KNOW
2. YES	-2. REFUSED

F2. Have you talked with a neighbor, friend, colleague, or community health worker about what you would do if you thought you were having a heart attack?

1. NO	-8. DON'T KNOW
2. YES	-2. REFUSED

F3. What would you say are the signs or symptoms that someone may be having a heart attack?

[CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anything else?]

		NO	YES
a.	ABDOMINAL PAIN	1	2
b.	ARM PAIN OR SHOULDER PAIN	1	2
c.	BACK PAIN	1	2
d.	CHEST PAIN	1	2
e.	CHEST PRESSURE	1	2
f.	CHEST TIGHTNESS	1	2
g.	CHEST DISCOMFORT(HEAVINESS, BURNING, TENDERNESS)	1	2
h.	COUGH	1	2
i.	DIZZINESS, LIGHTHEADEDNESS	1	2
j.	DON'T KNOW/NO IDEA	1	2
k.	FEEL LOUSY/GENERAL BLAHNESS	1	2
1.	HEADACHE	1	2
m.	HEARTBURN/INDIGESTION/STOMACH PROBLEM	1	2
n.	IMPENDING DOOM	1	2
0.	JAW PAIN	1	2
p.	LOSS OF CONSCIOUSNESS/FAINTING	1	2
q.	NAUSEA/VOMITING	1	2
r.	NECK PAIN	1	2
s.	NUMBNESS/TINGLING IN ARM OR HAND	1	2
t.	PALPITATIONS/RAPID HEART RATE	1	2
u.	SHORTNESS OF BREATH/DIFFICULTY BREATHING	1	2
v.	SWEATING	1	2
w.	WEAKNESS/FATIGUE/FAINTNESS	1	2
X.	OTHER (SPECIFY):	1	2

F4. Do you feel you know enough about what to do if you think you might be having a heart attack?



SECTION G: SELF-EFFICACY

G1. How sure are you that you could recognize the signs or symptoms of a heart attack in someone else? Are you very sure, pretty sure, a little sure, or not at all sure?

1	2	3	4	-8	-2
Very Sure	Pretty Sure	A Little Sure	Not At All Sure	DK/NO OPINION	REFUSED

G2. How sure are you that you could recognize the signs or symptoms of a heart attack in yourself? Are you very sure, pretty sure, a little sure, or not at all sure?

1	2	3	4	-8	-2
Very Sure	Pretty Sure	A Little Sure	Not At All Sure	DK/NO OPINION	REFUSED

G3. How sure are you that you could tell the difference between the signs or symptoms of a heart

attack and other medical problems? Are you <u>very sure</u>, <u>pretty sure</u>, <u>a little sure</u>, or <u>not at all sure</u>?

1	2	3	4	-8	-2
Very Sure	Pretty Sure	A Little Sure	Not At All Sure	DK/NO OPINION	REFUSED

SECTION H: BELIEFS

H1. Compared to other [MEN/WOMEN] your age, how likely do you think it is that you could have a heart attack in the next five years? Would that be <u>much less likely</u>, <u>somewhat less likely</u>, <u>about the same</u>, <u>somewhat more likely</u> or <u>much more likely</u> than other [MEN/WOMEN] your age?

1	2	3	4	5	-8	-2
Much Less Likely	Somewhat Less Likely	About the Same	Somewhat More Likely	Much More Likely	DON'T KNOW	REFUSED

Now I will read you some statements of opinion. Please tell me how you feel about each statement. Do you <u>strongly agree</u>, <u>agree</u>, <u>disagree</u>, or <u>strongly disagree</u>? Here's the first statement. [NOTE: IF RESPONDENT HAS DIFFICULTY, ASK: Do you <u>strongly agree</u> (agree, disagree, strongly disagree) that you would be embarrassed, etc.]

H2. I would be embarrassed to go to the hospital if I thought I was having a heart attack but I wasn't.

Do you:

1	2	3	4	-8	-2
Strongly Agree	Agree	Disagree	Strongly Disagree	DON'T KNOW	REFUSED

H3. If I thought I was having a heart attack, I would wait until I was <u>very sure</u> before going to hospital. Do you:

1	2	3	4	-8	-2
Strongly Agree	Agree	Disagree	Strongly Disagree	DON'T KNOW	REFUSED

H4. If I thought I was having a heart attack, I would rather have someone drive me to the hospital than have an ambulance come to my home. Do you:

1	2	3	4	-8	-2
Strongly Agree	Agree	Disagree	Strongly Disagree	DON'T KNOW	REFUSED

SECTION I: KNOWLEDGE

I1. Now I'd like to read you some statements about heart health. Tell me whether each of the following statements is true, false, or you don't know:

		True	False	DON'T KNOW	REFUSED
a.	Heart disease is the most common cause of death in women in the United States.	1	2	-8	-2
b.	Almost all heart attacks occur in people over age 65.	1	2	-8	-2
c.	Hospitals have drugs that reduce the damage done when a heart attack occurs.	1	2	-8	-2
d.	Younger African Americans have a greater danger of heart attacks than younger Whites.	1	2	-8	-2
e.	Younger Hispanic-Americans have a greater danger of heart attacks than younger Whites.	1	2	-8	-2

SECTION J: PRE-HOSPITAL AWARENESS OF EDUCATIONAL CAMPAIGN

- J1. Before you went to the hospital on [DATE], were you aware of any programs in your community that encourage people to get immediate medical care if they think they might be having a heart attack?
 - 1. NO → GO TO J1d.
 - 2. YES → GO TO J1a.

J1a. Where do you recall hearing about that program? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anywhere else?]

	SOURCE	NO	YES
1.	BILLBOARDS	1	2
2.	BOOK	1	2
3.	CHURCH	1	2
4.	CIVIC ORGANIZATION	1	2
5.	DOCTOR	1	2
6.	FAMILY MEMBER	1	2
7.	FRIEND, CO-WORKER	1	2
8.	HOSPITAL	1	2
9.	MAILING	1	2
10.	MAGAZINE	1	2
11.	MALL EVENT	1	2
12.	NEWSPAPER	1	2
13.	OTHER HEALTH PROFESSIONAL	1	2
14.	OTHER HEALTH CARE ORGANIZATION	1	2
15.	PAMPHLET	1	2
16.	PHARMACY POSTER/FLIER	1	2
17.	POSTER	1	2
18.	RADIO	1	2
19.	SCHOOL, CLASS, LECTURE	1	2
20.	SELF-HELP CLINIC OR GROUP	1	2
21.	SIGNS	1	2
22.	SOCIAL, RECREATION GROUP	1	2
23.	TELEVISION	1	2
24.	OTHER (SPECIFY):	1	2

- J1b. Can you recall the name of the program? [PROBE FOR NAME, SLOGAN.]
 - 1. Heart Attack REACT ↓

J1c. Did you feel this program had any effect on your decision to go to the hospital? 1. NO 2. YES \rightarrow GO TO SECTION K.

- 2. ANY OTHER NAME Please specify: ______
 J1c. Did you feel this program had any effect on your decision to go to the hospital?
 1. NO
 2. YES → GO TO J1d.
- -8. CAN'T RECALL/DON'T KNOW \checkmark
- J1d. Here are the names of three programs. Do you recognize any of these?

		NO	YES
1.	COMMIT	1	2
2.	Heart Attack REACT	1	2
3.	Heart Alert	1	2

SECTION K: PERSONAL HEALTH STATUS/HISTORY

K1.	In general, would you say your health is:							
	1	2	3	4	5	-8	-2	
	Excellent	Very Good	Good	Fair	Poor	DON'T KNOW	REFUSED	
K2.		vere admitted to cholesterol lev		had you ever	been told by a	a doctor that ye	ou had	
	1. NO			-8. DON"	T KNOW			
	2. YES			-2. REFU	SED			
K3. hospit	Did you even talization?	have chest pai	ins, pressure, t	ightness, or d	iscomfort <u>bef</u>	ore this		
	1. NO			-8. DON'	T KNOW			
	2. YES			-2. REFU	SED			
K4.	Have your pa	arents, brother	or sister ever l	nad a heart att	ack?			
	1. NO			-8. DON"	Γ KNOW			
	2. YES			-2. REFU	SED			
K5.	Have you <u>ev</u>	<u>er</u> smoked a cig	garette?					
	1. NO → L.	GO TO SECTI	ON L.	-8. DON"	T KNOW →	GO TO SEC	CTION	
	2. YES ↓			-2. REFU	SED → GO) TO SECTIO	N L.	
	K5a. Did y	vou smoke a cig	garette in the v	veek before yo	ou went to the	e hospital?		
	1. N	0		-8. DON'	Γ KNOW			
	2. Y	ES		-2. REFU	SED			

SECTION L: DEMOGRAPHICS

Finally, I have some general background questions about yourself.

L1. Do you consider yourself to be Hispanic or Latino? [PROBE: Of Spanish origin or descent?]

NO	1
YES	2

L2. Please tell me which group best describes your racial background:

White	1
Black/African American	2
Native American	3
Asian/Pacific Islander	4
OTHER	5
(SPECIFY):	_

- L3. What is your present marital status? [PROBE: READ CATEGORIES 1-5.]
 - 1. MARRIED \rightarrow GO TO L5.
 - 2. LIVING WITH SIGNIFICANT OTHER/ SOMEONE OTHER THAN A ROOMMATE → GO TO L5.
 - 3. SINGLE
 - 4. DIVORCED/SEPARATED
 - 5. WIDOWED
 - -8. DON'T KNOW
 - -2. REFUSED
- L4. Do you live alone?
 - 1. NO

- -8. DON'T KNOW
- 2. YES -2. REFUSED

L5. Are you currently working for pay? [NOTE: INCLUDES SELF-EMPLOYED OR ON **TEMPORARY** DISABILITY LEAVE.]
- 1. NO -8. DON'T KNOW
- 2. YES \rightarrow GO TO L6. -2. REFUSED
- L5a. Which one of the following best describes you? [CIRCLE ONE.]
 - 1. Homemaker
 - 2. Retired
 - 3. Disabled
 - 4. Student
 - 5. Not currently employed
- L6. What is the highest grade or year of school that you have completed?

ENTER HIGHEST GRADE COMPLETED OR NUMBER OF YEARS OF SCHOOL COMPLETED IF LESS THAN HIGH SCHOOL

	i
COMPLETED HIGH SCHOOL	12
SOME COLLEGE	13
COMPLETED COLLEGE	14
SOME GRADUATE SCHOOL	15
COMPLETED GRADUATE SCHOOL	16
SOME TECHNICAL SCHOOL	17
COMPLETED TECHNICAL SCHOOL	18
SOME PROFESSIONAL SCHOOL	19
COMPLETED PROFESSIONAL SCHOOL	20
OTHER (SPECIFY):	21

L7..... Which of the following kinds of health insurance do you have now?

		NO	YES	DK	REFUSED
a.	Medicare (the federal health insurance for people 65 or older or who are disabled)?	1	2	-8	-2
b.	Medicare supplement (additional insurance to Medicare that you buy yourself, such as Medex, Medigap, or AARP)?	1	2	-8	-2
c.	Medicaid (the state program for persons with incomes below a certain level)?	1	2	-8	-2
d.	Commercial or Private Insurance (such as Blue Cross, Ætna, Prudential, or Hancock)?	1	2	-8	-2
e.	An HMO (a Health Maintenance Organization) or an IPA (an Individual Practice Association)?	1	2	-8	-2
f.	VA benefits, CHAMPUS?	1	2	-8	-2
g.	Student Health Plan?	1	2	-8	-2
h.	Other state medical assistance or free care programs?	1	2	-8	-2
i.	Or something else. What is it? (SPECIFY):	1	2	-8	-2

NOTE: SKIP L8 IF NO TO ALL (a-i) ABOVE.

L8. Does your insurance plan pay for any part of the following:

		NO	YES	DK	REFUSED
a.	Ambulance Service	1	2	-8	-2
b.	Visits to the Emergency Department	1	2	-8	-2

L9. Do you have a regular doctor or group of doctors?

1. NO → GO TO L10.	-8. DON'T KNOW → GO TO L10.
2. YES	-2. REFUSED → GO TO L10.
L9a. Did you visit your doctor in the yea	ar prior to this hospitalization?
1. NO	-8. DON'T KNOW
2. YES	-2. REFUSED
Had you ever seen a cardiologist (a heart d	octor) before this hospitalization?

1. NO → GO TO SECTION M. SECTION M.	-8. DON'T KNOW → GO TO
2. YES \checkmark	-2. REFUSED \rightarrow GO TO SECTION M.

L10a. Did you see the cardiologist (a heart doctor) in the 6 months before your hospitalization?

1. NO	-8. DON'T KNOW
2. YES	-2. REFUSED

SECTION M: END OF SURVEY

That's all I need to ask you at this time. Thank you for your participation.

M1 F	END TIME:			:			1. AM	2. PM
------	-----------	--	--	---	--	--	-------	-------

L10.

N1. Please rate how comfortable the Respondent was during the interview.					
	Not at all comfortable			ery comfortable	
	1	2	3	4	5
N2.	Please rate how coop	perative the Resp	ondent was during	the interview.	
	Not at all cooperative				ery erative
	1	2	3	4	5
N 3.	In general, how diff	icult was it for th	ne Respondent to an	swer the intervi	ew questions?
	Not at all difficult			Ve diff	ry ïcult
	1	2	3	4	5
N4.	Did the Respondent	have difficulty a	nswering any of the	questions?	
	1. NO				ones?
N5.	Do you feel that the	Respondent gave			on on any of the questions?
	1. NO		2.	YES \rightarrow Which	ones?
N6.	Were there any unus concentrating or the			interview (e.g.,	R had difficulty hearing,
	1. NO				e:
N7.	Did the Respondent	have a language	or literacy problem	?	
	1. NO			YES →Which q	uestions were affected?

SECTION N: INTERVIEWER COMMENTS

ED FOLLOW-UP TELEPHONE SURVEY



R E A C T EMERGENCY DEPARTMENT FOLLOW-UP SURVEY

READ TO ALL RESPONDENTS TO BE INTERVIEWED BY TELEPHONE

I am calling on behalf of [UNIVERSITY]*. The University is participating in a study to learn more about people with chest pain or similar symptoms who seek medical care.

Before we begin, let me remind you that your participation is voluntary and will help us learn more about the treatment of heart disease. You may ask to stop the interview at any time. If there is a question that you cannot or do not wish to answer, please tell me and I will go on to the next question.

Any information that you provide is strictly confidential. Only research staff will see your responses. For quality assurance, my supervisor may monitor this call.

If you have any questions or concerns about the survey, you may call the [CONTACT PERSON] at [UNIVERSITY]*, or Sharyne Donfield of our Institutional Review Board at the New England Research Institutes. The toll free number for NERI is 1-800-775-6374 x523. There will be absolutely no charge to you.

* SEE LIST

Data Entered:

INTRODUCTION

I'll be asking about your visit to [HOSPITAL] on [DATE OF EVENT], then I'll ask you more general questions about heart health and yourself.

SECTION A: SITUATIONAL CONTEXT

A1. What problems or complaints did you experience that led you to go to the Emergency Room? [PROBE: Anything else?]

[CIRCLE "1" OR "2" FOR EACH RESPONSE.]

		NO	YES
a.	ABDOMINAL PAIN	1	2
b.	ARM PAIN OR SHOULDER PAIN	1	2
c.	BACK PAIN	1	2
d.	CHEST PAIN	1	2
e.	CHEST PRESSURE	1	2
f.	CHEST TIGHTNESS	1	2
g.	CHEST DISCOMFORT(HEAVINESS, BURNING, TENDERNESS)	1	2
h.	COUGH	1	2
i.	DIZZINESS, LIGHTHEADEDNESS	1	2
j.	FEEL LOUSY/GENERAL BLAHNESS	1	2
k.	HEADACHE	1	2
1.	HEARTBURN/INDIGESTION/STOMACH PROBLEM	1	2
m.	IMPENDING DOOM	1	2
n.	JAW PAIN	1	2
0.	LOSS OF CONSCIOUSNESS/FAINTING	1	2
p.	NAUSEA/VOMITING	1	2
q.	NECK PAIN	1	2
r.	NUMBNESS/TINGLING IN ARM OR HAND	1	2
s.	PALPITATIONS/RAPID HEART RATE	1	2
t.	SHORTNESS OF BREATH/DIFFICULTY BREATHING	1	2
u.	SWEATING	1	2
v.	WEAKNESS/FATIGUE/FAINTNESS	1	2
W.	OTHER(SPECIFY):	1	2

-

-

A2. When did the problems that led you to go to the Emergency Room start? [PROBE: On what date and time?]

DATE:	MONTH DAY YEAR
VISIT DATE" ON C for a long time. But , the date we're lookin	INTERVIEWER NOTE: T GIVES A DATE THAT IS MORE THAN 1 WEEK PRIOR TO "ED CONTACT RECORD, SAY: "Yes, I understand that the problems may go on what happened that made you decide to go to the Emergency Room - that's g for." T CANNOT PROVIDE ANY DATE AT ALL: "Did the problem start the
same day that you we RESPONDENT SAY	ent to the Emergency Room, the day before, or was it earlier?" IF YS SAME DAY, RECORD DATE LISTED ON CONTACT RECORD. IF YS EARLIER ASK: "When?" OR "How many days before?"
TIME:	: 1. AM 2. PM
before you	LE TO PROVIDE CLOCK TIME, PROBE: "How many hours or minutes arrived at the Emergency Room did the problems or complaints start?" OR he problems (or complaints) started did you arrive at the Emergency Room?"] HOURS MINUTES
INTERVIEWER NOTES:	QUESTION A2 SERIES

A3. Before calling the ambulance or going to the hospital, did you take any action or do anything for these problems or complaints?

[CIRCLE "1" OR "2" FOR EACH RESPONSE.]

[PROBE IF NECESSARY: Call or talk to anyone? Take medication? Did you do anything else?] [PROBE: Anything else?]

_		NO	YES
a.	DRINK ALCOHOL	1	2
b.	TAKE ANTACID	1	2
c.	TAKE ASPIRIN/OTHER PAIN MEDICATION	1	2
d.	TAKE NITROGLYCERIN	1	2
e.	TAKE TRANQUILIZER OR RELAXING DRUG	1	2
f.	TAKE OTHER MEDICATION (SPECIFY):	1	2
g.	TALK TO COWORKER	1	2
h.	TALK TO DOCTOR	1	2
i.	TALK TO FAMILY MEMBER	1	2
j.	TALK TO FRIEND	1	2
k.	TALK TO HOSPITAL PERSONNEL	1	2
1.	TALK TO NURSE	1	2
m.	TALK TO OTHER PERSON (SPECIFY):	1	2
n.	CALLED DOCTOR	1	2
0.	CALLED HEALTH CARE PLAN	1	2
p.	CALL OTHER (SPECIFY):	1	2
q.	ACCEPTED SYMPTOMS/SITUATION	1	2
r.	DID NOTHING TO COPE/RESPOND TO SYMPTOMS	1	2
s.	DISENGAGED SELF FROM SYMPTOMS BY DOING/THINKING SOMETHING ELSE	1	2
t.	IGNORED SYMPTOMS	1	2
u.	REDEFINED SYMPTOMS/SITUATION AS NOT THREATENING	1	2
v.	REST/STOP ACTIVITY	1	2
W.	WAITED TO SEE WHAT WOULD HAPPEN	1	2
X.	OTHER ACTIVITY(SPECIFY):	1	2

A4. What did you <u>think</u> was causing the problems or complaints that led you to go to the Emergency Room?

[CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anything else?]

		NO	YES
a.	ANGINA	1	2
b.	ANXIETY	1	2
c.	ARTHRITIS	1	2
d.	BREATHING OR LUNG PROBLEM	1	2
e.	DON'T KNOW/NO IDEA	1	2
f.	FLU/COLD	1	2
g.	HEART ATTACK	1	2
h.	HEARTBURN/INDIGESTION/STOMACH PROBLEM	1	2
i.	HEART PROBLEM/HEART CONDITION	1	2
j.	MUSCLE INJURY/PAIN	1	2
k.	OVEREXERTION	1	2
1.	ULCER	1	2
m.	OTHER (SPECIFY):	1	2

- A5. Were you alone when the **decision** was made to go to the Emergency Room?
 - 1. NO 2. YES
 - A5a. Who made the **decision** to go to the Emergency Room? [RECORD IN COLUMN A5a "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anyone else?]
 - A5b. Did anyone encourage or support your decision to go to the Emergency Room? [RECORD IN COLUMN A5b "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anyone else?]

		A5a. DECISION		ON A5b. ENCOURAG	
		NO	YES	NO	YES
a.	CASUAL ACQUAINTANCE	1	2	1	2
b.	CO-WORKER	1	2	1	2
c.	HOSPITAL PERSONNEL	1	2	1	2
d.	NEIGHBOR	1	2	1	2
e.	NOBODY	1	2	1	2
f.	OTHER FAMILY	1	2	1	2
g.	PARAMEDICS	1	2	1	2
h.	PHYSICIAN	1	2	1	2
i.	PHYSICIAN'S OFFICE STAFF	1	2	1	2
j.	SPOUSE	1	2	1	2
k.	STRANGER	1	2	1	2
1.	YOURSELF	1	2	1	2
m.	OTHER (SPECIFY):	1	2	1	2

- A6. Did you or someone else call 911 or an ambulance?
 - NO → A6c. Were there any particular reasons why you did not call 911 or an ambulance? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: "Anything else?"]

		NO	YES
a.	COST/NO INSURANCE	1	2
b.	FASTER ALTERNATIVE FOR GETTING TO THE HOSPITAL	1	2
c.	EMBARRASSED TO CALL 911	1	2
d.	SYMPTOMS NOT SEVERE/WORRISOME ENOUGH	1	2
e.	OTHER (SPECIFY):	1	2

A6a. On what date and time, did you call 911 or an ambulance?



INTERVIEWER NOTE

1) IF RESPONDENT GIVES A DATE THAT IS MORE THAN 1 WEEK PRIOR TO "ED VISIT DATE" ON CONTACT RECORD, SAY: "Yes, I understand that the problems may go on for a long time. **But**, what happened that made you **call** 911 or an ambulance to go to the Emergency Room - that's the date we're looking for."

2) IF RESPONDENT CANNOT PROVIDE ANY DATE AT ALL: "Did you call 911 or an ambulance on the same day that you went to the Emergency Room, the day before, or was it earlier?" IF RESPONDENT SAYS SAME DAY, RECORD DATE LISTED ON CONTACT RECORD. IF RESPONDENT SAYS EARLIER ASK: "When?" OR "How many days before?"

A6b. [IF UNABLE TO PROVIDE CLOCK TIME, PROBE: "How many hours or minutes before you arrived at the Emergency Room did you call 911 or an ambulance?" OR "How long after you called 911 or an ambulance did you arrive at the Emergency Room?"]



INTERVIEWER NOTE:

IF TIME PERIOD IS BEFORE TIME PROVIDED IN A2 SERIES (PAGE 3): [PROBE: Let me see, when I asked when the problems that led you to the Emergency Room started you said [DATE AND TIME]...[REPEAT A6a.]]

A7. On what date and time did you leave for the Emergency Room?



- A8. How did you get to the Emergency Room?
 - 1. ARRIVED BY AMBULANCE
 - 2. HELICOPTER
 - 3. ARRIVED BY FIRE OR POLICE DEPARTMENT
 - 4. DROVE MYSELF (PRIVATE CAR)
 - 5. SOMEONE DROVE ME (PRIVATE CAR)
 - 6. TOOK PUBLIC TRANSPORTATION (TAXI, BUS, ETC.)
 - 7. OTHER (SPECIFY): _____

SECTION B: BARRIERS/FACILITATORS TO CARE SEEKING

Many things could affect a person's decision to go to the hospital. A variety of things could speed you up or slow you down. Thinking back to when you experienced the symptoms we were talking about, I'd like to ask you about the things that affected your decision to go to the hospital.

B1. Did any factors or things cause you to go quickly to the hospital?

- 1. NO → GO TO B2.
- 2. YES
- B1a. What were those factors? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anything that somebody said or anything that you felt?] [PROBE: Anything else?]

		NO	YES
a.	ADVICE FROM DOCTOR OR HEALTH CARE PROVIDER	1	2
b.	ADVICE FROM FAMILY MEMBERS	1	2
c.	ADVICE FROM FRIENDS OR COWORKERS	1	2
d.	CERTAINTY THAT THE CAUSE OF SYMPTOMS WAS A HEART ATTACK	1	2
e.	HAD MEDICAL INSURANCE	1	2
f.	HAD SIMILAR SYMPTOMS BEFORE	1	2
g.	HAD TOO MANY RESPONSIBILITIES TO RISK NOT BEING SEEN	1	2
h.	KNEW I HAD A SERIOUS ILLNESS/PROBLEM	1	2
i.	PAIN GOT WORSE	1	2
j.	SYMPTOMS WERE SEVERE OR VERY DISTURBING	1	2
k.	OTHER (SPECIFY):	1	2

B2. Did any factors or things cause you to <u>wait</u> to go to the hospital?

1. NO \rightarrow **GO TO SECTION C.**

2. YES ↓

B2a. What were those factors? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anything that someone said or anything you felt?] [PROBE: Anything else?]

		NO	YES
a.	ADVICE FROM DOCTOR OR HEALTH CARE PROVIDER	1	2
b.	ADVICE FROM FAMILY MEMBERS	1	2
c.	ADVICE FROM FRIENDS OR COWORKERS	1	2
d.	AFRAID OF POSSIBLE TREATMENTS	1	2
e.	CHILDCARE	1	2
f.	COST OF MEDICAL CARE	1	2
g.	DID NOT THINK SYMPTOMS WERE RELATED TO HEART DISEASE	1	2
h.	EMBARRASSED ABOUT BEING A FALSE ALARM	1	2
i.	FEAR OF HOSPITALS/DOCTORS	1	2
j.	HAD SIMILAR SYMPTOMS BEFORE THAT WENT AWAY	1	2
k.	LACK OF CONFIDENCE IN HOSPITAL STAFF	1	2
1.	LACK OF MEDICAL INSURANCE	1	2
m.	NOT SERIOUS/ SEVERE SYMPTOMS/ ILLNESS/ PROBLEMS	1	2
n.	WAIT TO HEAR BACK FROM HEALTH CARE PROVIDER/PLAN	1	2
0.	WOULD LOSE PAY FROM WORK	1	2
p.	OTHER (SPECIFY):	1	2

SECTION C: THE EMERGENCY ROOM VISIT

C1. What were you told was the reason for the signs or symptoms that brought you to the Emergency Room? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anything else?]

		NO	YES
a.	ANGINA	1	2
b.	ARTHRITIS	1	2
c.	ANXIETY/PANIC ATTACK	1	2
d.	BREATHING OR LUNG PROBLEM	1	2
e.	DIDN'T TELL ME ANYTHING	1	2
f.	DON'T KNOW/DON'T REMEMBER/NO IDEA	1	2
g.	FLU/COLD	1	2
h.	HEART ATTACK	1	2
i.	HEARTBURN/INDIGESTION/STOMACH PROBLEM	1	2
j.	HEART PROBLEM/HEART CONDITION	1	2
k.	HIGH BLOOD PRESSURE	1	2
1.	MUSCLE INJURY/PAIN	1	2
m.	ULCER	1	2
n.	UNDETERMINED/THEY DIDN'T KNOW	1	2
0.	OTHER (SPECIFY):	1	2

C2. What instructions or advice were you given to manage or help the symptoms? [PROBE: Anything else?]

1.	GOT NO INSTRUCTIONS → GO TO C	C 2b.	
2.	SEE PERSONAL DOCTOR		
	\checkmark		
	C2a2. Did you follow that advice?	1. NO	2. YES
3.	TAKE MEDICATION		
	$\mathbf{\Psi}$		
	C2a3. Did you follow that advice?	1. NO	2. YES
4.	REST		
	$\mathbf{\Psi}$		
	C2a4. Did you follow that advice?	1. NO	2. YES
5.	OTHER (SPECIFY):		
	¥		
	C2a5. Did you follow that advice?	1. NO	2. YES
0			

- -8. DON'T KNOW → GO TO C2b.
- -2. REFUSED → GO TO C2b.

C2b. Since you were seen at the hospital ER, did you see your doctor about the symptoms which brought you to the ER?

1. NO 2. YES

C3. What were you told to do if your symptoms came back after you were discharged from the Emergency Room? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anything else?]

		NO	YES
1.	CALL 911/AMBULANCE	1	2
2.	CALL ED/HOSPITAL	1	2
3.	CALL YOUR PERSONAL PHYSICIAN	1	2
4.	DON'T KNOW	1	2
5.	GO TO THE EMERGENCY DEPARTMENT/EMERGENCY ROOM	1	2
6.	NOTHING	1	2
7.	OTHER (SPECIFY):	1	2

C4. Since your treatment for your symptoms on [REPEAT DATE OF EVENT], has a doctor told you that you have a heart-related problem?

1. NO 2.	YES
----------	-----

SECTION D: AFFECTIVE RESPONSE

Looking back on your visit to the Emergency Room, how much do you agree or disagree with the following statements? Do you <u>strongly agree</u>, <u>agree</u>, <u>disagree</u>, <u>or strongly disagree</u>?

		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	NO OPINION
D1.	You did the right thing by going to the Emergency Room for your symptoms.	1	2	3	4	5
D2.	The Emergency Room staff made you feel like you did the right thing by coming to the Emergency Room	1	2	3	4	5
D3.	You were embarrassed when you realized you were not having a heart attack.	1	2	3	4	5
D4.	Your experience with the Emergency Room has increased your ability to decide when similar symptoms require emergency medical care.	1	2	3	4	5

SECTION E: SATISFACTION

In terms of your experience with the Emergency Department staff, how would you rate each of the following? [REPEAT RESPONSE CHOICES FOR EACH EXPLANATION.]

	How was	Excellent	Very Good	Good	Fair	Poor	NA
E1.	The explanation of what caused your problems.	1	2	3	4	5	8
E2.	The explanation of what was done for you.	1	2	3	4	5	8
E3.	The explanation of what to do if your problems returned after you left the Emergency Room.	1	2	3	4	5	8

SECTION F: BEHAVIORAL REHEARSAL AND PROVIDER/BYSTANDER INTERACTION

- F1. Before your recent visit to the Emergency Room, had you ever talked with anyone about planning what to do in case you were having a heart attack?
 - 1. NO \rightarrow GO TO G1. -8. DON'T KNOW \rightarrow GO TO G1.
 - 2. YES -2. REFUSED \rightarrow GO TO G1.
 - F1a. Whom did you talk with? [RECORD IN COLUMN A "1" OR "2" FOR EACH RESPONSE.]
 - F1b. Did you talk with them during the 6 months before your visit to the Emergency Room? [RECORD IN COLUMN B "1" OR "2" FOR EACH RESPONSE.]

		А		I	3
		NO	YES	NO	YES
1.	CO-WORKER/COLLEAGUE	1	2	1	2
2.	FRIEND	1	2	1	2
3.	NEIGHBOR	1	2	1	2
4.	NURSE	1	2	1	2
5.	OTHER FAMILY MEMBER	1	2	1	2
6.	OTHER HEALTH PROFESSIONAL	1	2	1	2
7.	PHYSICIAN	1	2	1	2
8.	SPOUSE	1	2	1	2
9.	OTHER (SPECIFY):	1	2	1	2

SECTION G: INTENTIONS/ PREPARATION AND SYMPTOM KNOWLEDGE

- G1. In the future, if you had problems similar to the ones that brought you to the Emergency Room, would you do anything differently?
 - 1. NO \rightarrow GO TO H1. -8. DON'T KNOW \rightarrow GO TO H1.
 - 2. YES \rightarrow GO TO H1.
 - G1a. What would you do differently?

		NO	YES
1.	COME TO THE ER SOONER	1	2
2.	CONSULT WITH DOCTOR	1	2
3.	DELAY GOING TO EMERGENCY ROOM/HOSPITAL	1	2
3.	GET TO EMERGENCY ROOM/HOSPITAL SOONER	1	2
3.	NOT GO TO THE EMERGENCY ROOM	1	2
4.	OTHER (SPECIFY):	1	2

G2. Have you talked with a spouse (husband or wife) or family member about what you would do if you thought you were having a heart attack?

1. NO	-8. DON'T KNOW
2. YES	-2. REFUSED

- G3. Have you talked with a neighbor, friend, colleague, or community health worker about what you would do if you thought you were having a heart attack?
 - 1. NO -8. DON'T KNOW
 - 2. YES -2. REFUSED

G4. Do you feel you know enough about what to do if you think you might be having a heart attack?



SECTION H: SELF-EFFICACY

H1. How sure are you that you could recognize the signs or symptoms of a heart attack in someone else? Are you very sure, pretty sure, a little sure, or not at all sure?

1	2	3	4	-8	-2
Very Sure	Pretty Sure	A Little Sure	Not At All Sure	DK/NO OPINION	REFUSED

H2. How sure are you that you could recognize the signs or symptoms of a heart attack in <u>yourself</u>? Are you <u>very sure</u>, <u>pretty sure</u>, <u>a little sure</u>, or <u>not at all sure</u>?

1	2	3	4	-8	-2
Very Sure	Pretty Sure	A Little Sure	Not At All Sure	DK/NO OPINION	REFUSED

H3. How sure are you that you could tell the difference between the signs or symptoms of a heart attack and other medical problems? Are you very sure, pretty sure, a little sure, or not at all sure?

1	2	3	4	-8	-2
Very Sure	Pretty Sure	A Little Sure	Not At All Sure	DK/NO OPINION	REFUSED

SECTION I: BELIEFS

I1. Compared to other [MEN/WOMEN] your age, how likely do you think it is that you could have a heart attack in the next five years? Would that be <u>much less likely</u>, <u>somewhat less likely</u>, <u>about the same</u>, <u>somewhat more likely</u> or <u>much more likely</u> than other [MEN/WOMEN] your age?

1	2	3	4	5	-8	-2
Much Less Likely	Somewhat Less Likely	About the Same	Somewhat More Likely	Much More Likely	DON'T KNOW	REFUSED

Now I will read you some statements of opinion. Please tell me how you feel about each statement. Do you <u>strongly agree</u>, <u>agree</u>, <u>disagree</u>, or <u>strongly disagree</u>? Here's the first statement. [NOTE: IF RESPONDENT HAS DIFFICULTY, ASK: Do you <u>strongly agree</u> (agree, disagree,

strongly disagree) that you would be embarrassed, etc.]

I2. I would be embarrassed to go to the hospital if I thought I was having a heart attack but I wasn't. Do you:

1	2	3	4	-8	-2
Strongly Agree	Agree	Disagree	Strongly Disagree	DON'T KNOW	REFUSED

13. If I thought I was having a heart attack, I would wait until I was <u>very sure</u> before going to the hospital. Do you:

1	2	3	4	-8	-2
Strongly Agree	Agree	Disagree	Strongly Disagree	DON'T KNOW	REFUSED

I4. If I thought I was having a heart attack, I would rather have someone drive me to the hospital than have an ambulance come to my home. Do you:

1	2	3	4	-8	-2
Strongly Agree	Agree	Disagree	Strongly Disagree	DON'T KNOW	REFUSED

SECTION J: KNOWLEDGE

J1.	What would you say are the signs or symptoms that someone may be	e having a h	eart attack?	
	[CIRCLE "1" OR "2" FOR EACH RESPONSE.]			
	[PROBE: Anything else?]			

[PROBI	E: Anything else?]	NO	YES
a.	ABDOMINAL PAIN	1	2
b.	ARM PAIN OR SHOULDER PAIN	1	2
c.	BACK PAIN	1	2
d.	CHEST PAIN	1	2
e.	CHEST PRESSURE	1	2
f.	CHEST TIGHTNESS	1	2
g.	CHEST DISCOMFORT(HEAVINESS, BURNING, TENDERNESS)	1	2
h.	COUGH	1	2
i.	DIZZINESS, LIGHTHEADEDNESS	1	2
j.	DON'T KNOW/NO IDEA	1	2
k.	FEEL LOUSY/GENERAL BLAHNESS	1	2
1.	HEADACHE	1	2
m.	HEARTBURN/INDIGESTION/STOMACH PROBLEM	1	2
n.	IMPENDING DOOM	1	2
0.	JAW PAIN	1	2
p.	LOSS OF CONSCIOUSNESS/FAINTING	1	2
q.	NAUSEA/VOMITING	1	2
r.	NECK PAIN	1	2
s.	NUMBNESS/TINGLING IN ARM OR HAND	1	2
t.	PALPITATIONS/RAPID HEART RATE	1	2
u.	SHORTNESS OF BREATH/DIFFICULTY BREATHING	1	2
v.	SWEATING	1	2
W.	WEAKNESS/FATIGUE/FAINTNESS	1	2
x.	OTHER (SPECIFY):	1	2

J2. Now I'd like to read you some statements about heart health. Tell me whether each of the following statements is true, false, or you don't know:

		TRUE	FALSE	DON'T KNOW	REFUSED
a.	Heart disease is the most common cause of death in women in the United States.	1	2	-8	-2
b.	Almost all heart attacks occur in people over age 65.	1	2	-8	-2
c.	Hospitals have drugs that reduce the damage done when a heart attack occurs.	1	2	-8	-2
d.	Younger African Americans have a greater danger of heart attacks than younger Whites.	1	2	-8	-2
e.	Younger Hispanic-Americans have a greater danger of heart attacks than younger Whites.	1	2	-8	-2

SECTION K: PRE-HOSPITAL AWARENESS OF EDUCATIONAL CAMPAIGN

K1. Before you went to the Emergency Room on [DATE], were you aware of any programs in your community that encourage people to get immediate medical care if they think they might be having a heart attack?

1. NO → GO TO K1d.

2. YES 🗲 GO TO K1a.

K1a. Where do you recall hearing about that program? [CIRCLE "1" OR "2" FOR EACH RESPONSE.] [PROBE: Anywhere else?]

	SOURCE	NO	YES
1.	BILLBOARDS	1	2
2.	BOOK	1	2
3.	CHURCH	1	2
4.	CIVIC ORGANIZATION	1	2
5.	DOCTOR	1	2
6.	FAMILY MEMBER	1	2
7.	FRIEND, CO-WORKER	1	2
8.	HOSPITAL	1	2
9.	MAILING	1	2
10.	MAGAZINE	1	2
11.	MALL EVENT	1	2
12.	NEWSPAPER	1	2
13.	OTHER HEALTH PROFESSIONAL	1	2
14.	OTHER HEALTHCARE ORGANIZATION	1	2
15.	PAMPHLET	1	2
16.	PHARMACY POSTER/FLIER	1	2
17.	POSTER	1	2
18.	RADIO	1	2
19.	SCHOOL, CLASS, LECTURE	1	2
20.	SELF-HELP CLINIC OR GROUP	1	2
21.	SIGNS	1	2
22.	SOCIAL, RECREATION GROUP	1	2
23.	TELEVISION	1	2
24.	OTHER (SPECIFY):	1	2

- K1b. Can you recall the name of the program? [PROBE FOR NAME, SLOGAN.]
 - 1. Heart Attack REACT ↓

K1c. Did you feel this program had $1. \text{ NO } 2. \text{ YES } \rightarrow \text{ GO TO SECTION L.}$ any effect on your decision to go to the hospital?

- 2. ANY OTHER NAME Specify: ______
 K1c. Did you feel this program had any effect on your decision to go to the hospital?
 1. NO
 2. YES → GO TO K1d.
- -8. CAN'T RECALL/DON'T KNOW Ψ
- K1d. Here are the names of three programs. Do you recognize any of these?

		NO	YES
1.	COMMIT	1	2
2.	Heart Attack REACT	1	2
3.	Heart Alert	1	2

SECTION L: PERSONAL HEALTH STATUS/HISTORY

L1.	In general, w	yould you say y	our health is:				
	1	2	3	4	5	-8	-2
	Excellent	Very Good	Good	Fair	Poor	DON'T KNOW	REFUSED
L2.	Have you ev	er had a heart a	ttack?				
	1. NO			-8. DON'	Γ KNOW		
	2. YES			-2. REFU	SED		
L3. Room	Have you ev visit?	er had chest pa	ins, pressure,	tightness, or d	iscomfort bef	ore your recer	t Emergency
	1. NO			-8. DON'	ΓΚΝΟΨ		
	2. YES			-2. REFU	SED		
L4.	Have your pa	arents, brother o	or sister ever	had a heart atta	ack?		
	1. NO			-8. DON'	ſ KNOW		
	2. YES			-2. REFU	SED		
L5.	Have you ever	been told by a doc	tor that you hav	e a heart conditio	n?		
	1. NO			-8. DON'	Γ KNOW		
	2. YES			-2. REFU	SED		
L6.	Have you ever	been told by a doc	tor that you hav	e diabetes?			
	1. NO			-8. DON'	Γ KNOW		

2. YES -2. REFUSED

L7.	Have vou ever bee	n told by a doctor the	at you have high blood pressure?
D 7.	114.0 904 0.01 000	n tora og a aðotor in	

	1. NO	-8. DON'T KNOW
	2. YES	-2. REFUSED
L8.	Have you ever been told by a doctor that y	ou have high blood cholesterol?
	1. NO	-8. DON'T KNOW
	2. YES	-2. REFUSED
L9.	Have you ever smoked a cigarette?	
	1. NO \rightarrow GO TO SECTION M.	-8. DON'T KNOW \rightarrow GO TO SECTION M.
	2. YES \checkmark	-2. REFUSED \rightarrow GO TO SECTION M.
	L9a. Did you smoke a cigarette in the wo	eek before you went to the Emergency Room?
	1. NO	-8. DON'T KNOW

2. YES -2. REFUSED

SECTION M: DEMOGRAPHICS

Finally, I have some general background questions about yourself.

M1. Do you consider yourself to be Hispanic or Latino? [PROBE: Of Spanish origin or descent?]

NO	1
YES	2

M2. Please tell me which group best describes your racial background:

White	1
Black/African American	2
Native American	3
Asian/Pacific Islander	4
OTHER	5
(SPECIFY):	

- M3. What is your present marital status? [PROBE: READ CATEGORIES 1-5.]
 - 1. MARRIED \rightarrow GO TO M5.
 - 2. LIVING WITH SIGNIFICANT OTHER/ SOMEONE OTHER THAN A ROOMMATE → GO TO M5.
 - 3. SINGLE
 - 4. DIVORCED/SEPARATED
 - 5. WIDOWED
 - -8. DON'T KNOW
 - -2. REFUSED
- M4. Do you live alone?
 - 1. NO -8. DON'T KNOW
 - 2. YES -2. REFUSED

- M5. Are you currently working for pay? [NOTE: INCLUDES SELF-EMPLOYED OR ON TEMPORARY DISABILITY LEAVE.]
 - 1. NO -8. DON'T KNOW
 - 2. YES \rightarrow GO TO M6. -2. REFUSED
 - M5a. Which one of the following best describes you? [CIRCLE ONE.]
 - 1. Homemaker
 - 2. Retired
 - 3. Disabled
 - 4. Student
 - 5. Not currently employed
- M6. What is the highest grade or year of school that you have completed?

ENTER HIGHEST GRADE COMPLETED OR NUMBER OF YEARS OF SCHOOL COMPLETED IF LESS THAN HIGH SCHOOL

COMPLETED HIGH SCHOOL	12
SOME COLLEGE	13
COMPLETED COLLEGE	14
SOME GRADUATE SCHOOL	15
COMPLETED GRADUATE SCHOOL	16
SOME TECHNICAL SCHOOL	17
COMPLETED TECHNICAL SCHOOL	18
SOME PROFESSIONAL SCHOOL	19
COMPLETED PROFESSIONAL SCHOOL	20
OTHER (SPECIFY):	21

M7.	Which of the following kinds of health	insurance do vou have now?
111/1	the field of the folio this hinds of heath	mourance de yeu nave new.

		NO	YES	DK	REFUSED
a.	Medicare (the federal health insurance for people 65 or older or who are disabled)?	1	2	-8	-2
b.	Medicare supplement (additional insurance to Medicare that you buy yourself, such as Medex, Medigap, or AARP)?	1	2	-8	-2
c.	Medicaid (the state program for persons with incomes below a certain level)?	1	2	-8	-2
d.	Commercial or Private Insurance (such as Blue Cross, Ætna, Prudential, or Hancock)?	1	2	-8	-2
e.	An HMO (a Health Maintenance Organization) or an IPA (an Individual Practice Association)?	1	2	-8	-2
f.	VA benefits, CHAMPUS?	1	2	-8	-2
g.	Student Health Plan?	1	2	-8	-2
h.	Other state medical assistance or free care programs?	1	2	-8	-2
i.	Or something else. What is it? (SPECIFY):	1	2	-8	-2

NOTE: SKIP M8 IF NO TO ALL (a-i) ABOVE.

M8. Does your insurance plan pay for any part of the following:

		NO	YES	DK	REFUSED
a.	Ambulance Service	1	2	-8	-2
b.	Visits to the Emergency Department	1	2	-8	-2

M9.	Do you have a regular doctor or group of doctors?	
	1. NO → GO TO M10.	-8. DON'T KNOW → GO TO M10.
	2. YES	-2. REFUSED → GO TO M10.
	M9a. Did you visit a doctor in the past ye	ar?
	1. NO	-8. DON'T KNOW
	2. YES	-2. REFUSED
M10.	Had you ever seen a cardiologist (a heart do	octor) before going to the Emergency Room?
	1. NO → GO TO SECTION N.	-8. DON'T KNOW \rightarrow GO TO SECTION N.
	2. YES ↓	-2. REFUSED \rightarrow GO TO SECTION N.
	M10a. Did you see the cardiologist (a hear Emergency Room?	t doctor) in the 6 months before your visit to the

1. NO	-8. DON'T KNOW
2. YES	-2. REFUSED

SECTION N: END OF SURVEY

That's all I need to ask you at this time. Thank you for your participation.

N1. END TIME:		:		1. AM	2. PM
---------------	--	---	--	-------	-------

SECTION O:	INTERVIEWER	COMMENTS
------------	-------------	----------

01.	Please rate how cor	Please rate how comfortable the Respondent was during the interview.								
	Not at all comfortable		Very comfortable							
	1	2	3	4	5					
02.	Please rate how cooperative the Respondent was during the interview.									
	Not at all cooperative			Very perative						
	1	2	3	4	5					
O 3.	In general, how dif	fficult was it for th	ne Respondent to an	swer the inter-	view questions?					
	Not at all difficult			Very difficult						
	1	2	3	4	5					
O4.	Did the Responden									
	1. NO				h ones?	_				
O5.	Do you feel that the	e Respondent gave			ation on any of the que	- stions?				
	1. NO		2.	YES \rightarrow Whic	h ones?					
O6.	Were there any unu ere frequent interrupt				., R had difficulty heari					
there w	1 1	tions, etc.)	2	VEC	-ih a.					
	1. NO				ribe:	-				
O7.	Did the Responden	t have a language				-				
	1. NO			YES →Which	questions were affected	d? -				