

# *REACT*

RAPID EARLY ACTION FOR CORONARY TREATMENT

## **INTERVENTION MANUAL OF OPERATIONS**

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## **I. OVERVIEW OF REACT INTERVENTION**

### **A. OVERVIEW**

The study framework is described in Figure 1.1, showing an overview of the components of the proposed intervention as well as the factors upon which we hypothesize that we will impact and outcomes that we hypothesize will occur. 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

While individualized Site Action Plans for communities have been developed to address cultural, ethnic and regional differences, a basic REACT message has been developed based on extensive review of quantitative and qualitative data previously available as well as formative research data collected during the planning phase of REACT (see Site Action Plans in Appendix B). Data suggest that even though chest pain and shortness of breath may be the most common symptoms, they may not be the most prominent symptoms in some cases and may be mixed with a variety of symptoms in many cases. The different 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. More detailed action components accompany some of the intervention methods depending on the format in which the message is to be delivered as is discussed in later sections of this Manual of Operations. For example, one-on-one patient-centered counseling methods allow the detailing of patient-specific methods and skills training, going far beyond the basic REACT message.

### **B. THEORETICAL MODELS**

In considering the theoretical model for the proposed intervention, two different forms of theory were incorporated: behavior change theory and implementation theory. Two theories served as the primary behavior change theoretical basis upon which the four components of the intervention were developed: Social Cognitive Theory and Self-Regulatory Theory. These behavior change theoretical approaches are described below in Section A. along with the overall, combined study approach. Theoretical methods for implementing the interventions are also

relevant. Three primary theoretical approaches have been considered as important for REACT: Diffusion Theory, Social Marketing Theory, and Community Organization Theory. These implementation theoretical approaches are described in Section 2.

## 1. Behavior Change Theories

While a number of theories were considered for REACT, including not only those that were adopted but also the Theory of Reasoned Action, the Health Belief Model, and Attribution Theories, Social Cognitive Theory provides an important overall behavior change theoretical framework for the proposed intervention. Key elements of Social Cognitive Theory are reviewed in Section 1. Aspects of the Self-Regulatory Theory, however, are also important as discussed in Section 2. Finally, the manner in which we propose combining elements of both models are discussed in Section 3.

### a. Social Cognitive Theory

Social Cognitive Theory suggests that individuals' behavior is explained by a dynamic, reciprocal interaction among behavior, personal factors, and environmental influences (Bandura, 1986). Crucial personal factors include individuals' capabilities to foresee the outcomes of given behavior patterns, to learn by observing others, to self-determine or self-regulate behavior, and to reflect and analyze experience. In terms of the social environment, verbal persuasion, feedback, support and reinforcement from credible people in the environment are important in establishing long-term behavior change. Social Cognitive Theory emphasizes the importance of individuals' beliefs of efficacy, or the self-appraisal of one's capabilities. People's efficacy perceptions influence the types of anticipatory scenarios they construct. The importance of self-efficacy for motivating people to respond more quickly to chest pain lies in the fact that people's beliefs about their coping efficacy affects not only their behavior (or willingness to engage in certain behaviors), it also affects their emotional reactions in taxing situations.

Perry and colleagues (1989) have outlined the major concepts of Social Cognitive Theory and implications for interventions. Table 1 summarizes key constructs of Social Cognitive Theory along with the definition of these key constructs and their implications for professional/patient/community interventions. Social Cognitive Theory provides an overall model for the proposed intervention, articulating a number of key constructs for different intervention components; however, aspects of Self-Regulatory Theory have also been useful in framing the overall intervention.

### b. Self-Regulatory Theory

Leventhal and colleagues (Leventhal et al., 1980; Leventhal & Nerenz, 1985; Cameron, Leventhal & Leventhal, 1993) argue that illness behavior and help seeking can best be conceptualized as a self-regulating process in which a person's perception of physical states produce illness representations with concomitant emotional responses that then provide the basis for coping plans and actions that the person evaluates and reformulates if necessary. This model posits three main stages that are activated at the onset of an illness threat (see Figure 1-2).

The first stage, problem representation, comprises the use of a set of attributes to identify or specify the features of the problem and goals for action. An individual recognizes symptom sensations, such as acute moderate chest pain, as abnormal based on semantic and episodic memory and generates an initial hypothesis about the nature and causes of the sensations along with an evaluation of the need for coping actions. In the second stage, action plan, an individual generates a set of coping responses, for both the illness and affective responses, perceived as relevant to the problem representation. This consists of a set of specific behaviors and expectations regarding their efficacy on the problem as currently represented. Thus, if the acute chest pain is represented as that of indigestion, and is therefore considered not life-threatening and easily curable, the relevant coping behaviors (e.g., taking an antacid) and the expectations for efficacy of that behavior for reducing the physical and psychological discomfort (e.g., "I expect to feel some relief of my discomfort in a few minutes") will follow. The third stage is the appraisal process, during which the individual employs his or her own set of rules for comparing the pre- and post-action relationships between current discomfort and the goal of symptom elimination. The stages may cycle repeatedly as the individual generates new hypotheses, initiates coping actions, and evaluates their consequences. The processing of new information serves continually to update the representations.

Self-Regulatory Theory also posits that this cognitive process is paralleled by an emotional process (e.g., fear, anger, distress) that unfolds in response to symptoms, the labels and perceived health consequences, coping failures, and reinterpretation of the illness condition. Finally, extraneous stressors are considered likely to influence the self-regulatory process by encouraging care seeking by enhancing the symptom severity or as a means of regulating emotional distress (Cameron et al., 1993).

Self-Regulatory Theory also suggests wide interpersonal and intrapersonal variation. Thus, predicting an individual's coping responses across situations and time is difficult and likely to be less accurate than desired. Finally, this model views coping styles or dispositional factors (e.g., repressive coping style, cynical hostility) as "higher-order factors that interact with stimulus events in shaping the representation of an illness experience" (Ward, Leventhal & Love, 1988, p. 735). Given this wide variation, REACT strategies must include those which emphasize tailoring, interpersonal communication and patient-focused counseling; these interpersonal methods are most relevant to the patient and provider education components and the interpersonal strategies of community education of the proposed intervention as opposed to the impersonal strategies of the community education, media components.

### c. Combined Study Theory

Social Cognitive Theory provides the basic model for the proposed intervention; however, the utility of aspects of Self-Regulatory Theory argued for a combined intervention model. This combined model is represented in Figure 2 in which aspects of both theories are represented as providing the overall behavior change theoretical approach for the proposed interventions.

## 2. Implementation Theories

The implementation theories identified as key for the proposed interventions are discussed below.

### a. Diffusion Theory

Diffusion theory describes and explains how people adapt "innovations". An innovation pertains to anything (i.e., idea, behavior) that is perceived as "new" by some target audience. Diffusion theory suggests that, in general, individuals adopt innovations by a process of: 1) knowledge (awareness), 2) persuasion, 3) decision, 4) implementation, and 5) confirmation (Rogers, 1983). This implies that health care providers and health care organizations in the REACT intervention communities need to be: 1) made aware of the REACT trial and its objectives, 2) persuaded to implement patient and provider education interventions, 3) assisted in implementing these activities, and 4) encouraged to continue these interventions.

Diffusion research shows that the mass media tends to have the greatest impact on awareness, whereas interpersonal channels tend to be more effective at persuading individuals to try an innovation (Rogers, 1983). Thus, one implication of diffusion theory in REACT is that media efforts need to be followed or accompanied by interpersonal efforts, such as patient and provider education, to get the target audience to adopt a new behavior. This means that:

1) Health care organizations and provider groups need to be made aware of the REACT interventions and its objectives through the mass media and through interpersonal contact. Additionally, media efforts need to be targeted (e.g., direct mail to providers) to emphasize the importance of patient/provider education in the intervention communities.

2) The mass media and targeted media efforts need to be accompanied by interpersonal efforts (one-on-one meetings, staff meetings, etc.) by REACT staff to "persuade" organizations and health care providers to implement patient and provider education interventions in their health care settings as well as sponsor community education activities.



3) Interpersonal contacts between REACT staff and health care organizations/providers and other community organizations need to be continued throughout implementation. Regular contact is particularly important reinforce and maintain behavior changes.

The "S"-shaped curve found in most diffusion research shows that a critical mass (usually around 20%) is necessary for innovation to be diffused throughout a community. Rogers (1983) emphasizes the importance of different adoption groups. Foremost among these groups are potential "innovators" in the target audience who can most readily be persuaded to adopt the innovation early. These individuals are usually key influential people (opinion leaders) in the community, and once they have adopted the innovation, these people can be extremely useful as spokespeople for interpersonal interventions to increase adoption rates amongst others. Aside from identifying "innovators", it is important to identify other potential adopter groups, such as early adopters, early majority, late adopters and laggards, so that the intervention focuses on those most likely to change. Using these methods will allow REACT staff to tailor messages more precisely to address potential barriers specific at each stage. Thus,

a) Pre- and post-randomization community analysis will identify opinion leaders and key people in REACT intervention communities. These individuals will be invited to be involved in supporting the public/patient/provider education implementation process through their involvement on community boards and by directly endorsing the REACT project and the public/patient/provider education interventions in their communities.

b) Techniques to "market" the public/patient/provider interventions need to address specific barriers of the different adopter categories.

Another important feature of diffusion theory is the emphasis on innovation attributes. For an innovation to be readily adopted, important features of the innovation must include (Rogers, 1983): 1) compatible (with beliefs and status quo), 2) triable, 3) reversible, 4) cost-effective, 5) simple, and 6) have a perceived relative advantage. Hence, the REACT intervention must address these issues during public/patient/provider intervention contacts.

## b. Social Marketing Theory

A variety of programs suggest the benefits of social marketing principles in formulating and implementing broad-based behavior change programs (Yusuf et al., 1985; Safer et al., 1979). The principles and basic methods of social marketing emphasize the use of a consumer orientation to develop and market intervention messages (Safer et al.). The emphasis on consumer orientation suggests that a social marketing approach in minority communities may be particularly relevant since community representatives are actively involved in the development of the messages and the marketing approach and the likelihood of cultural sensitivity is thus increased (Yusuf et al.). Key stages in the marketing process have been identified and include: market analysis in which the marketplace, the consumers, and the organizational structures are analyzed; planning in which marketing-mix strategies are formulated into a marketing plan; development, testing and refinement of plan elements in which communication concepts and messages are pre-tested and refined; implementation in which the marketing plan is put into effect, monitored, and refined as necessary; evaluation of in-market effectiveness; and

use of feedback is used to re-shape market analysis and further refine the process (Novelli in Glanz et al., 1990). This social marketing theory provides the basis for our proposed community education component.

c. Community Organization Theory

Community organization is a planned process of assisting communities to use their structures and resources to accomplish goals endorsed by community leaders and representatives (Bracht, 1990). Five typical phases of the community organization process include: 1) community analysis; 2) design initiation; 3) implementation; 4) maintenance; and 5) dissemination/reassessment. There are at least four models of community organization, including: 1) a coalition model in which existing organizations are used to address community issues through a process in which linkages between existing organizations are constructed; 2) a leadership model in which community leaders identified as necessary for achieving project goals are brought together, generally from diverse segments of the community, to work toward a common goal; 3) a lead agency model, in which a community agency is identified as the primary liaison for activities in the community; and 4) a networks/grassroots model in which community mobilization occurs through direct involvement with residents on a broader scale with grassroots support. Community organization theory and principles are envisioned as providing the means to generate support from professional groups for the professional and patient education components of the intervention and the service of volunteers to support activities of the community and patient education components of the proposed intervention.

**C. REACT TARGET AUDIENCE DESCRIPTION**

REACT target audiences include those at higher and lower risk of heart attack.

THOSE AT HIGHER RISK include persons who have previously experienced an MI; and those with diagnosed ischemia, angina or other CHD condition but who may or may not have experienced an MI. Epidemiologic data suggest the following demographic characteristics of this group: <sup>1</sup>

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<sup>1</sup> There are about 1.25 million heart attacks in the U.S. each year. Of these, about 800,000 are first-time MIs; about 450,000 are recurring MIs. Sudden death (within 1 hour of symptom onset) occurs in about 250,000 cases a year. In 48 percent of men and 63 percent of women who died suddenly, there was no previous evidence of CHD.

## 1. Coronary Heart Disease (CHD)

Among American adults age 20 and older, CHD prevalence is 7.2 percent; 7.5 percent for non-Hispanic Whites; 6.9 percent for non-Hispanic Blacks; and 5.6 percent for Mexican Americans.

About 5 percent of heart attacks occur among persons under 40; about 45 percent occur among persons under 65. Among males (64% of MIs), the distribution is about equally divided between those older and younger than 65 years. Among women (36% of MIs), those 65 and older experience MIs at the twice the rate of those younger than 65. At older ages, women are more than twice as likely as men to die within a few weeks of an MI.

African-Americans are more likely to die of an MI than Whites. CHD death rates for African-American males are about 3.5 percent higher than White males. CHD death rates for African-American women are about 33 percent higher than White women. From ages 35-74, the CHD death rate for African-American women is about twice that of White women and three times that of women of other races.

The prevalence of angina pectoris is higher among women than men in the U.S. For White, Black, and Mexican-American women, the rates are 6.3, 6.8, and 5.4 percent respectively. This compares to angina prevalence among White men (3.9%), Black men (6.2%), and Mexican-American men (2.8%).<sup>2</sup>

THOSE AT LOWER RISK include individuals with diagnosed hyperlipidemia, hypertension, who smoke, or who have diabetes.<sup>3</sup> This group, which includes a broader range of sources of risk, is less easy to characterize demographically. However, within each source of risk there are some demographic patterns evident.

## 2. Hypertension

For example, about 25 percent of American adults have hypertension. Men have a greater risk of hypertension until about age 55. From 55 to 75, hypertension risk is about the same for men and women. For women over 75, their risk of hypertension is greater than men's at the same age. Blacks and Hispanic-Americans are more likely to have hypertension than Anglo-Americans. Of persons age 60 and older, hypertension is present in about 60 percent of non-Hispanic Whites, 71 percent of non-Hispanic Blacks, and 61 percent of Hispanic-Americans. In addition, persons of lower socioeconomic status have higher blood pressure.

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<sup>2</sup> It should also be pointed out that there are regional differences in the CHD death rate across REACT study sites. The rates tend to be highest in Alabama and Louisiana and lowest in Washington state, with other states falling between.

<sup>3</sup> It is important to note that those in the lower risk category may not perceive themselves as actually at any risk of MI.

## 3. Smoking

People who smoke include about 28 percent of White men and 26 percent of White women; 32 percent of Black men, and 24 percent of Black women; 26 percent of Hispanic men; and 13 percent of Hispanic women. Persons with less than 12 years of formal education are several times more likely to be smokers than those with 16 or more years of formal education. Older age groups (particularly men) are more likely to have stopped smoking.

#### 4. Hyperlipidemia

About 52 percent of American adults have cholesterol values of 200 mg/dl and higher. This includes 54 percent of White males; 47 percent of Black males; 53 percent of White females; and 51 percent of Black females. About 49 percent of Mexican-American men and 45 percent of Mexican-American women have blood cholesterol levels at 200 or above.

Although many of these higher risk individuals will be reached through patient education programs at hospitals, primary care and cardiac care clinics, the community education intervention seeks to supplement and intensify their exposure in other community channels including mass and small media, worksites, churches, community organizations, and high profile public events. Intervention objectives include building attention, awareness, and knowledge about MI symptoms 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.

#### 5. Diabetes

[Needs epidemiologic description]

#### 6. Bystanders and the general public

Studies show that most heart attacks occur not in social isolation, but in circumstances in which witnesses (often spouses and family members) are present. They frequently become aware that an individual is experiencing discomfort and are often asked for their opinion and advice. Although the majority of persons will never witness a heart attack, those who do may have a major impact on whether the individual seeks care immediately or delays. The major objective with this group is to build their attention, awareness, and knowledge about MI symptoms and the problem of delay; modify beliefs that may act as barriers to assisting others in seeking immediate care; and build specific skills in responding to MI symptoms in others to improve behavioral intentions and actions.

## 7. Community Organizations

The intervention will be implemented in partnership with community organizations and leaders that will provide resources for, and access to, important community education programs and channels of communication. The objective of the intervention here is to raise the salience of the delay problem as a major public health issue facing communities. Community leaders and organizations provide legitimacy to the campaign objectives as well as access to group and organizational channels for education.

### **D. COMPONENTS**

We conceptualize four basic components of the intervention (community organization, community education, professional education, and patient education), although these four components overlap and reinforce one another. Within these four components can also be differentiated two major modes of intervention delivery: interpersonal strategies and impersonal strategies. *Interpersonal strategies* are those which involve interaction between at least two people, such as individual counseling, group education or counseling, or telephone contact and education. *Impersonal strategies* are those which do not involve interpersonal interaction, such as various media approaches, using both large (TV, radio, newspapers) and small (pamphlets, posters, or videotapes) media. Within each intervention strategy, a variety of techniques or methods could be used, such as role modeling with or without role play, and contracting. Objectives for each intervention component have been designed to affect: 1) awareness and knowledge, 2) attitudes and beliefs, 3) skills or capabilities, and 4) behavior. These objectives are described in detail in the following sections.

#### 1. Community Organization Component

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.

#### 2. Community Education Component

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.

### 3. Professional Education Component

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.

### 4. Patient Education Intervention Component

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 be relied upon to deliver much of the patient education intervention component.

## **E. APPROACH TO STANDARDIZING INTERVENTIONS WHILE ALLOWING FLEXIBILITY**

There is clearly a need to standardize intervention approaches for several reasons, including: 1) provision of clear guidance to interventionists in each of the 10 intervention communities; 2) establishment of appropriate intervention goals and subsequent judgment of progress according to actual achievement of these goals in time periods; 3) conceptualization and description of the intervention as one overall intervention rather than 10 independent interventions; 4) measurement of the generalizability or external validity of the standard intervention across sites; and 5) clear description of the intervention for others to learn from and hopefully replicate or extend. Nonetheless, there is also a need to

maintain some flexibility in the intervention between sites for several reasons, including: 1) differences in cultural and ethnic diversity between sites in factors related to symptom perception, symptom attribution and health care seeking differences, leading to needs to tailor intervention messages depending on these cultural and ethnic issues; 2) differences in cultural and ethnic diversity between sites that may affect the methods that are used to access segments of the population and hence to differences in the emphasis of intervention methods; 3) regional differences in health care systems that may affect the methods that are needed to conduct the professional and patient education components, e.g., differences in prevalence of HMOs, differences in methods for conducting CME programs; 4) differences in available media and potential overlap between communities in large media markets; and 5) differences between communities in existing community organizations that influence the approaches that appear feasible to organize the community. As reflected in the following chapters, describing the intervention components, the need to balance standardization with flexibility has been addressed by developing standards and then specifying for each site the approaches that will be used within these overall standards (see standards in Appendix A).

## **F. SITE ACTION PLANS**

Site Action Plans for each center have been developed based on empirical and theoretical rationales within the context of the standards developed for each intervention component. This approach results in a standardized intervention process while allowing necessary flexibility in methods. Site Action Plans are contained in Appendix B. While the need to maintain flexibility is addressed with these plans, this emphasis on flexibility should not be construed to mean that there is flexibility in departing from these plans without approval of the Intervention Subcommittee and the Steering Committee.

## **G. TIMELINE FOR INTERVENTION**

REACT will begin different components of the intervention at different times, as well as stage different aspects of the intervention within each component. The community organization component will begin first to ensure adequate initial community support. Professional education will also begin early to serve as the basis for later patient education activities. Starting with community organization and professional education will allow additional time for materials development for the community education component. The community education activities will also be varied over time to ensure adequate marketing salience of the message. Key components in developing and implementing the intervention are summarized in Table 1-2.

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Table 1.1. Major Concepts in Social Cognitive Theory and Implications for Intervention

<i>Concept</i>	<i>Definition</i>	<i>General Implications</i>	<i>Implications for Provider Interventions</i>	<i>Implications for Patient/Family and Community Interventions</i>
Environment	Factors that are physically external to the person	Provide EMS, hospital, provider and social support.	Encourage organized approaches within hospitals; form hospital teams; provide materials. Promote as a CQI project. Increase (perceived) support from colleagues and administrators for the providers role in encouraging patients to seek prompt action for symptoms of AMI.	Assure provider systems are in place. Increase (perceived) social support from health care providers for prompt care seeking for symptoms of AMI (i.e., "Legitimize prompt care seeking"; all players reinforce messages). Involve families in interventions, reinforcing community interventions.
Situation	Person's perception of the environment.	Correct misperceptions and promote norms.	Activities which promote interdisciplinary provider communication. Promote systems which facilitate action (e.g. medical record check lists). Correct provider misconceptions about prompt care seeking for symptoms of AMI (i.e., patients overreact to symptoms; emergencies burden the system; prompt care seeking is bothersome for patient and hospital staff, etc.)	Improve knowledge about how system works (including costs). Collaborate with insurers on education strategies. Correct misconceptions about prompt care seeking for symptoms of AMI, (i.e., Ambulance is only a method of transportation; MI can't be treated, etc.) If a false alarm, emphasize legitimacy and explicit steps for future. Consider all situational needs, such as feeling need to call son/daughter/spouse.

<p>Behavioral Capabilities:</p> <p>* Cognitive</p>	<p>Knowledge and skill building.</p> <p>Knowledge and skill to perform certain cognitive tasks.</p>	<p>Promote Mastery learning through skills (cognitive/behavioral) training.</p>	<p>State of the art CME; on-site technical assistance.</p> <p>Educate care givers on how to teach their patients to evaluate symptoms in view of patients' medical histories and general knowledge of illness and disease which may vary by gender, age and/or other factors.</p>	<p>Patient Center Counseling. Behavioral Rehearsal; Have spouses verbalize concerns. Work through barriers. Encourage patients to initiate discussion with providers.</p> <p>Educate individuals how to evaluate AMI symptoms in view of their medical histories and general knowledge of illness and disease (particularly heart disease). Emphasis on discouraging patients to associate AMI symptoms with other medical conditions. Increase knowledge on the varied and individualized nature of MI presentation. (Interactive computer game; testimonials of people presenting with "ambiguous" symptoms; Counseling; etc. Discussion groups and role models can education via scenarios.</p>
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Table 1.1. Cont Major Concepts in Social Cognitive Theory and Implications for Intervention

Behavioral Capabilities  * Behavior	Knowledge and skill to perform given behaviors.		Educate care givers on how to teach their patients how to cope and to take appropriate action in response to symptoms; how to reinforce/educate the "false alarm" patients about next time. Encourage provider's "risk-based" targeted action by giving epi and efficacy data.	Educate individuals about the appropriate actions in response to (particularly ambiguous) symptoms. (Contracting with health provider or spouse; "Action plan" brochure; Patient Counseling; Interactive computer game, discussion groups, peer modeling.)
Expectations	Anticipatory outcomes of a behavior	Model positive outcomes of behavior desired.	Include "scripts" which emphasize patient/provider behavioral rehearsal. Emphasize the positive outcomes of teaching patients about prompt care seeking for AMI (i.e., save a life, increase quality of life after MI, grateful patient/family, etc.) Emphasize how important it is for provider to acknowledge support even if it turns out not to be an MI.	First assess patient/family perceived benefits/barriers, then address and problem solve one by one via patient centered counseling. Highlight unanticipated benefits/barriers. Use scenarios which portray "positive outcome" (even if false alarm)
Expectancies	The values that the person places on a given outcome, incentives	Present outcomes of change that have functional meaning.	Understand their priorities/problems; design strategies to address them (hospitals teams, office coordinator). Emphasize the value of outcomes; e.g., patient outcome, hospital image.	Emphasize the positive outcomes (i.e., survival, greater quality of life after MI) of prompt care seeking for symptoms. Counsel through expected negative outcomes.

Self-control	Personal regulation of goal-directed behavior or performance	Provide opportunities for self-monitoring and contracting.	Provide standardized checklists; staff teams agree on a monitoring system.	Prepare for action to a heart emergency. Behavioral rehearsal; cues to action—phone sticker, keychain.
Observational learning	Behavioral acquisition that occurs by watching the actions and outcomes of others' behavior.	Include credible role models of desired behavior.	Use credible provider role models to communicate behavior and the positive outcomes of this behavior. Find key provider leadership to endorse participation; role plays in CMEs; role model in newspaper human interest stories.	Use credible role models to communicate the targeted behavior and the positive outcomes contingent on this behavior, via magnet events, print and broadcast media. Community discussion groups can include "testimonials," use of peer influential.
Reinforcements	Responses to a person's behavior that increase or decrease the likelihood of reoccurrence.	Promote self-initiated social and affirmation incentives.	Visible hospital leadership support; MD support and affirm staff involvement. Give concrete suggestions on how to support—tokens from study staff, thank-you notes.	Reinforcement for quick action (even if it wasn't an MI)—ER, EMT staff, skills critical. Primary care, cardiologist sponsored education (1 on 1 patient centered counseling, targeted mailing or phone call) as well as MD endorsed and/or hospital team sponsored community sessions.

Table 1.1. Cont. Major Concepts in Social Cognitive Theory and Implications for Intervention

<i>Concept</i>	<i>Definition</i>	<i>General Implications</i>	<i>Implications for Provider Interventions</i>	<i>Implications for Patient/Family and Community Interventions</i>
Self-efficacy	The person's confidence in performing a particular behavior	Approach behavior change in small steps; provide specificity about the change sought.	Provide specific guidelines and scripts for teaching patients about MI symptoms and actions; opportunity to observe, "make it easy"—checklist, aides, have nifty patient education materials. Provide multiple intervention strategies that a provider may choose from to educate their patients.	Provide very specific guidelines for evaluation and action in response to heart-related symptoms (verbal and written). Encourage mental and verbal rehearsal of behavior with patient and if possible with families. Provide multiple behavioral strategies that can be employed in response to heart-related symptoms (verbal and written).
Emotional coping responses	Strategies or tactics that are used by a person to deal with emotional stimuli.	Provide training in problem solving and stress management; include opportunities to practice skills in emotionally arousing situations.	Provide concrete ideas on how to deal with needs to reassure/comfort, yet help patients/family understand it can "happen to them," or "happen again."	Provide specific guidelines for behavior in order to reduce emotional anxiety (or panic) during a symptom episode. Talk frankly and openly about fear reactions; mental and verbal rehearsal of coping responses; emphasis behavioral capability to minimize negative emotional states and heighten self efficacy (controllability).

Reciprocal determinism	The dynamic interaction of the person, behavior, and the environment in which the behavior is performed.	Consider multiple avenues to behavioral change including environmental, skill, and personal change.	Multi-level, multi-organizational, multi-strategy, multi-provider, multi-message—all reinforcing the other.	Multi-strategy, multi-provider, multi-message—all reinforcing the other.
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\* Adapted from Perry et al in Glanz et al. (1990).

□Table. 1.2 Timing of Key Intervention Activities

Component	Duration	Begin Date	End Date
Focus groups of identified target audiences and analysis	6 months	3/95	8/95
Materials production	12 months	9/95	9/96
Hire/train intervention staff	3 months	12/95	2/96
Community organization	18 months	3/1/96	9/1/97
Professional education	15 months	3/1/96	6/1/97
Patient education	12 months	9/1/96	9/1/97
Community education intervention	16 months	4/96	9/1/97



**Figure 1-1. REACT Framework of Intervention Process, Impact and Outcomes**

**Figure 1-2.** The self-regulatory model of health and illness behavior as adapted from Cameron, Leventhal, and Leventhal (1993). “Symptoms are perceived and elaborated on to generate both a cognitive representation of the symptom episode and emotional responses, typically stress. Both the representation and the emotional responses lead to the selection and initiation of coping procedures. The effectiveness of the coping attempts are appraised, and appraisals of coping failure lead to modifications of the representation or coping strategies and to decisions that one is well, stressed, or sick. Failure to cope either with the symptom episode itself or with the distress induced by the episode can motivate health-care use” (p. 172).

**Figure 1-3.** The relationship of concepts of social cognitive theory on the self-regulatory model of health and illness behavior as adapted from Cameron, Leventhal, and Leventhal (1993). “Symptoms are perceived and elaborated on to generate both a cognitive representation of the symptom episode and emotional responses, typically stress. Both the representation and the emotional responses lead to the selection and initiation of coping procedures. The effectiveness of the coping attempts are appraised, and appraisals of coping failure lead to modifications of the representation or coping strategies and to decisions that one is well, stressed, or sick. Failure to cope either with the symptom episode itself or with the distress induced by the episode can motivate health-care use” (p. 172). The concepts of social cognitive theory in this diagram and their related implications for intervention at the patient level are diagrammed below.

## **REACT COMMUNITY ORGANIZATION**

### **A. OVERVIEW OF COMMUNITY ORGANIZATION**

#### **1. Background**

Community organizing is an established process of mobilizing citizens, health professionals and communities for health action. It involves engaging community networks of private, public and volunteer organizations in a coordinated effort(s) to obtain a measurable health or program improvement goal. Successful intervention strategies utilizing community partnership principles have been reported over the past 20 years of experience with community-based demonstrations. The REACT project has adopted the partnership approach (see protocol, p.30) in implementing study interventions.

Community organization strategies and coalition building components can be identified in many health research and demonstration programs. An important lesson to be learned from earlier demonstration projects is that these citizen structures are not static and will often evolve into new or modified arrangements. Research sponsors, particularly from outside the community, must allow citizen groups to exercise decision making authority.

### **B. GOALS OF COMMUNITY ORGANIZATION**

#### **1. Community Organization**

##### **a. Goals**

Community organization in the REACT project 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. Lasting change in the behaviors of interest can only be sustained if the community is engaged and serves to reinforce change. The community organization techniques and strategies described below 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 will be the primary model used in communities where a suitable lead agency exists. In other communities, the coalition model will be used. In most communities, the approach used will draw parts from all organizational models. The specific objectives of the REACT community organization component are listed below.

## 2. Objectives

1. assist in creating a supportive community context in which the goals of REACT can best be realized
2. obtain the endorsement of community leaders and organizations to legitimize the project
3. motivate existing community organizations to commit resources in support of the intervention effort
4. motivate individuals and organizations within the community to provide volunteer service in support of the intervention effort
5. form productive partnerships with community organizations to further the goals of REACT
6. seek input from minority groups to elicit culturally sensitive intervention messages for the project
7. influence community norms to be more supportive of actions desired by REACT
8. sustain levels of community participation and enthusiasm throughout the intervention period

### c. Community Mobilization

Efforts will begin shortly before the start of the intervention phase. The mobilization process will activate communities to recognize the problem of MI delay and become involved in addressing the issue. Key community leaders and institutions identified during the community analyses will be involved early on in the planning process. Decision-making will be shared, and roles and responsibilities of the partners will be clarified and agreed upon. Specific objectives of the implementation process in each community are listed below.

1. The hiring of a field intervention coordinator. Hiring criteria will include knowledge of local culture, experience in community change efforts and skills in organizational management and evaluation. This individual will work in close collaboration with community groups and deliver programs and services.
2. In some sites there will be the development of a team in hospitals (consisting of members of the disciplines and departments involved in the care of heart attack patients and those at risk for heart attack). These teams, to be facilitated by project staff, will serve as the catalyst for a comprehensive hospital component. They will serve as sources of information about REACT and heart disease, help to organize and promote educational programs for hospital staff and serve as role-models for provider-delivered patient education. They will also provide information to REACT staff about each hospital and the implementation of REACT in the hospital setting.
3. Development of a broad-based community board/group to facilitate and co-manage the project. This may be an independent group created specifically for the REACT project (coalition model) or it may be affiliated with an existing community service organization, such as the American Heart Association (lead

agency model). Group members will include representatives from the following community sectors: political; economic; health; media; volunteer groups and the EMS system. Depending on the site, the religious and educational sectors may also be included.

4. The creation and staffing of task forces within boards or groups to provide input in specific intervention areas, such as community education, professional education and patient education.
5. Solicitation of volunteer support, particularly from existing volunteer networks identified through the community analyses
6. Training sessions for local trainers and leaders to improve knowledge and skills related to the achievement of REACT goals. Possible training topics include a summary of current research findings on MI delay and techniques for raising community awareness of MI delay issues.
7. In-depth key informant interviews, conducted by REACT staff, to further assess community readiness and begin enlistment of community volunteer support.
8. Findings from focus groups will be integrated into local planning efforts and shared with community representatives.

## **C. OBJECTIVES FOR KEY PLAYERS IN COMMUNITY ORGANIZATION**

### **1. Lead Agencies**

The lead agency approach involves the use of a single, powerful agency or organization which is given responsibility for action, including whatever coalition building or coordination of others' work is needed to meet the project's objectives. The lead agency will serve as the primary liaison for health promotion activities in the community. This approach requires that the selected lead agency change from within by adopting new job descriptions. This may be accomplished by organizing an advisory group that may be affiliated with an agency such as the American Heart Association (AHA). The AHA will serve as the agency through which project activities emanate and will provide backing and credibility for the REACT project with the community. Efforts will be made to secure donated office space within the confines of the local AHA where regular meetings of the advisory group and intervention field staff will be held.

### **2. Coalition and Coalition Members**

Key informants and coalition members will identify individuals and groups to form a core collaborative partnership for the REACT project, provide appropriate training and technical assistance to support coalition (i.e., education, training, data, progress reports, meeting planning), and obtain partnership commitments through collaborative agreements. Document roles and responsibilities will be established and agreed upon by community peers. A variation of the "lead agency" and "coalition" approaches is the "advisory network" approach. Within certain communities there may be substantial interest in supporting REACT activities, but on a more task focused basis. For instance, a group of media representatives might meet over a period of time to give advice, expertise and support to community media activities; or representatives from several agencies may focus on a "women's initiative" to plan and organize a series of activities aimed at women; and

simultaneously, the local REACT office could be housed in one agency, such as the Heart Association. REACT staff may periodically sponsor a recognition luncheon to highlight activities and promote communication across working groups. This approach capitalizes on the strengths of both the lead model agency and coalition strategies to accomplish tasks within a reasonable time frame, but not require extended or extensive commitment of one agency.

### 3. Networks

#### a. Neighborhood Networks (optional)

The community organizer will recruit and train a community network to reach persons at high-risk of heart disease and the community as a whole. Special emphasis will be given to reaching poorly-educated and low-income groups who may be less likely to seek care promptly. There are two general approaches to network organization: 1) networks within formal interaction systems, agencies, or private businesses (worksites, health care professionals, social welfare agencies, neighborhood/cultural organizations); and 2) informal peer networks in families or in residential or leisure-time gathering places. These social systems are tapped to contribute to the project by distributing printed materials and providing social reinforcement for imitation of role models.

When priorities have been determined in the first stage of mapping, all available data are used to identify specific persons in key positions to determine access to a particular network unit such as a *cantina*, beauty shop or street location. When specific contacts are nominated, they are approached directly in a presentation by staff and/or project leadership which includes the framing statement and an appeal for endorsement, support and specific participation in the communication network. Additional participants are identified by peer nomination or are simply found by "blind" canvassing, e.g., going from *cantina* to *cantina* or in a street setting, direct canvassing in search of potential network participants.

### 4. Volunteers

Volunteers are recruited to take part in both neighborhood networking (Texas model) and in general implementation. In the former, they are recruited directly, if possible, with referral or preliminary introduction by an advisor or by another volunteer. In Texas, responsibilities include the following: 1) regular distribution of information/material packages, 2) encouraging emulation of role models, 3) verbally conveying basic message, and 4) providing referral to services/additional information sources. These volunteers, part of the social environment in the target communities, will be involved in providing interpersonal contact that emphasizes social reinforcement for attention to and imitation of modeling displays.

In other sites, volunteers will be used in a variety of partnership arrangements. Volunteers for councils, coalitions, and task forces can often be identified through key informant interviews. Depending on the scope of volunteer involvement, sites should consider a systematic management process for selection, recruitment, placement, "supervision", and reward-reinforcement.

## 5. Media Representatives (see also Community Education Manual of Operations)

Television news personalities, radio talk show hosts, and journalists will assist in the community organization campaign. They will provide cost-free, carefully constructed publicity which conveys specific messages in role-model stories. With guidance from field staff, they will conduct interviews and shoot "B roll" or provide other "sidebars" which underlie the specific information, attitudes, and skills to be conveyed by the role model. The media representatives will develop stories which cover a range of models and issues related to symptom recognition and care seeking. Media messages will be designed to provide both information and skills trainings, especially for overcoming barriers to care. The messages will also be persuasive in that they will target specific attitudes and attempt to shape subjective perceptions of community and peer norms, self-evaluative processes and the social desirability of specific acts relating to AMI recognition and response.

### **D. REACT COMMUNITY ORGANIZATION STAFF**

#### 1. Qualifications

##### Recommended Skills:

- experience with organizing community health or related civic projects
- ability to work in a partnership with a wide range of lay and professional groups
- knowledge of media strategies to build community awareness and support
- knowledge of local community and history; living within the intervention community highly desirable
- knowledge of theory, processes and techniques of community organization and group dynamics
- experience working with community leaders, community groups, and health professionals
- familiarity with professional education and training resources
- ability to supervise other staff
- demonstrate dependability, maturity, coping with deadlines, high energy, and excellent interpersonal skills
- experience working with diverse groups and sensitivity to cultural differences

##### Qualifications:

B.A./B.S.

M.A./M.S. in health-related discipline preferred

Documented background in successful community-based efforts required.



## **E. IMPLEMENTATION OF COMMUNITY ORGANIZATION AND INTERVENTION COORDINATION**

### **1. Overall Considerations**

Community organizers/interventionists will identify the history of communication and cooperation in each community through key informant interviews, establish an inventory of formal/informal community resources, and promote collaboration through shared leadership and responsibility among partners. They will develop a knowledge and understanding of cultural and community values through key informant interviews, community meetings, and review of focus group results. They will also participate in training for REACT staff.

The site action plan will be the guiding framework for intervention activities in each particular community. Not all procedures listed below are to be followed in each community.

### **2. Developing and/or Updating Community Profiles**

Community organizers/interventionists will contact representatives from each of the following community sectors to gather additional information about the community and determine if willing and appropriate organizational members can be identified to serve as REACT community board members (coalition model) or an advisory community or ensure that representatives are presently affiliated with the existing lead service organization affiliated with the REACT intervention (lead agency model). Community sectors to be contacted include: city/regional government; major business/work sites; predominant medical/health institutions; local newspaper/radio/television agencies; principal health voluntary groups and; EMS agencies. Other suggested community sectors that may be contacted to provide membership include: major religious organizations; social service agencies; senior citizen's groups; public and private educational organizations; women's clubs; public health agencies and; labor unions. The qualifications and skills of board members should be quickly identified to avoid duplication and ensure adequate internal resources to carry out the REACT intervention. If a predominant organization is identified that will champion REACT activities, organization representatives should be recruited early to assure community involvement and ownership.

### 3. Planning for Success

Community organizers/interventionists will create awareness of project goals, establish collaborative relationships that identify roles and responsibilities of partners, and define process to resolve issues. (see Community Education Manual of Operation, Sections \_\_\_)

In presentations to community groups, emphasize clarity and brevity. Mobilize the community to assist in intervention activities.

### 4. Procedures for Development of Relationships with Media (see also Community Education Manual of Operations)

Relationships with media representatives will be established through introductions from the lead agency or other local organization closely affiliated with REACT. Representatives will be formally approached in concert with community representatives from the lead agency and/or those who are local opinion leaders. An ongoing relationship will be developed and strengthened by ties with community representatives.

### 5. Procedures for Development of Relationships with Provider Groups and Organizations (see also Provider Education Manual of Operations)

Relationships with provider groups (such as the local medical society), with health services delivery organizations (such as hospitals, HMOs and Community Health Centers) and with individual and groups of providers (such as a cardiology group practice) are pivotal to the acceptance and promotion of REACT goals. REACT investigators and field staff will embark on a strategy which cultivates these relationships via key informant interviews, face-to-face meetings, integration of appropriate providers into committees, teams and working groups, and regular communications via mail strategies.

#### 1. Procedures for Development of Relationships with Other Community Organizations (see also Community Education Chapters III.F)

Community organizers/interventionists will provide a vehicle for the exchange of ideas and information by convening meetings and facilitating discussion. They will communicate and coordinate routinely, via telephone calls and periodic meetings, with public sector, private, and non-profit organizations that have well developed volunteer structures.

#### ***Optional Procedures:***

#### 7. Procedures for Neighborhood Networking (primarily Texas)

Data and information from the first qualitative research and community mobilization will be used to prepare a plan for systematic utilization of formal systems, informal networks, and geographic units as channels of access to the community. Staff from each site will prepare forms and charts that tentatively "map" the access plan, with final mapping to be done on-site with input from local advisors and volunteers. Based on the access plan, illustrations of "ideal" networkers are generated. A wall map will be used to mark the location of each of the priority network participants. To assure appropriate geographical

coverage, units will be re-prioritized according to location. Where potential contacts are relatively few, further investigation is needed to identify potential network participants.

Training of network volunteers consists of demonstration and role plays, with the primary objective being to shape positive verbal behaviors and extinguish negative responses to persons who do not accept the behavioral recommendations that are implied in the role model stories. Although the role-model story-based encounter is the central part to training, network participants also learn factual information about heart disease prevention and treatment and other special topics about referral and resources available in their community. Role playing is used to allow practice in a supportive environment to emphasize the importance of using positive communication and to provide opportunity for group feedback. Staff first role-play (model) an ideal volunteer interaction, then encourage volunteer trainees to do so in front of the group. Supportive feedback is elicited throughout from the group. After several "ideal" role-plays, a problem that may be encountered in the field is introduced and group feedback is sought on creative ways to deal with such problems.

The focus of training is on clear statements about symptoms recognition and care-seeking with strenuous expressions of praise for all positive responses. The volunteers' chief objectives are to: 1) encourage their friends/contacts to attend to campaign features; 2) reinforce those who say they have done so or intend to do; 3) encourage their friends/contacts to learn from modeled protective behaviors; and 4) reinforce those who learn. Important social skills covered in training include: 1) importance of using ONLY positive reinforcement; 2) avoiding moralistic attitudes; 3) avoiding prejudice, criticism, and conflict; 4) respecting others' rights to privacy; 5) respecting the cultural values of others; 6) the distinction between assertive, aggressive, and non-assertive behavior; and 7) awareness of non-verbal communication. It can not be stressed often enough that individuals who do not follow the role model features, or who do not choose to learn should never be criticized or harassed. Story-telling is a natural activity, but many network participants require repeated training and much prompting before they begin to convey appropriate information about symptom-recognition and care-seeking. Even minimal remarks or gestures endorsing the project materials will be helpful in changing perceived norms in the community and the staff who manage the network participant should reward even very modest efforts.

Network participants are contacted on a schedule corresponding to the production and distribution of media and other materials. The purpose of this contact is to monitor the volunteer's activity, re-emphasize the importance of positive reinforcement, discuss successes and barriers encountered, discuss strategies for dealing with these barriers, and preview new materials and activities. This contact is also an important opportunity for staff to receive feedback on the reception of materials and activities by the community. Monthly contact is feasible, and by organizing group meetings, a single staff member is capable of guiding as many as 100 volunteers after six months of network development. For each volunteer, a record is kept to identify their network and track their progress. A volunteer record form records name, address, phone(s), system or network description, and other comments. It also contains a log of meetings with date, duration/content, comments and quantity of material distributed.

The management of network participants is handled in a way that fosters emotional support and the sense of belonging to a group that produced valuable social benefits. To enhance

these feelings and build perceptions of a "movement", several specific activities are conducted:

- a) the projects have a locally-selected name identifying the network and their participants and they share and display a symbol or membership (t-shirt, window sticker)
- b) a significant portion of each meeting is devoted purely to enjoyment of activities, e.g., sharing a meal, receiving an interesting guest, game, etc.
- c) activities are framed in terms of a challenge to be overcome by group effort, with tangible benefits of great value
- d) high levels of participation are recognized and symbolic representations of achievement will be awarded, e.g., certificates of appreciation, ribbons, etc.

## 8. Procedures for Hospital Team Development

Some sites will want to use hospital teams (existing or new) to facilitate intervention activities.

- a. Through contacts established by principal investigators or key informant interviews, or other ways, contact hospital administration for clearance.
- b. Contact key administrators of nursing, coronary care, emergency department, discharge planning (if applicable), cardiac rehabilitation, other departments as appropriate.
- c. Determine whether an interdepartmental, interdisciplinary committee on coronary care already exists; if yes, contact.
- d. If no committee already exists, ask administrators to identify two or three persons from their staffs who might be interested.
- e. Contact persons identified. If they are not able to participate, request other suggestions.
- f. Convene a meeting
- g. Orient members about REACT, objectives for team and members
- h. Record minutes of meetings and attendance
- i. Schedule subsequent meetings and activities
- j. Change membership as necessary
- k. Orient new members (see #7)

Additional information on the development of hospital teams is available under Provider Education (Chapter IV.E and Appendix D.7)

### III. REACT COMMUNITY EDUCATION

#### A. Overview of Community Education

The purpose of the REACT community education intervention is to provide widespread and repeated exposure to a public health campaign to reduce individuals' delay in seeking medical care for MI symptoms. There are several dimensions to this:

- 1) the campaign is addressed to specific target groups including persons at risk of MI, their spouses and families, and the general public.
- 2) the campaign emphasizes messages to appropriate target groups to raise the level of salience about the problem of delay, to assist in symptom recognition, and the importance, benefits, and intentions of taking immediate action to seek care. The object of change in this intervention is somewhat different than in many public health interventions that seek lifestyle behavioral change. Here, the object of change is to prepare individuals to take appropriate action for an event which has not yet occurred and which may or may not occur in the future. Preparation for such a contingency requires attention, awareness, knowledge, relevant beliefs and perceptions, development of specific skills and their rehearsal, and intentions to act appropriately.
- 3) the campaign uses multiple education strategies making as full use as possible of mass media, small media, community organizations, groups and networks, and high visibility public events. The purpose of a multi-strategy approach is to maximize opportunities for exposure to the REACT intervention.
- 4) the campaign seeks to raise the public visibility of the issue of delay and to frame the issue as a public health concern of the entire community. The campaign seeks the involvement of community organizations, groups, institutions, and leadership in helping to reduce this public health problem.
- 5) the community education intervention seeks to accomplish its goals and objectives in a period of 18 months (from March 1996 to September 1997).

#### 1. Community Intervention Staging and Messages

The intervention will include a primary core message that will be emphasized throughout, but it will also include six three-month phases that will emphasize secondary messages relevant to particular target groups.

##### a. Primary Campaign

Throughout the 18-month intervention, the primary campaign will present a simple, core message consisting of a few key points repeated in all available channels. It is expected that all education strategies will emphasize this message as appropriate in various intervention settings. Core elements include:

- Basic heart attack symptom recognition
- Importance of acting fast
- Action plan -- exactly what to do

In addition to this core message, a strong identifiable logo and slogan will be repeated in all campaign elements. A consistent "look" or style will be created for all centrally produced education materials; and templates to assist local sites in maintaining the general look.

b. Secondary Campaign Waves

In addition to the primary intervention message, the intervention will also consist of six three-month "waves," including several more detailed secondary messages. These will include more detailed information regarding symptom recognition, issues surrounding EMS/911, and messages directed specifically at women and bystanders.<sup>1</sup>

These six waves of intervention will feature important content that requires more detail than is possible in the primary campaign. A variety of channels will carry these secondary messages, reinforcing one another as appropriate for specific target audiences. Mass media channels and community activities will reinforce these messages. The wave approach keeps audience interest high as new information is added to the continuing basic message.

All education strategies will seek to emphasize these secondary messages during each wave as appropriate for target groups. For example, during the one period, patient education programs may wish to focus especially on high-risk women (although women will be exposed to the program during the entire campaign). Group and network presentations although communicating the primary core message, may especially emphasize the secondary themes described further below. The point is that each strategy will seek to reflect and intensify certain secondary messages and themes according to the schedule listed below.

While many intervention materials will be centrally produced, communities will also tailor intervention emphases to their specific needs. For example, some communities may need to emphasize EMS/911 issues more than others, or campaign themes of particular relevance to ethnic groups.

c. Secondary Campaign Wave Topics (in suggested order)

First quarter: Program awareness and introduction of primary campaign message

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<sup>1</sup> The secondary intervention waves will consist of three-month periods (in reality, these will more likely be two-month waves with one-month respites between waves to prevent audience "overload"). A one-month quiet period also allows field staff to prepare for the next wave.

Second quarter: Why acting fast saves lives (e.g., clot-busters; reduction of sudden death; having an action plan)

Third quarter: Symptom recognition skills (more detail than primary message)

Fourth quarter: Women have heart attacks too

Fifth quarter: Saving someone's life (bystander-spouse message) symptoms)

Sixth quarter: 911: The hospital at your doorstep (provides immediate care for stabilizing MI

## **B. Goals**

- 1) To reduce patient delay in seeking medical care for MI symptoms;
- 2) Among persons at higher risk of MI: to build awareness, knowledge, changes in beliefs and perceptions, decision-making skills (including development of a personal action plan), and intentions to act rapidly in the event of MI;
- 3) Among the general public and those who may become bystanders to persons experiencing MI symptoms: to build awareness, knowledge, changes in beliefs and perceptions, decision-making skills, and intentions to provide appropriate social support to those experiencing MI symptoms;
- 4) Among all groups: to maximize opportunities for exposure to intervention messages among the target groups listed above;
- 5) Among community groups and organizations: to build broad public support for efforts to reduce patient delay as a major community public health problem.

## **C. Target Groups and Objectives**

### **1. Persons at Risk of MI**

Target populations include those at higher and lower risk of MI.

THOSE AT HIGHER RISK include persons who have previously experienced an MI; and those with diagnosed ischemia, angina or other CHD condition but who may or may not have experienced an MI. Characteristics of this group are reviewed in the intervention introduction and overview.

THOSE AT LOWER RISK include individuals with diagnosed hyperlipidemia, hypertension, who smoke, or who have diabetes.<sup>2</sup> Characteristics of this group are reviewed in the intervention introduction and overview as well.

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<sup>2</sup> It is important to note that those in the lower risk category may not perceive themselves as actually at any risk of MI.

## 2. Bystanders and the General Public

Studies show that most heart attacks occur not in social isolation, but in circumstances in which witnesses (often spouses and family members) are present. They frequently become aware that an individual is experiencing discomfort and are often asked for their opinion and advice. Although the majority of persons will never witness a heart attack, those who do may have a major impact on whether the individual seeks care immediately or delays. The major objective with this group is to build their attention, awareness, and knowledge about MI symptoms and the problem of delay; modify beliefs that may act as barriers to assisting others in seeking immediate care; and build specific skills in responding to MI symptoms in others to improve behavioral intentions and actions.

## 3. Community Organizations

The intervention will be implemented in partnership with community organizations and leaders that will provide resources for, and access to, important community education programs and channels of communication. The objective of the intervention here is to raise the salience of the delay problem as a major public health issue facing communities. Community leaders and organizations provide legitimacy to the campaign objectives as well as access to group and organizational channels for education.

### **D. Implementation of Community Education Intervention**

#### 1. Mass Media

The REACT intervention recognizes that mass media are important public institutions whose attention to, and support of, the campaign will be key to achieving its goals and objectives. The mass media intervention includes two strategies: media relations (generating media news and feature stories); and public service advertising (placement of pre-packaged PSAs with commercial and alternative media).

Mass Media Intervention Standards:

The REACT Community Education Intervention seeks as much commonality as feasible across intervention sites. Thus it is necessary to specify certain standards that all sites are expected to meet. However, these standards take into consideration that the intervention will be tailored to reflect some community and regional differences in the implementation of specific strategies. Standards for the mass media strategy include:

Exposure to the Intervention through News Stories:

Beginning in May-June, 1996, each intervention site will generate a minimum average of two news stories per month across mass media channels (equivalent of 2 “hits” per household). It is recommended but not required that at least one-third to one-half of the stories be generated through electronic mass media.

News opportunities may include assisting the media in developing news stories; appearances on radio or television talk or call-in programs; newspaper or magazine inserts; with the commercial or alternative press.



For both the generation of news stories and the placement of public service (PSA) messages (below), it is recommended that communities plan media placement in advance. Appendix C.1 provides an example of a media placement schedule.

### Exposure to the Intervention through PSAs

Beginning no later than July-August, 1996, each intervention community will generate a minimum average of 5 public service advertising (PSAs) placements per month across mass media channels (equivalent of 5 “hits” per household). It is recommended but not required that at least one-third to one-half be generated through electronic media.

If communities decide not to use PSAs, it is expected that they will focus their resources on developing news stories (as above) in the range of 4-5 per month across channels.

#### a. Media Relations Procedures: Overview

The intervention seeks to educate individuals about the problem of MI delay and at the same time seeks to build the issue as an important community public health concern. Mass media are among important community institutions that can help to achieve this objective. First, through news and editorial coverage, they alert, inform, and educate the public about important community problems that need solutions. Second, they help build the public agenda for specific solutions to realize some beneficial goal. Third, they feed back to community leaders public opinion about specific problems or proposed solutions. Fourth, media news and editorial coverage often determine the “framework” (definitions, descriptors, terms) within which problems and solutions will be discussed and treated in the community.

The roles media play depend in part on whether the community is large or small; whether power is concentrated in the hands of a few or widely dispersed among many actors; whether groups are organized to push a particular campaign; and the extent to which problems and solutions affect large or small groups of people and special interest groups of greater or lesser influence in communities. Successful media relations therefore depends in part on a good working knowledge of community power and leadership structures.

How well or poorly the mass media help fulfill their roles and functions is in large measure a product of good management of media relations. In this context, managing media relations means effective representation of the intervention and its point of view to the media. This requires an active approach based on understanding media roles in communities, how the media work on a daily basis, and what's involved in establishing one-on-one relationships with news reporters and editors. Media relations must be organized sufficiently to influence the media not only to cover the issue in the first place, but to cover it over a sustained period of time, and how to cover it as well. This involves planning -- forethought about the kinds of events, happenings, spokespersons, and information that will appeal to the media's news judgment as deserving of their sustained attention. In addition, it involves planning about how to present the issue of MI delay to the media -- a process that is often called “issue framing.”

Although this section focuses primarily on the mass media, it is important to point out that they include not just large commercial daily newspapers and broadcast stations, but alternative (including ethnic) weekly newspapers, magazines, and newsletters, and even public access cable channels (which may reach larger numbers of persons if there is appropriate cross-media promotion). Decisions about the use of these channels should

be made based on local conditions and appropriateness and reach to specific target audiences or the general public.

A first step in making effective use of the mass media is to have a good understanding of community dynamics and community actors and interest groups. What leaders, groups, and interests will want to see REACT high on the community agenda and may be mobilized to actively support these efforts?

### 1. Range of Media Involvement

This is a key issue illustrating that effective media relations in part requires community organizing skills as discussed in the community organization section of this manual. Good media relations may be carried out to achieve a range of involvement of the mass media in the REACT campaign. Minimally, they should be engaged to publicize activities, messages, and information. Optimally, some mass media outlets may be engaged in partnership to promote campaign goals and objectives. For example, some media outlets may be persuaded to adopt the REACT intervention as an object of special emphasis or support in their news and editorial goals for the community. In such case, they may seek to produce special programming or coverage in partnership with campaign leaders and spokespersons; and they may provide more sustained coverage during the period of the campaign. While we recognize that the ability to establish this optimal relationship with mass media outlets will likely vary across sites, it is highly recommended that sites engage the mass media just as they seek to engage and to educate the health professions and other community institutions.

### 2. Media Relations Tasks

Specific media relations tasks in intervention communities include the following (in approximate order):

- Identify key community media reporters, editors, producers (newspaper, TV, radio, magazines);
- Compile media outlet information including daily deadlines, public service opportunities, key programs, standing columns, and desired formats of copy or information;<sup>3</sup>
  - Develop a press kit and support information for local media;
- Meet with media gatekeepers to explain REACT;

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<sup>3</sup>It is important to note that media outlets themselves can provide a great deal of detailed information about demographics of the audiences they serve. This is available in marketing and other reports especially thorough advertising departments.

- Establish working relationships with media gatekeepers
- Recruit some media workers to participate in campaign planning (these may include journalists or producers or public relations or advertising persons);<sup>4</sup>
- Organize media briefings, conferences
- Train local sources and contacts in dealing with the media;
- Assist media in developing news and feature stories by placing them in contact with individual REACT “success” stories; assist in arranging “visuals” for television; provide media with contacts, sources for interviews and quotation in media stories;
- Create press releases about major events or issues related to REACT;
- Collect process information including clippings of stories published or broadcast.

#### b. Media Work and Representing REACT

A primary characteristic of the mass media is a time-urgent, standardized work routine. Thus advocates and groups seeking to influence media coverage are most effective when they make it as easy as possible for reporters and editors to do their jobs. Such organization increases the likelihood that the media will attend to the REACT message and intervention activities. There are practical issues here: 1) establishing personal relationships with reporters and editors; and being a good news "source;" and 2) learning to think "news" like a reporter or editor; and planning the language and symbols that will best frame the issue for the public.

#### C. Media Relations Procedures: Establishing Relationships

Good media relations begin by identifying local reporters and editors that are most likely to be interested in the issue of MI delay. On small newspapers and broadcasting outlets, this isn't difficult since they have only a few staff persons. On larger newspapers or broadcast stations, this may require a few discrete inquiries. On larger newspapers, it is important to identify the principal editor who assigns reporters to stories. This person's title typically is City Editor or News Editor but sometimes may be Managing Editor. At larger broadcast stations, the News Director carries out the same function.

It is recommended that the field intervention coordinator call for an appointment and stop by to introduce him/herself and the REACT campaign. Written background on REACT, others involved in the community, and any upcoming activities (such as press conferences) should be provided as well as telephone numbers. For newspapers and television stations, the coordinator should ask about visual requirements and needs. Some media are receptive to submitted photos or videos, while others may be limited in accepting them because of union contracts or other rules. The intervention coordinator should inquire about deadlines and whether there is a particular reporter that might be assigned to cover REACT activities. The coordinator should ask to be introduced to the reporter and also obtain their phone numbers. The initial contact should be upbeat and friendly and sensitive to the editor's or reporter's daily routine. Information about

contacts and deadlines should be used to create a local media directory. A sample media directory is provided in Appendix B.

A key aspect of the REACT approach to media relations, is to localize the campaign as much as possible. Forming community partnerships or using a lead agency model discussed in the community organization section above lays the groundwork for this localization to take place. In other words, the campaign should not be promoted primarily as an out-of-town university research project, but should be promoted as a partnership of community organizations, leaders, and researchers. Thus wherever possible, local community leaders involved in REACT should be in the forefront of the campaign. This requires identifying and training local spokespersons who will clearly and articulately represent the issue to the public and to the mass media. These persons may include physicians, nurses, pastors, community leaders or other articulate persons. The intervention coordinator may need to plan training sessions to help impart to these individuals skills in interacting with the media. A sample guide for a training session is provided in a Appendix C.

In addition, as community organization efforts move forward, coordinators should plan to create a "media kit" to assist reporters and editors in covering REACT. This information subsidy of the mass media is important for two reasons. First, it provides the media with basic information about the problem of delay so that they report the issue accurately. Second, it provides them with a list of local (and perhaps regional or national) contacts whom they can call for more information, quotation and also to check accuracy. A sample outline for a media kit is provided in Appendix D.

#### d. Media Relations Procedures: Newsworthiness

Getting a single news story published or broadcast is not usually difficult if it remotely meets any of the criteria of "newsworthiness" described below. But sustained media attention is key to raising and keeping an issue part of the community's agenda. This is much more difficult. The media often act like a "restless searchlight" moving from issue to issue. In part this is due to the media's need to report something new and different (issues get old fast), but it is also due to competition for media attention to other issues. REACT will not be the only group in the community that wants attention to an important issue. The ability to "think like a news person" and to build personal relationships with reporters and editors become critical in getting sustained attention.

While the media, especially in smaller towns, are very amenable to publishing or broadcasting notices about meetings and other "bulletin board" fare, raising an issue to the public agenda requires special attention to newsworthiness. Characteristics defining newsworthiness are highly subjective. Some elements that reporters and editors regard as newsworthy include, but are not limited to, the following:

- an issue, event, or problem that affects large numbers of people;
- a novel approach to an issue or problem;
- conflict among different interests or groups;
- drama or sensation;
- community organizing for action to solve a problem;
- human interest "success" and "tragedy" stories
- what's being done locally to solve a problem of national scope

In addition, news stories provide the public with frameworks within which to think about an issue. That is, the language and symbols used in news stories provide a basis for interpreting meaning and importance.

In proposing story ideas, the ability to include these characteristics and draw them to the attention of reporters and editors helps to enhance the potential for news coverage. Examples of these characteristics applied to REACT may include many of the following story ideas:

- how the community is organizing to address the problem; the numbers of persons, groups involved, even competing hospitals, etc.;
- role model stories: human interest features about individuals who responded to MI symptoms appropriately;<sup>3</sup>
- what happens when you call 911 in the event of a heart attack; taking the mystery and fear out of acting fast;
- features on EMS techs, ED physicians, nurses who daily see the consequences of delay;
- feature showing individuals how to plan what to do in the event of an MI; especially targeted to bystanders;
- women suffer heart attacks too; features on women who experienced MIs and took action; including discussion that the nation has over-sold the idea that heart attacks happen only to men.

e. Media Relations Procedures Summary

Here is a summary of this section's main points:

- Media relations are necessary because the mass media help to alert and inform the public and build the public agenda of important issues and problems;
- Effective media relations begins by recognizing that media people are individuals who have a job to do, who live in the community, have families, and who want the best for themselves, their families, and their community;
- Effective media relations means in part establishing personal working relationships and understanding the needs and requirements of media work, that is, making it easy for the media to cover REACT activities and interests;
- To represent REACT effectively requires a planned approach including the following:
  - identifying leaders, groups, and interests who will want to see the MI delay issue high on the community agenda and will become actively involved;

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<sup>3</sup> Sometimes called “behavioral journalism” by A. McAlister.

- Planning events, happenings, and programs in which the media will have interest; and learning to think "newsworthy;"
- Planning in advance how best to frame the issue and to communicate it to the public;
- Identifying and training spokespersons who will clearly and articulately represent the issue to the public.

## 2. Public Service Advertising: Overview

While media relations are key to the mass media strategy, public service advertising (PSA) is important in providing supplemental exposure to highly controlled specific messages about MI delay. It is therefore very important as a tool of public education and framing of the problem of MI delay. PSAs will for the most part be centrally produced and distributed to intervention sites. However, local production of PSAs may be possible in specific cases where there is a special local need as well as a media outlet willing to do the production.

PSA themes and messages will reflect the core primary message as well as the secondary themes discussed above. Many PSAs will reflect a "role model" approach -- that is, they will tell real stories about real people and their response to MI symptoms. A sample script is included in Appendix E.

Similar to media relations, successful placement of public service advertising requires an active approach. The same rules of media relations management apply, but there are some differences. United States federal law designates that the airwaves are not private property but belong to the public. Broadcasters may occupy their frequencies only if they operate in the "public interest, convenience, and necessity." Broadcast licenses are reviewed every few years by a federal agency and, in part, renewal requires broadcasters (especially television stations) to show how they have met public service obligations. One way television stations show this is to run PSAs free-of-charge on a regular basis.<sup>4</sup> Print media outlets, on the other hand, are under no similar legal obligation. However, many print media outlets are very amenable to public service advertising and allot space on a regular basis. This includes newspapers, magazines, and outdoor advertising companies.

Specific tasks related to PSAs in intervention communities include the following:

- Compile information on media outlet public service (PSA) and paid advertising procedures
- Arrange for placement of PSAs and paid advertising
- Arrange for "piggybacking" of REACT message in regular advertising of hospitals, clinics, and other cooperating and participating organizations

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<sup>6</sup> Due to broadcast deregulation in the 1980s, radio stations are not required to make the same showing as television stations. Nevertheless, most radio stations take public service obligations very seriously and will broadcast PSAs on a regular basis.

- Arrange for local production of PSAs where needed working with local media outlets

### 1. Public Service Advertising: Procedures

During the course of establishing relationships with media reporters and editors, the intervention coordinator will gather information about media outlets and their PSA format requirements.

A common problem of placing PSAs is that they may be run only during “graveyard” hours when few people are watching or listening. Certainly this will sometimes be the case, but successful placement of PSAs during high viewing or listening periods is also a function of building good relations with media gatekeepers. In meeting with program and news directors at broadcast stations, for example, the intervention coordinator should also consider meeting with advertising directors and informing them of REACT too. When PSAs become available, they should be delivered in person and if possible reviewed with media staff. A common factor in successful placement of PSAs is whether media staff regard PSAs as well-produced, creative, and of interest to the community. The extent to which all these media gatekeepers see MI delay as an important issue deserving of the media outlet’s support will propel them both to cover the project as news and to run PSAs on a more regular basis.

Some media outlets will also assist non-profit groups in the production of PSAs especially in cases in which the media outlet has taken a special interest in the issue.

In addition, most broadcast outlets will provide information about when PSAs were run and the approximate audience size estimated to have been watching or listening. These data are key to judging success in placement of PSAs. Arrangements with media outlets should be made in advance to collect such data.

Finally, in community organization efforts to build the REACT partnership or in working with a lead agency, attention should be given to the idea of “piggybacking” a REACT message on advertising by other community organizations. For example, a hospital advertising a chest pain center may be persuaded to include a general MI delay message or specific REACT message in its material. Pharmacies may be persuaded to include a REACT logo or message in their local advertising. Other organizations may be willing to provide similar PSA opportunities.

### 2. Public Service Advertising: Summary

The main points of this section are:

- PSAs are important exposure supplements to the generation of news and information in the mass media; while they may not be viewed by audiences as having the same authority as the news, campaigns gain increased control over the message;
- PSAs are convenient and cost-effective ways of telling a brief, persuasive story in an entertaining fashion to a large number of people;
- Successful placement of PSAs follows the same rules as those of good media relations: strong, personal relations with media gatekeepers;
- Opportunities for “piggyback” exposure in the advertising of other organizations should also be explored.





## E. Small Media

Small media include channels and materials that may be more easily targeted at narrower audience segments or that can be used to supplement exposure to other intervention strategies. Small media include, for example, pamphlets, brochures, outdoor or transit advertising, direct mail, posters, point-of-purchase displays, and "stuffers" that may accompany other mailed items. In the REACT intervention, these materials will be used particularly to supplement presentations of the message to community organizations and neighborhood networks but also may be used independently to increase general exposure opportunities (e.g., direct mail; outdoor, transit advertising).

### 1. Small Media Intervention Standards

As indicated above, the use of small media requires decisions at each intervention site about the appropriateness, cost, and potential effectiveness of small media vehicles. While all intervention communities are expected to use small media in some form to maximize and supplement exposure opportunities, standards anticipate that these decisions will vary somewhat from site to site. As such, intervention communities may select options from the intervention standards described below.

#### a. Exposure to the Intervention through Small Media

It is expected that intervention sites will implement at least two small media strategies from the following list:

- Direct mail: at least one direct mailing to every household in the community; or several smaller mailings aimed at reaching a high percentage of designated target groups. Direct mail is widely recognized as a powerful tool to raise attention and awareness to issues. It can also be specifically targeted to more narrowly defined groups or geographic segments of the community. Its effectiveness can also be enhanced to the extent that it avoids a "junk mail" or advertising look and appears as a personal communication to the intended reader. It does, however, require reasonable levels of community literacy and depending upon the extent of its use can be costly. For example, while direct mail can be useful in reaching every community household, it may also be an important tool to build support for the campaign among certain groups such as physicians and other health professionals.
- Point of purchase displays: a poster with brochures giving the REACT message recommended for use in intervention communities' ten largest pharmacies or grocery stores. Such displays have the potential to be seen by thousands of persons on a daily basis, similar to other display advertising and can thus be useful in further supplementing community exposure. Used in pharmacies, these displays can be tailored toward groups at higher risk for heart attack, particularly those filling prescriptions for hypertension, hyperlipidemia, or other CVD-related conditions.
- Brochure, pamphlets: distributed through community organizations as a supplement to individual or group presentations of the REACT message. As detailed further below, the intervention seeks to use community organizations or neighborhoods as a staging point for presenting the REACT message to groups or individuals. Brochures and pamphlets will serve to reinforce these contacts.

- Outdoor/Transit advertising: at least two billboards in high traffic locations for one month each during the campaign; or “transit cards” on high traffic public transportation routes. Outdoor and transit advertising are useful in reaching large numbers of persons with a simple message that can be recognized rapidly while driving by, or using public transportation. In combination with mass media strategies, this may be very effective in raising attention and general awareness to REACT.
- Posters: displays/display boards in at least ten high-traffic areas in the community such as shopping centers, malls, large worksites, libraries, hospitals or other areas. Similar to outdoor advertising, the use of this strategy seeks to reinforce the message encountered in other circumstances and also to supplement organizational and neighborhood strategies described further below.
- “Stuffers”: material inserted regularly in organizational newsletters, paychecks, school backpacks, or other organizational small media channels.

## 2. Small Media Procedures

Procedures for the development and use of small media will necessarily vary depending on the medium, the circumstances of its use, and community needs. While much small media will be centrally produced for the REACT intervention, it is also expected that individual communities will wish to produce some of their own materials for specific local use. This is important because local needs will sometimes vary. It is also important that local community organizations and leaders involved in the campaign promote REACT as a primarily local intervention effort even though it has national overtones as a research project.

### a. Procedures for Developing Small Media

Small media vehicles that will be centrally produced for use in REACT intervention sites generally follow these development procedures:

- develop objectives for each vehicle;
- coordinate vehicle planning where some items may be identified to supplement multiple educational strategies;
- develop drafts of material with feedback from REACT staff;
- pretest vehicles with persons similar to intended audience;
- modify vehicles as indicated;
- produce camera-ready art for production;
- print and distribute vehicles to REACT intervention sites;
- distribute vehicles in community as needed.

For the development of material at the local level, it is suggested that a similar set of steps be followed in conjunction with the local REACT community coalition or lead agency. Obviously, it will be helpful in developing local materials to engage persons who have some experience and also resources to facilitate this process. For example, many large hospitals have public relations, marketing, or media production staff that regularly develop and distribute media, advertising, or educational material. Engaging these resources on behalf of the REACT campaign should be explored through the REACT local coalition or lead agency. Many health-related non-profit organizations

such as the American Heart Association (AHA) also maintain education and graphic production staff. In addition, many local advertising agencies donate time and money in the form of *pro bono* work to worthy public causes and non-profit organizations. Working through the coalition or lead agency, one of these may be identified to assist the campaign.

The development of some small media material at the local level may be quite specialized. For example, outdoor advertising firms frequently allot billboard space for non-profit organizations or public service causes. This is also true of public transportation organizations. While the space is given free for a set period (usually a month), there may be costs associated with producing the “paper,” that is, the material that is pasted to the board. The firm may ask the campaign to pick up these costs; or the coalition may seek a benefactor to do the same. As with the media relations strategy described earlier, strong personal relations and community organizing skills are often required for effective development and implementation of small media strategies.

Finally, to assist local production of small media vehicles, templates will be provided on disk to help local intervention sites maintain the general look and style of REACT materials. These may be altered on computer to better customize them to local needs. It is important that the general look of materials be maintained across communication channels. This will help to increase attention and awareness to the campaign and lead to the outcomes we seek.

#### b. Procedures For Use of Small Media

Use of small media will vary depending on the above-listed options that a community selects. The use of direct mail will certainly require contacting a direct mail firm and discussing costs. It may also require obtaining mailing lists in the case of certain target audiences (e.g., physicians or other health professionals) and therefore other organizations may need to be contacted to obtain such lists.

The use of “stuffers” is similar. This is a vehicle that is developed to “piggyback” a REACT message into an organization’s regular mailing channel as a cost-effective way of garnering further exposure. Examples include a one-page leaflet put into a worksite’s paychecks or mailed to an organization’s members as part of a regular mailing. Successful use of this channel will require contacts with organizational leaders; garnering their support for the REACT intervention; and technical information about the required size and weight of a “stuffer.”

In the case of point-of-purchase displays or posters, pharmacies, grocery stores or other organizations will need to be contacted and their leaders apprised of the campaign and their support requested. It is also important that once such displays are implemented, they be re-visited regularly to assure that materials are actually available or to replace the display if they become worn or shabby.

In the case of materials used to supplement organizational or neighborhood presentations, it is recommended that organizational or community leaders be provided them in advance as arrangements are being made and their help and support requested.

### 3. Small Media Procedures Summary

The key points of this section are:

- Small media are important supplements to increasing exposure to the REACT intervention and message;
- Successful implementation of small media strategies requires community organization skills and strong relationships with leaders of organizations that can provide access to channels or support of materials production;
- While many small media materials will be centrally produced, it is expected that intervention sites will need to develop some more customized materials and will follow a general set of guidelines in doing so.

## **F. Community Group/Network Strategies**

Community group settings are important components of the REACT intervention and can produce intensive opportunities for education about MI delay. Each community will implement programs within an identified common core of group settings, but some may use settings unique to their communities. The particular community settings to be targeted will vary depending on local conditions and individual site action plans. However, despite this variation, all sites are expected to implement an organizational or network strategy to enhance the opportunities for greater exposure to the REACT intervention. These standards include the following:

### 1. Community Organization/Network Standards

Intervention standards include three strategy implementation area. Each site is expected to select one of the options in each area as determined to be appropriate based on local circumstances. These include:

- Strategy 1: Individual sites may choose to deliver presentations and small media materials to at least 10 of the largest and/or most appropriate volunteer, service, church, and other non-profit organizations in each community.<sup>5</sup>
- Strategy 2: Arrange for presentations and distribution of small media materials through the 10 largest community worksites. All intervention sites are expected to utilize this strategy.
- Strategy 3: In this area, there are three options from which communities may select depending on local circumstances.
  - Option 1: work through the 10 largest (if applicable) senior citizen high-rises or senior citizen organizations in the community to arrange for presentations of the REACT message and distribution of materials.
  - Option 2: work through public and private social service agencies such as local welfare, charities, and Urban Leagues to arrange for presentations of the REACT message and distribution of materials.
  - Option 3: intervention sites may utilize a neighborhood networking approach.

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<sup>5</sup> We recognize that some of the largest organizations or worksites in a community may not be appropriate for intervention, for example, a large worksite that includes fewer than half of its workers living in the intervention community. Some judgment may be called for here in selection.

## 2. Community Group Strategies: Procedures

Decisions as to which of the strategy options to use will be made independently at each site, and will be specified in each site's Action Plan. Individual sites may elect to use all or a mixture of the available options to implement the community education component of the REACT project. Each of the strategies outlined in the REACT Standards for Community Education will be discussed below.

The community intervention coordinator, in consultation with the local REACT investigator and staff, and the lead agency or coalition, will select the most appropriate local groups and organizations with which to work. The community profile will guide decision making.

### a. Recruiting Organizations and Individuals

The intervention coordinator or other staff will approach selected worksites, churches and community organizations through contacts developed as part of the community organization activities. A brief proposal outlining workshops and activities that may be used to promote the educational sessions will be available to provide to contacts. Samples of print materials, posters and other items will be included in the information packet. At each site, central staff will be available to discuss the proposal with management and/or the person(s) with responsibility for such programming.

A sample outline of a group education session is included in Appendix F. While the group education session is designed to be a stand-alone presentation, it also may be modified as a module to be added to existing programs (e.g., CPR, diabetes management classes or other similar programs).

A strategy to recruit participants into group education sessions will be planned in conjunction with members of each relevant community association or group. The strategy will incorporate flyers, posters, sign-up sheets and other announcements. It also will incorporate participation of volunteers from each community association or group to assure the identification and inclusion of high risk participants and their families and friends. Other promotion activities may include electronic mail and employee newsletters at worksites, the use of bulletins, bulletin boards and posters (or local newspapers if appropriate), at churches and community organizations. Incentives will be used where indicated to improve participation.

### b. Implementing Presentations to Organizations, Groups

Actual educational programs may be delivered by REACT staff, or by a nurse, physician or peer educator following a prepared, specified outline or script. The intervention coordinator should work with local medical associations, health departments, councils and other medical and health organizations to help provide speakers for the educational programs. Working through the community REACT coalition or lead agency, the local professional community should be mobilized to help achieve REACT project goals and to “localize” the campaign. It is recommended that sites consider establishing a Speakers' Bureau to provide a group of available speakers to actually deliver presentations following the script/outline. A suggested training session for Speaker's Bureau volunteers is included in Appendix G. The intervention coordinator or assistant will normally be responsible for making program arrangements.

In some communities, small media materials and presentations will be delivered to a minimum of 10 of the largest volunteer, service, and other non-profit organizations during the course of the intervention. Examples of such organizations include the local chapters of the American Heart Association, the Rotary Club, the League of Women Voters, fraternal organizations, the YMCA/YWCA, and neighborhood, ethnic or social clubs. Where possible, group education sessions will be arranged in cooperation with these organizations. Participation may be limited to members of the sponsoring organization or may include people from the community.

#### c. Implementing Presentations in Churches

Sites may elect to conduct community education programs through churches. If this option is selected, the 10 largest religious organizations must be targeted for education programs. Churches are an important community resource, particularly for the older members of the community and some ethnic groups. They increasingly are viewed as effective avenues for health promotion. They are particularly helpful in emphasizing norms for bystander action because of the value placed on community and mutual care.

Educational messages can be inserted in church bulletins, and educational sessions can be promoted and conducted through churches. It may be useful to get the minister or other respected church elder or leader to deliver health messages to the congregation, or to draw the congregation's attention to other media messages or educational programs. When possible, educational sessions should be incorporated into existing church social activities or events. For example, attendance might be increased at educational sessions by combining them with church musical events. Bulletin boards, posters, or other displays can also be used in churches.

#### d. Implementing Presentations in Worksites

Worksites have generally been effective channels for providing health information to the public. Strategy 2 specifies that materials must be distributed to workers at the 10 largest worksites in the community. Major employers in each community have been identified in the Community Profile. Age and residence summaries of employees will determine whether an appropriate portion of employees falls within the study target population. Worksites will be recruited to assist in planning and implementation of an MI delay reduction program with workers and workers' families. Where feasible, the intervention coordinator will arrange for at least one speaker to address workers regarding signs and symptoms of heart attack and the importance of seeking help quickly. Speakers may be project staff or community volunteers.

Popular formats for worksite-based programs include breakfast or lunch seminars, cafeteria displays, employee health events, and distribution of print materials. Methods for promoting the program at the worksite include electronic mail, paycheck stuffers, employee newsletters, bulletin boards, and posters. Local union chapters may be willing to assist with organizing and sponsoring educational sessions. Existing health programs should be assessed for possible collaboration with REACT educational programs. Linkages can be formed, where appropriate and feasible, with other worksite programs such as CPR training and wellness programs for employees. The intervention coordinator should target company nurses, wellness program managers and individuals in similar positions to assist with integrating REACT community education programs with other appropriate employee based programs.

#### e. Implementing Presentations in Seniors Organizations

The elderly are a high risk group for MI. The majority of people who have heart attacks are 65 and older. Educational programs for the elderly will be presented through local agencies, organizations, or centers that serve this population. Presentations, educational programs, and/or materials must be delivered at a minimum of 10 such settings.<sup>6</sup>

Any program that serves the elderly should be considered as a possible setting to deliver interventions. Managers and directors of programs and services for senior citizens may be useful allies. Senior housing complexes and social organizations are ideal sites for educational programs. Nutrition programs for the elderly such as Meals on Wheels can be used to deliver intervention materials and to recruit people into educational sessions. Posters and displays to recruit participants can be set up at senior citizen centers, high-rises, or other places frequented by the elderly. In addition, senior citizens make good volunteers to help with the overall community education program. Efforts should be made to recruit volunteers from this group.

#### f. Implementing Presentations in Social Service Agencies

Communities may decide to develop community education programs through public or private social services agencies. Welfare agencies, charities, community service agencies, Urban Leagues, or any local service groups may be used to distribute educational materials to agency clients. It is important to reach this population, as its members are less likely to have regular medical care than people with higher incomes.

Posters, flyers or displays may be delivered to agencies or service groups to attempt to reach and recruit members of this population into educational sessions. In addition, agency staff may help enlist people into REACT programs. Incentives for participation may be helpful with this group. Location of the educational sessions should be a consideration if participants are likely to have a problem with transportation.

### 3. Networking Strategy: Procedures

Volunteer community organizers will recruit and train a community network to reach persons at high-risk of heart diseases and the community as a whole. Special emphasis will be given to reaching poorly-educated and low income groups that may be less likely to seek care promptly.

#### a. Planning Networking

Data and information from the first stage of qualitative research and community mobilization will be used to prepare a plan for systematic utilization of formal systems, informal networks and geographic units as channels of access to the community. Staff from each site will prepare forms and charts that tentatively map the access plan, with final mapping to be done on-site with input from local advisors and volunteers. Based on the access plan, illustrations of "ideal" volunteer networkers will be generated.

There are two general approaches to network organization:

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<sup>8</sup> Nursing homes will not be targeted for patient education activities.

1.) Networks within formal interaction systems, agencies or private businesses (e.g., work-sites, health service providers, criminal justice system, social welfare agencies, political organizations, neighborhood/ cultural organizations, Laundromat supervisors, liquor store clerks, bartenders);

2.) Informal peer networks in families or in residential or leisure-time gathering places.

A wall map will be used to mark the location of each of the priority network participants. To assure appropriate geographical coverage, units can be re-prioritized according to location. Where potential contacts are relatively few, further investigation will be needed to identify potential network participants. Networkers will be recruited directly, if possible, with referral or preliminary introduction by an advisor or by another volunteer.

#### b. Networking Tasks

Responsibilities of network participants include the following;

- regular distribution of information/material packages;
- encouraging emulation of role models;
- verbally conveying basic messages;
- providing referral to services/additional information sources.

"Ideal" volunteers perform these activities as part of their everyday routine, distributing materials and providing personalized words of encouragement to persons they know. The quality of their performance will be highly variable. Some only provide a location where materials can be displayed, e.g., at a liquor store or cantina. In other cases, significant contact will be provided with active, frequent, personal messages. Some persons may accept responsibility to recruit, train and manage other volunteers.

#### c. Networking Recruitment

Selection and attraction of effective networkers will depend upon personal contacts with opinion leaders and gatekeepers. Priority setting in the first stage of mapping will make it possible to use all available data to identify specific persons in key positions to determine access to a particular network unit such as a cantina beauty shop or street location. When specific contacts are nominated they will be approached directly in a presentation by staff and/or project leadership which includes the framing statement and an appeal for endorsement, support and specific participation in the communication network. Additional participants will be identified by peer nomination or found by blind canvassing, e.g., going from cantina to cantina, or, in a street setting, direct canvassing in search of potential network participants. Depending upon the networking category and participants' levels of activity, incentives and other participation supports will be provided, e.g., door prizes, transportation, child care, etc. As consistent responsibilities are assumed, network participants will receive compensation through various systems, e.g., membership level awards. Genuine appreciation expressed by staff members during regular interactions is probably the most powerful incentive. Other incentives can be material (t-shirts), social (volunteer meetings, picnics, banquets) and symbolic (certificates and public recognition).

#### d. Networking Training



Training consists of demonstration and role plays, with the primary objective being to shape positive verbal behaviors and reduce negative responses among persons who do not accept the behavioral recommendations that are implied in the role model stories. Although the role model-story-based encounter will be the central part of training, network participants will also learn factual information about heart disease prevention and treatment and other special topics about referral and resources available in their community. The techniques for training volunteers are grounded in the principles of social learning theory. Role playing is used to allow practice in a supportive environment, to emphasize the importance of using positive communication and to provide opportunity for group feedback.

Staff first role-play (model) an ideal volunteer interaction, then encourage volunteers to do so in front of the group. Supportive feedback is elicited throughout from the group. After several "ideal" role-plays, a problem that may be encountered in the field is introduced and group feedback is sought on creative ways to deal with such problems. A sample script for role playing is provided in Appendix H.

Training emphasizes clear statements about symptom recognition and care-seeking with strenuous expressions of praise for all positive responses. The volunteers' chief objectives are to:

- encourage their friends/contacts to attend to campaign features;
- reinforce those who say they have done so or intend to do so;
- encourage their friends/contacts to learn from modeled protective; behaviors; and
- reinforce those who learn.

Important social skills covered in training include; the importance of using ONLY positive reinforcement; avoiding moralistic attitudes; avoiding prejudice criticism and conflict; respecting others' rights to privacy; respecting the cultural values of others; the distinction between assertive, aggressive and non-assertive behavior; and awareness of non-verbal communication. It cannot be stressed often enough that individuals who do not follow the role model features, or who do not choose to learn should never be criticized or harassed.

Storytelling is a natural activity but many network participants require repeated training and much prompting before they begin to convey appropriate information about symptom-recognition and care-seeking. But even minimal remarks or gestures endorsing the project materials will be helpful in changing perceived norms in the community and the staff who manage network participants should reward even very modest efforts.

#### e. Contacts with Network Participants

Network participants are contacted on a schedule corresponding to the production and distribution of media and other materials. The purpose of this contact is to monitor the volunteer's activity, re-emphasize the importance of positive reinforcement, discuss successes and barriers encountered, discuss strategies for dealing with these barriers, and preview new materials and activities. This contact is also an important opportunity for staff to receive feedback on the reception of materials and activities by the

community. Monthly contact is feasible and, by organizing group meetings, a single staff member is capable of guiding as many as 100 volunteers after 6 months of network development.

#### f. Network Management

For each volunteer, a record is kept to identify her/his network and to track her/his progress. A volunteer record form records name, address, phone(s), system or network description, and other comments. It also contains a log of meetings with date, duration/content, comments and quantity of material distributed.

The management of network participants is handled in a way that fosters emotional support and the sense of belonging to a group that produced valuable social benefits. To enhance these feelings and build perceptions of a "movement," several specific activities are conducted:

- The locally-selected name identifies the network and their participants and they share and display a symbol or membership (t-shirt, window sticker);
- A significant portion of each meeting is devoted purely to enjoyment of activities e.g., sharing a meal, receiving an interesting guests games, etc.;
- Activities are framed in terms of a challenge to be overcome by group effort, with tangible benefits of great value; and
- High levels of participation are recognized and symbolic representations of achievement will be awarded, e.g., certificates of appreciation, ribbons, etc.

#### . Organizational/Networking Strategy Summary

The key points of this section include the following:

- Organizational and networking strategies are important to the effectiveness of the REACT intervention because they are capable of delivering a more intense and involving educational experience and stimulating interpersonal discussion;
- Organizations and networks are important also because they are useful in reaching socioeconomic groups that might not be as highly exposed to the campaign through other channels;
- Organization and network strategies more deeply involve the community in educating one another about solutions for the problem of MI delay;

#### **G. Magnet Events**

Magnet events include various public activities that are meant to gain immediate high visibility especially through public attendance and participation and often mass media coverage. The selection of specific magnet events will vary based on individual community conditions, but in general they include such things as press conferences; media briefings; health fairs; skills demonstrations in public places; and so on.

##### 1. Magnet Events Intervention Standards

During the intervention, each community will implement a minimum of two magnet events. It is recommended that one occur near the beginning of the intervention perhaps as a “kickoff” to increase awareness and public visibility; and one occur near the middle or during the last half of intervention to provide a “boost” to public visibility and awareness. Selection of specific magnet events should follow procedures similar to the development of media materials described above. That is, the purpose and objectives of an event should be clearly defined; the audience to be reached; materials needed; and the relative cost effectiveness of the event.

## 2. Magnet Events Procedures

The organization of magnet events will depend on the specific one selected, but all require planning and organization. For example, staging a press conference or media briefing requires contacting media reporters and editors well in advance; securing a location suitable for television cameras, radio microphones, and other media equipment; staging at a time permitting media to construct their stories before deadline; arranging for key sources and important persons to be present, perhaps make a statement, and to be available for questions; to provide background information (press kits) to help reporters be thorough and accurate.

Setting up a skills demonstration at a public place such as a health fair or shopping mall also requires planning and organization. For example, a good location will need to be selected to maximize public exposure; an attractive display booth and materials will be required; trained and knowledgeable demonstrators and speakers will be required and rotation of staff for the duration of the demonstration if required.

Whatever event is selected and implemented, it should involve the community coalition or lead agency who may also provide access to a variety of resources to help develop the event.

In general, the following tasks will be associated with implementing successful magnet events:

- Contact potential collaborator(s) and recruit local leadership
- Select target group(s), scope of event, theme(s), locations
- Plan event (activities, materials, key players/supporters, etc.)
- Promote event
- Implement event
- Gather process and impact data (e.g., numbers attending)

## 3. Magnet Events Summary

The key points of this section are:

- Magnet events are important to the REACT intervention because they can be a source of immediate if transient high public visibility which is useful in supplementing other kinds of exposure;
- Magnet events often require detailed planning but can be useful in reaching large numbers of persons in a brief period of time;

Depending on their location, magnet events can be useful in reaching certain underserved groups that may not be as exposed to the REACT message in other community channels.

## IV. REACT PROVIDER EDUCATION

### A. Overview of Provider Intervention Component

The various health care providers who have contact with persons at risk for heart attack have a pivotal role in the reduction of patient delay. Health care providers have many opportunities to provide education to patients and their families, and those patients who receive counseling, encouragement and reinforcement from their physicians, nurses and other health professionals are much more likely to carry out desired behaviors than those who do not. Because of this key role, provider orientation and education are critical to the success of the REACT intervention. We are depending on these providers to support REACT activities, to provide patient education, and to be willing to grant access to their patients for intervention and evaluation. Additionally, providers and health care organizations can play important roles in community education by being the focus of selected media stories and sponsoring community activities. A multi-strategy approach aimed at multiple providers and health care organizations will complement the strategies used within the community organization and community education components.

In general, provider education programs try to motivate clinicians by having an impact on their knowledge, attitudes, beliefs and skills. When CME and other strategies have been effective, multiple methods have been designed not only to motivate clinicians, but also to teach them new skills, and to help them change their practice environment. Among the successful strategies for changing the environmental support system are: physician or patient reminders to engage in some desired action; explicit delegation of educational tasks to a staff person; and organized follow-up (e.g., a tickler file for office staff to call each patient two weeks after an event and give an educational, reinforcing message). Providers can also be powerful allies in promoting procedure and policy changes within organizations, such as in hospitals and HMOs. The goal in creating a supportive practice environment is to provide the cues, resources and support for the desired behavior of both providers and patients. Since neither motivation nor environmental support alone is sufficient to initiate and sustain behavior change, interventions should address both.

The successful implementation of provider activities requires significant attention to developing cordial working relationships with health care organizations and provider associations via the activities of the community organization component (see Chapter II).

### B. Goals and Objectives of the Intervention

The overall goals of the provider intervention are: 1) increase awareness of and support for REACT activities; 2) impact the knowledge, attitudes, and beliefs related to overall project goals; 3) enhance provider patient-centered counseling skills and skills about recognition of patients who are at high risk for AMI, and who are at high risk for care seeking delay; and 4) impact the clinical practice environment within health care organizations and physician offices.

The overall objectives of provider interventions are:

1. Providers Will Show Significantly Increased Knowledge About CHD, MI, Treatment and Delay, and Education of Patients
  - a. Awareness of epidemiological risk profiles
  - b. Awareness of signs and symptoms of AMI as perceived by patients

- c. Knowledge of state-of-the-art AMI treatment and the importance of prompt action to its efficacy
- d. Awareness of empirical evidence concerning patient delay
- e. Understanding the need for quick patient and provider response to symptoms including patient bypass of regular physician to immediately access EMS and ED
- f. Knowledge of the steps patients should take in seeking appropriate medical care
- g. Understanding special issues related to patient sub-groups, such as women, African-Americans, and others; and special needs of patients and of family members
- h. Understanding the role and importance of all providers in giving and reinforcing messages about health to patients and family members
- i. Knowledge of patient-centered counseling principles.

## 2. Providers will Demonstrate These Attitudes

- a. Belief in the value and effectiveness of brief counseling/educational intervention
- b. Confidence in ability to perform effective patient-centered counseling (know steps)
- c. Support for the importance of policies and procedure changes the practice environment.
- d. Acknowledge feasibility of interventions even in view of the barriers and challenges within the broader medical care climate.

## 3. Post-intervention, providers will show significantly increased behavioral capacity to perform certain skills related to MI

- a. Ability to identify those patients and families at increased risk of care seeking delay
- b. Ability to conduct brief patient-centered counseling according to a common protocol
- c. Undertake changes in the practice environment which enable provider, patient and family education
- d. Demonstrate support for REACT project activities

## **C. Target Group Description and Rationale**

The target audiences for the provider education component have been chosen and prioritized based on their proximity to and interaction with high risk patient groups and their potential effectiveness in patient educating/counseling.

### 1. Core Provider Groups

All five REACT sites are expected to implement provider education activities for a set of "core groups". These groups include:

a. Physicians

1) *Cardiologists*: The providers have regular contact with a large number of patients who are at high risk for having a repeat acute myocardial infarction. They are usually the attending physicians for hospitalized patients, are major decision makers concerning cardiac rehab referrals, and many follow patients post-discharge. In addition, they are sometimes referral recipients from primary care physicians of high risk, no MI history, CHD patients. Given these roles, they are pivotal in providing patient education as well as providing reinforcement to other clinicians, particularly nurses, to provide education. It will be very important for the patient education component to obtain support among this group of health care providers for REACT goals and objectives, as well as active participation in patient education strategies. In addition, they can foster procedure changes in their offices and in hospitals which enable appropriate provider and patient behavior.

2) *Emergency Physicians*: Emergency physicians have direct contact with many of the REACT patient target groups (i.e., MI patients, CHD patient, non-CHD patients with significant chronic disease co-morbidity). However, this contact is generally brief and not ongoing after a patient has been released from the hospital or admitted to the CCU or ICU. Because of this direct contact ED physicians can play an important role in educating high risk patients about signs and symptoms of an AMI, as well as appropriate actions to take. Moreover, emergency physicians also have contact with individuals who come in with chest pain, but who do not have a heart emergency. Emergency physicians will be able to provide positive reinforcement for care-seeking behavior, including minimizing embarrassment over a “false alarm”, and provide clear instructions for future action among this group of patients. Emergency physicians can provide leadership in endorsing ED procedures and policy changes, which enable patient education to be implemented.

3) *Primary Care Physicians and Other Primary Care Providers* (i.e., internists and family medicine physicians): Although many of the *highest* risk patient target groups may be reached by cardiologists or emergency physicians, most of the patients with chronic conditions that increase the risk for a MI (i.e., diabetes, hypertension, high cholesterol) or have other behavioral risk factors (such as smoking, poor nutrition and/or lack of exercise) are best reached through their primary care provider. Additionally, as managed care and provider network procedures become more common in the health care industry, post-MI management is often the responsibility of the primary care physician. Primary care providers have regular and ongoing contact with their patients. Furthermore, patient education or patient counseling may “fit” most closely with the goals of primary care providers, making them an important target group for the provider component of the REACT study.

b. Nurses

1) *Nurses in In-Patient Setting* (ED, CCU): Although support of cardiologists and emergency physicians for REACT goals and objectives is critical for gaining access to important patient target groups, most patient education activities are likely to be conducted by the nursing staff in these settings. Thus, it is important that this group of health care providers is informed about the goals and objectives of REACT, be given opportunity to enhance their patient-centered counseling skills, and provided specific patient education materials that accompany these goals.

2) *Nurses in Out-Patient Setting* (primary care clinics, cardiologist's office, cardiac rehab): In many physician practices, much patient education falls in the purview of the nursing staff rather than the physician. Nurses are often also on the first line of communication when patients have symptoms. Additionally, many sites have nurse practitioners who assume considerable patient management responsibilities. To increase the reach to high risk patient target groups, nurses in out-patient settings need to be included as a core provider target group.

c. Cardiac Rehab Staff

1) *Cardiac Rehab Staff*: These health care providers are in an ideal situation to teach recovering MI patients, other high risk patients and their families how to deal with a future heart emergency. Many patients are referred to cardiac rehab and a great deal of cardiac rehab consists of patient education. These post-emergency encounters occurring within a supportive environment, often present the opportunity for many "teachable" moments. Patient education messages consistent with REACT goals and objectives would fit logically in this setting.

d. Emergency Medical Technicians (EMTs) and Paramedics

1) *Emergency Medical Technicians and Paramedics*: These health care providers are often the first contact with a chest pain patient (when the patient calls 911). Although the situation usually does not lend itself to detailed patient education or counseling, brief advice (particularly positive reinforcement about having called 911 for chest pain, regardless of the patient's outcome diagnosis) is important for increasing care seeking behavior in future heart emergencies.

## 2. Optional Target Groups - Other Health Care Providers

Other health care providers may be targeted depending on the healthcare delivery profile of a particular community. These include:

a. Pharmacists: Pharmacists have regular contact with many high risk patient target groups since most high risk patients are in need of regular prescription medication. Thus, pharmacies are an excellent place for dissemination of REACT messages. Additionally, pharmacists generally have a role in patient education (regarding medication) and adding brief advice regarding REACT goals and objectives is likely to be consistent with the pharmacists' overall mission.

b. Physician Office Staff: These include the receptionist, office nurse, medical assistants, and other office staff members. In order to make sure that high risk patients are presented with reinforcing messages regarding heart emergencies, it is important that office staff are informed about REACT goals and objectives and, more importantly, REACT patient activities, and be aware of available materials. This way office staff will be able to answer questions from patients in a consistent manner and reinforce messages that are conveyed to patients in other ways (by individual counseling or by distributing impersonal patient education materials).

c. Health Educators/Patient Educators: In some health care organizations or physician practices, patient education is the responsibility of the health or patient educator. In settings where this is the case it is important that these individuals are informed about the REACT goals and objectives, have patient-centered skills to provide education as well as have specific patient education materials that accompany these goals.

d. Case Managers, Discharge Planning Nurses or VNA Nurses: These health care providers are involved in planning patients' hospital stay and re-entry into the "real world". Since these individuals are involved in part in the transition process from hospital to patients' home, they are in a good position to instruct patients on when and how to re-enter the medical system. But in many cases, actual patient contact may be limited. However, even though time for patient education may be limited, it is still important that these individuals are informed about the REACT goals and objectives, give advice as well as distribute specific patient education materials. In some parts of the community, particularly those with a high member penetration by staff and group model HMOs, case managers have on-going contact with patients and their families. VNA associations often have contracts for care management of Medicare beneficiaries, and are frequently eager to be involved in community activities.

## **D. Provider Education Intervention Strategies, Guidelines and Procedures**

### **1. Strategies and Standards**

Clearly, a multi-center trial requires a coherent, uniform intervention. However, given the reality of site differences in community demographic profiles, medical community structures and processes, size and diversity of provider groups, as well as numerous other community differences, flexibility in provider education implementation is important. To be otherwise would be atheoretical. To achieve maximum similarity and assure acceptable standards of practice, while permitting local tailoring, a framework of core target groups using identified strategies was adopted. In addition, a set of minimum standards has been articulated. These are listed in the Patient Education Standards located following this section. All site operations plans must adhere to this set of standards. There are no requirements of using a specific activity or option within interpersonal or impersonal strategies. However, for each required target group, requirements are articulated for the level and frequency of activity.

### **2. Intervention Strategies**

A variety of strategies will be utilized to provide and facilitate the delivery of provider education. Such strategies may be broadly categorized as those encompassing interpersonal and impersonal methods/techniques. Utilization of these strategies parallels methodology which will be used within the patient education component.

*Interpersonal educational strategies* are those modes such as 1:1 meetings, such as academic detailing, and group sessions. The latter example may involve program delivery to existing groups, such as specialty groups (i.e., cardiology), or health care groups with a common vested interest in REACT intervention such as hospital team groups. A procedure would identify goals for preventive care related to cardiovascular disease morbidity; enable assessment of current office practice; identify plans for improvement; and implement REACT efforts. Other methods of provider education may be utilized as deemed necessary, such as phone conversation or video conference.

*Impersonal strategies* which may be utilized with providers rely on the delivery of education intervention(s) which rely predominantly on indirect contact through media. Impersonal methodology serves to reinforce key educational messages within the provider group. Use of impersonal strategies with health care providers parallels methodology which will be utilized with patient groups, though the mode may vary.

#### **a. Interpersonal Strategies**



1) CME (physician) and CEU (nurse) programs can be arranged through county or district medical societies, through the hospitals in the participating communities, and/or professional associations and societies. If a site is developing a hospital team(s), the team may serve as the local promoter. Presenters must be qualified medical professional (either REACT investigators or consultants or local professionals trained by REACT). Presentations should follow closely the recommended curriculum for CME/CEU presentations. Investigators, as well as field staff, will make contacts to develop local sponsorship and field staff will assist with logistics. The specific objectives for the CME programs, as well as for the materials to be used within the program, can be found in Appendices E.1-3. The instructions guide and participant hand-outs will be developed centrally.

## 2) Academic Detailing

Academic detailing involves making a short visit to a physician's office to present information about REACT and suggest education strategies. The primary aim of the visit is to promote the involvement of the physician in activities that further the goals and objectives of REACT such as providing materials and counseling to patients. Physician target groups include cardiologists (high-volume are priority) and ED physicians. Some sites may elect to undertake academic detailing with selected primary care providers (e.g., gerontologists) depending on the health service profile of the intervention communities. Optimally, the detailer should be a clinician or Ph.D. investigator from the REACT team or a volunteer M.D. not on the team and should be trained to deliver the REACT academic detailing curriculum.

The detailer begins by identifying target physicians via the key informant network or hospital teams (see below), or through lists supplied by hospitals, clinics, or local medical societies. A preliminary letter of introduction should be sent to each target physician, followed by a direct telephone call. The telephone contact should include a review of REACT goals and objectives, an offer to supply REACT patient education materials, and an attempt to schedule a 10-minute office visit. If the target physician refuses a face-to-face meeting, the caller should offer to arrange an inservice training for the physician's office staff/nurses (see Section d: Tailored Inservice Training). Materials should be sent if physician declines participation.

The office visit should follow closely the centrally developed recommended guidelines for academic detailing (see Appendix E.4). The physician should receive a packet containing the REACT provider brochure, the patient-centered counseling algorithm, OPEC materials, and sample patient education materials. The REACT poster and a brochure display holder should also be given to the physician.

## 3) Brief Presentations to Existing Groups

A brief presentation on the REACT intervention may be delivered as part of an existing group meeting, such as CME or CEU programs of a related nature, inservice training programs within health service organizations, staff meetings, or society meetings. Presentations can be arranged through provider contacts or hospital team members (see below). Information about existing CME or CEU programs can be obtained from provider contacts or state or local medical societies. Presentations should follow closely the recommended curriculum for brief

presentations to existing groups (see Appendix E.5). The brief presentation may be delivered by a REACT staff member, investigator, or qualified medical professional, depending on the audience and setting. Recommended materials include provider and patient brochures, CME and CEU instructor and participant guides, slide show/script, and poster.

#### 4) Inservice Training Tailored to Specific Provider Sites

Site-tailored inservice training is designed to meet the education needs of specific provider sites, particularly those in which high-risk patients are seen routinely (e.g., cardiac rehabilitation, ED, cardiology). They may be particularly effective in the staff/group model HMOs or community health centers. Inservice programs should be planned in collaboration with site representatives. The training should be led by a qualified medical professional who may be a member of the hospital team (see below), a community coalition or advisory group, or REACT staff. The program should follow the recommended curriculum for inservice training (see Appendix E.6). REACT materials (provider brochure, patient brochure, patient-centered counseling algorithm, etc.) should be available for distribution.

#### 5) Hospital Teams

A hospital team is a multidisciplinary group formed within a particular hospital to provide opportunities for collaborative promotion of REACT messages. The membership of REACT hospital teams should reflect a broad representation of relevant disciplines, including administrators, physicians (cardiologists and ED), nurses (ED, CCU, floor, and discharge), EMS personnel, ED records staff, patient educators, cardiac rehab personnel, and hospital public relations staff. However, membership can reflect the customs and desires of a particular institution.

The first step in establishing a hospital team is to meet with representatives of the hospital administration to determine whether an interdepartmental, interdisciplinary committee on coronary care already exists. If such a group exists, leaders of the group should be contacted to explore possible collaboration with REACT. If there is no such group, the feasibility of team formation should be discussed and the potential benefits to the organization explained. Possible team members and individuals for leadership roles can be identified during the community organization process, particularly the key informant interviews. Potential team leaders are then contacted and engaged in a planning process. The agenda for initial meetings should include a review of REACT goals and objectives, a presentation of possible models for team organization and function, brainstorming among leaders about collaborative activities and scheduling of future meetings. A REACT staff member should support and assist the team leadership as necessary with hopes that the team becomes self-sustaining. Activities to be planned and implemented by the hospital team could include distribution of small media, provider education (i.e., conducting an inservice training), patient education (i.e., incorporating an "act fast" message in an existing patient education program) and magnet events. Goals and objectives can be found in Appendix E.7. A leaders guide will be developed.

#### b. Impersonal Strategies

Impersonal strategies for providers will consist primarily of mail contacts in accordance with intervention standards (see below). Mail contacts may take the form of personal

letters, study-supplied newsletters, or materials distribution. Provider names and addresses can be obtained from local medical societies, hospital or clinic staff rosters, or telephone or business directories. Letters sent to individuals should be personalized. See Appendix E.8.

### 3. Process for Development and Pre-Testing

The curricula and guidelines which will be utilized within the provider component will be centrally developed by the Provider Working Group in cooperation with educational specialists from the National Heart Attack Alert Program. Each working group member has assignments for developing goals and objectives for an overall strategy (e.g., CME for physicians) as well as media pieces (e.g., general provider brochure) which will be used within strategies. Each working group member first consults with resources at their own site. Then the goals and objectives are reviewed by the working group and subsequently with the Intervention Subcommittee. OPEC staff then take the goals and objectives and delineate an educational strategy (content, methods, etc.). This is reviewed by working group members and in an interactive, interactive process of development.

Pre-testing will occur on a very tight timeline. It is expected that the provider curricula will be pre-tested at only one site, given the difficulty in assembling provider groups. Media pieces, however will be piloted at numerous sites.

## **E. REACT Provider Education Staff**

Coordinating all provider education efforts will be the local community field staff person. Other REACT investigators will also assist with provider component activities. The investigative teams from each site include physicians, nurses, behavioral scientists, and other professional who are qualified to deliver provider educational strategies.

The qualifications for provider education staff are:

1. Familiarity with REACT goals and objectives
2. Current or past experience in health care delivery or related field
3. Familiarity with professional education and training resources
4. Knowledge of the subject area for which they will present
5. Have credibility with and ability to interact with relevant health care providers in interpersonal and/or group setting(s)
6. Experience working with diverse groups and sensitivity to cultural differences

REACT investigators will serve important roles in the provider component. As noted in the community organization component they will make contact and meet with local medical leadership to ensure their understanding of, participation in, and support for the project; providing training programs to groups of health care professionals; and meeting with interdisciplinary hospital teams as necessary. Local medical leadership will serve as role models for their peers. They will not only be asked to provide endorsement and support for the project, but will also be asked to become actively involved as faculty in provider education sessions.

Following community randomization, key informant interviews or group meetings will be held with members of the various professional groups and all health care institutions in the intervention communities. These contacts will create a body of information and a professional network to use in planning and delivery of the professional education component. Physicians,

nurses, cardiac rehab staff, emergency medical technicians, as well as pharmacists, VNA leadership, voluntary leadership such as the local AHA, and health educators/patient educators can be included in this network depending on the community of providers. Field workers and investigators will need to be attuned to discovering the passionate people who make a team effort "work".

Where feasible, interdisciplinary teams will also be initiated and developed in intervention hospitals. As noted in Section IV, these REACT teams will refine the protocol for education, assist in the delivery of provider education, and identify other hospital staff who are willing to assist in the educational effort. Depending on the community health services profile, the team building approach will be encouraged in other provider organizations, such as health maintenance organizations and community health centers.

## **F. Process and Impact Evaluation**

### **1. Process**

Much of the process evaluation rests on good documentation by project staff. Logs of contacts with provider individuals and groups will be kept to document the effort of implementation and document purpose, process and result of the meetings. Logs will also document the numbers of providers eligible for continuing education efforts, and the attendance at REACT CME/CEU sessions.

A series of activity measures will be collected in both intervention and control communities. For example, lists of CME courses offered during the project to physicians by hospitals, medical societies and professional associations will be compiled and topics relevant to MI delay will be identified. It will be important to monitor secular trends (historical threats to internal validity) in both experimental and control communities. This in part will be done through the on-going process of "community profiling" and key informant interviews.

### **2. Impact Evaluation**

The impact measures are implicit in the statements of objectives. Impact measures are related to the knowledge, beliefs and skills which are the content of the strategy. From the provider intervention perspective, the "outcome" is favorable physician behavior, that is, physicians carry out patient education. We will refer to these as "behavioral measure for providers" so as not to confuse them with patient outcomes or study outcomes. Questions about provider interaction can be included in patient surveys (hospitalized patients and those who visit the ER). A RDD community survey can also include physician interaction measures. It should be noted however, that due to resource limitations, the planned sample sizes, and limited number of survey items will not be sufficient to provide statistically valid comparisons between individual sites. A secondary outcome is the support provided by physicians for REACT, including willingness to permit patient intervention with project staff, and participation in community education activities. *{discuss possibilities within process evaluation}*

The CME protocol for all providers will include assessment by examining the levels of knowledge, skills, confidence in ability to implement the patient-centered education, and behavioral intention. Perceived deficits in any of these areas will be addressed by re-examination of the CME outlines.

As the project unfolds, it is hoped that resources can be located to improve the documentation of progress with impact objectives. For example, providers who participate in education interventions could be contacted by telephone three months later. If a

substantial proportion of provider participants have not implemented a systematic method of providing patient-centered counseling (e.g., tickler files, designated staff to provide reminders or education intervention), REACT staff will reconsider their methods for encouraging such implementation and revise their approaches. Exit interviews of patients could also document the messages that were provided by clinicians. Resources for these or other strategies will be explored as the project unfolds.

Sites may add additional measures in other data sources as resources permit. Provider impact could be measured by observation and/or by pre-post test, including a delayed post-test. With CME workshops, skills could be measure by role-play and/or use of standardized patients. However, such approaches do not tap actual behavior (performance of the skills in day-to-day practice

## **V. REACT Patient Education**

### **A. Overview of Patient Education Intervention Activities**

To make the greatest reductions in mortality/morbidity, a special emphasis on reducing pre-hospital delay time for persons at high risk for heart attack is critical. Not only are these individuals at much higher risk for getting an MI than the general public, they also can be reached with educational messages through the medical system. Patients with risk factors for MI can be reached through various settings such as hospital, physician's office, pharmacies or even the patient's home, as well as in community settings.

The patient education program for all five REACT sites includes interpersonal (individual and group counseling) as well as impersonal (flyers/brochures, 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. Design of the interventions is based on information obtained from the literature, and through focus group research. The interventions are designed to affect patients' knowledge, beliefs, attitudes and behaviors regarding prompt action for MI symptoms. Within these strategies, principles of patient-centered counseling, role-modeling and behavioral rehearsal are employed. The patient education strategies and techniques will be similar in each site. There will be variation among the sites in regard to the relative extensiveness of each intervention component due to site-specific situations. However, each site will document and justify the reasons for the strategies used to meet the agreed-upon REACT minimum standards.

Patient education activities are integrally linked with other REACT components in at least two ways. First, some patient education materials will also be used in community education activities and vice versa. Patient education program modules may be used in group session activities targeted at the larger community. Some patient education materials overlap with materials used in the community education components (such as posters, news stories and the heart action plan brochure). Second, the success of many patient education activities depends on the support of various "gatekeepers" in the community as well as general community awareness, particularly of spouses, families and co-workers who might be bystanders to an event. The successful implementation of the patient education activities are dependent on the successful implementation of provider education activities and the success of provider community organization. For instance, the quantity and quality of individual interpersonal patient counseling activities depends on the level of motivation and participation of health care providers in REACT program activities. Although the impersonal patient education strategies are least dependent on the active participation of "gate keepers", support from health care providers and health care organization administrators will still need to be obtained in order to be able to disseminate these intervention pieces and reinforce the REACT messages in health organizations.

## **B. Goals of the Patient Education Component Intervention**

The goal of REACT is to reduce the time between the onset of possible MI symptoms and obtaining medical care. REACT patient education programs will seek to enable patients to: 1) recognize symptoms of a possible MI; and 2) take appropriate action quickly. Presented below are the overall objectives of patient intervention strategies. Emphasis placed on each objective will vary according to the patient group being addressed as well as the intervention strategy itself.

### 1. Patients Will Demonstrate Significantly Increased Knowledge About MI Symptoms and Appropriate Actions.

- a. Awareness of MI signs and symptoms (and how they may differ from symptoms which are associated with patient's medical history)
- b. Awareness of patient's high risk profile
- c. Understanding of need for quick patient response to symptoms
- d. Knowledge of steps patient should take in responding appropriately to symptoms of MI.
- e. Knowledge of their physician's recommendation regarding possible MI event
- f. Knowledge of insurance benefits

### 2. Patients Will Demonstrate These Attitudes:

- a. Belief that they are susceptible to MI
- b. A change in perceived barriers to fast action (cost, embarrassment, etc.)
- c. Increased confidence in patients' ability to recognize MI symptoms and act appropriately
- d. Increased confidence in patient's ability to acknowledge rather than deny that symptoms could be related to MI
- e. Belief that MI symptoms may not be what we expect
- f. Increased confidence in ability to cope with emotional stress that accompanies a possible MI event

### 3. Patients Will Demonstrate Significantly Greater Behavioral Capacity to Perform Certain Skills Related to MI

- a. Ability to make a plan of action prior to MI event.
- b. Ability to discuss with spouse/relative or other individual steps to take when confronted with MI event.
- c. Ability to cope with emotional stress that accompanies a possible MI event

### 4. Patients Will Demonstrate Significantly Greater Behaviors Related to REACT

- a. Accept to participate in patient education interventions
- b. Be willing to expose oneself to educational resource/materials
- c. Intent to act quickly in response to MI symptoms
- d. Develop a plan of action for dealing with possible MI event
- e. Discuss a plan of action with their doctor and/or spouse

## **C. Patient Groups Description and Rationale**

Based on MI risk level and characteristics known to influence delay in seeking care, patients have been segmented into the following target groups:

1. MI Patients. Patients with a previous MI are at increased risk for subsequent MI. In addition, patients with a prior MI have been shown to delay as long or even longer than individuals experiencing an initial MI.
2. CHD/CVD Patients. Patients with a CVD/CHD conditions (e.g. angina, ischemic heart disease) but not previous MI also have an increased risk for a first MI.
3. Patients with CHD Risk Factors. As epidemiological evidence demonstrates, patients with one or more CHD risk factors but no previous MI are also at increased risk for MI. Risk factors include the presence of one or more chronic conditions, as well as behavioral risk factors. Chronic risk factors include hypertension, hyperlipidemia, and diabetes. Family history of CHD is also important. Behavioral risks include smoking, eating and exercise habits, resulting in obesity. Patients with these CHD risk factors are at high risk of having an MI and can be reached via the health care system.
4. Chest Pain Patients. Approximately 50% of all patients presenting with chest pain at the ED are not admitted. However, it's important that this group of people does not feel discouraged to come in (quickly) when they experience heart-related symptoms at some future date.
5. Spouses/Family. The spouses and adult family members of patients in the above groups are targeted for education because of their potential for influencing decisions to seek care.



For a large proportion of MI patients, spouses or family members are either present during the MI event and/or are contacted as a first response to the event by the MI patient. Thus, it's critical that these bystanders or first "contacts" are informed about the signs and symptoms of MI and appropriate actions in response to such symptoms.

#### **D. Standards for Intervention Implementation**

Clearly, a multi-center trial requires a coherent, uniform intervention plan. However, given the reality of site differences, community demographic profiles, medical community structures and processes, and community media, social, educational and voluntary structures, flexibility in patient education program implementation is important. To be otherwise would be atheoretical. To achieve maximum similarity and assure acceptable standards of practice, while permitting local tailoring, a framework of core strategies and optional activities within strategies were adopted. In addition a set of minimum standards has been articulated (see Appendix A in the Intervention Overview section). All site operational plans must adhere to this set of standards.

Standards for implementation are set around type of strategy required and segment of patient population reached. There are five specific target audiences for the patient education component. These audiences are: MI patients; CHD/CVD patients who have not had a previous MI; Patients with CHD risk factors; Chest pain patients and spouses/family members of any of the above mentioned patient groups.

The strategies for the patient education program includes interpersonal (individual and group counseling) as well as impersonal (flyers/brochures, 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.

#### **E. Intervention Strategies/Guidelines: Interpersonal and Impersonal Strategies**

In setting implementation standards, and designing site specific operational plans we have conceptually grouped possible strategies as *interpersonal* or *impersonal*. Interpersonal strategies are educational activities that are interactive and involve face-to-face (or telephone) contact in an one-on-one or group setting. Impersonal strategies include media such as mailings, brochures, posters, videotape, key chains, wallet cards, refrigerator magnets and articles in a variety of print media. The groupings and sub-groupings reflect the differences in purpose and efficacy noted in the health education literature.

## 1. Interpersonal Strategies

Interpersonal strategies include individual as well as group interpersonal strategies.

Individual Interpersonal Strategies. These strategies have in common that the messages are tailored toward the individual patient's knowledge level, attitudes and skills and capitalize on the effectiveness of at least two people interacting and communicating. The differences of the strategies pertain to the differences in the "deliverer" of the counseling (hospital staff; specialist or primary care staff; rehab staff; nursing staff ; EMT's or paramedics and other health care professionals), the depth of the counseling (face-to-face in depth counseling versus brief advice), as well as the setting in which the interaction takes place.

In-person patient-centered counseling by hospital staff or other health care provider (see list above). The objective of patient-centered counseling is for the health care provider to aid the patient in identifying and acknowledging feelings and potential barriers or problems and explore ways of dealing with barriers to taking quick action in response to chest pain. The personalized provider-patient interaction should motivate patients to develop in advance a plan of action for symptoms of a possible heart attack, increase self-efficacy beliefs and ultimately seek emergency medical care immediately if a heart attack is suspected. The algorithm and materials for patient education counseling are included in Appendix A.

Telephone education by trained staff. The objective of the telephone patient education intervention is quite similar to the objectives of the in-person patient-centered counseling, other than that the difference in medium. The objective of this educational intervention is for the patient to identify and acknowledge feelings and potential barriers or problems and explore ways of dealing with barriers to taking quick action in response to chest pain. The personalized provider-patient interaction should motivate patients to develop in advance a plan of action for possible heart attack, and ultimately seek emergency medical care immediately if a heart attack is suspected. The algorithm and materials for patient education counseling are included in Appendix F.1.

Brief advice by trained staff. The objective of this intervention is to convey the most critical information regarding signs and symptoms of MI and appropriate actions in response to these symptoms, in a minimal amount of time. This intervention can be used in settings such as the ED where time constraints do not permit in-depth patient-centered counseling.

Group Interpersonal Strategies: These strategies have in common that the messages are targeted toward patient groups, either specifically assembled, or patient groups already in the community. The differences in the strategies for different groups pertain mostly to differences in amount of materials covered and depth of the counseling (i.e. sponsoring a "new" program, which is totally focused on "heart health" versus add-ons to existing patient education programs, such as an on-going diabetes education group).

Co-sponsor "new" programs with a participating health facility (e.g. HMO, CHC, hospital). The objective of this patient education activity is to provide patients with knowledge and skills to respond effectively to a heart emergency. Sponsoring a new program for high risk patients will provide patients and their spouses with an opportunity to share their feelings with others who have similar concerns and to provide opportunities for role-modeling and testimonials. The curriculum for the stand-alone program module is included in Appendix

B. Small media such as slides, video and print media for use in these programs are included in Appendix F.2.

Work with established group programs to integrate an “act-fast” discussion. The objective of this patient education activity is to provide high risk patients who are already enrolled in other patient education programs (e.g. a hospital sponsored program for diabetes) or support groups with the knowledge and skills to respond effectively to a heart emergency. REACT staff will work in cooperation with program administrators and teachers to include a module on reducing pre-hospital delay time into existing patient education/patient support programs. The protocol for this “add-on module” is included in Appendix F.3. Slides, video and small media to be used in this module are included in Appendix F.3.

## 2. Impersonal Strategies

Brochures. Several different types of brochures will be developed targeted at different audiences. REACT staff will try to adopt available brochures already developed and pretested such as those produced by AHA, or the National Heart Attack Alert Program. The brochures are designed to support and reinforce REACT objectives conveyed through interpersonal strategies, yet they can stand alone as an impersonal strategy. These include: Patient brochure; Women’s heart health brochure and a Heart Action Plan brochure.

Patient brochure. The patient brochure is designed to inform persons with risk factors of AMI of their increased risk of acute myocardial infarction, the signs and symptoms of AMI and appropriate actions to take. The interventionists will make these brochures available in physician’s offices, HMO’s, hospitals, cardiac rehab programs and other patient education’s settings. This centrally produced brochure is found in Appendix F.4. Local modifications (such as bi-lingual text) may be made by individual sites.

Women’s heart health brochure. This brochure focuses on perceptions of personal risk of heart attacks for women, relevance of heart health education for women, heart attack prevention and knowledge and skill levels for dealing with a heart emergency. We are exploring adoption of several specifically targeted NHLBI publications. See Appendix E.

Heart Action Plan brochure. This brochure is specifically designed to encourage patients to develop a plan for responding to symptoms that may be an acute myocardial infarction. This brochure (or work booklet) can be used in conjunction with patient-centered counseling or can be used on its own. This brochure is shown in Appendix F.

Posters. Posters will be developed to reflect REACT messages regarding signs and symptoms of MI and the importance of prompt action. These posters can be posted in high traffic areas in hospitals, clinics and other patient care settings. Posters will be designed centrally.

Videotape. A videotape will be developed to reflect REACT messages regarding signs and symptoms of MI and the importance of prompt action. This video will include role model stories of MI patients. This video can be viewed in waiting rooms of clinics/hospitals, can be borrowed or given to the patient or disseminated in some other way.

Other materials: Key chains, wallet cards, refrigerator magnets. The purpose of these materials is to use a variety of different channels to reinforce and remind patients of REACT messages. These materials also serve the purpose of increasing recognition of REACT goals and objectives. These items can be handed to patients during interpersonal educational activities and/or during health fairs or other community activities.

New Stories. REACT staff will generate and disseminate news stories targeted at different patient populations in newspapers or other mailings that are distributed by health care organizations. These stories/articles will also meet the “media relations” requirement for the community education component of the REACT project.

## **F. Patient Education Intervention Staff**

1. Role of Health Care Providers. The support, involvement, and collaboration of a variety of health care professionals is essential for the success of this project. The quality and quantity of many of the patient education activities are dependent on the support from, and action by, health care providers. Such health care providers include, but are not limited to: physicians, nurses, patient educators, technicians, & EMS providers. The roles of various providers have been discussed in the Provider Intervention part in the Manual of Operations.

Hospital teams or Health Care Organization (See Provider Component). This team should be composed of a variety of health care providers which function in the hospital setting including, but not limited to: physicians, nurses, educators, volunteer services coordinator, and a marketing representative. The purpose of the team is to collaboratively address the needs of the MI or unstable angina patient and the patient at risk for acute cardiac event. They should also support, reinforce and promote REACT program activities within (and possibly outside) their respective health organizations as well as establish programs for patient education, providers, volunteers etc.

Role of volunteers. Duties which can be performed by volunteers will be determined by the project coordinator in conjunction with the interventionist. Hospital teams can aid in providing information on duties which volunteers can successfully address given the local hospital structure.

Role of REACT staff. The REACT staff will provide a major coordinating and motivating function. Please refer to the Provider Component Section. REACT investigator activities are pivotal in creating provider support (individual and organizational) so that patient education will in fact occur. The staff should be informative by providing sample ideas for message promotion and provide examples on ways hospital teams may benefit the project. REACT staff will also directly be involved in dissemination of patient education materials, organizing patient education programs and maintaining ongoing contact with health care providers in intervention communities.

## **G. Implementation of the Patient Education Interventions**

1. Procedures for Developing and Pretesting Activity Guidelines: Curricula and Media Materials

During the formative planning phase, focus groups were held with high risk patients. They were conducted to help inform development of patient education message strategies for reducing delay. Previous reports by the NHAAPs Office of Prevention, Education and Control (OPEC), as well as individual sites, will also inform study decisions. Development of patient education curricula and media materials is a collaborative and iterative process between the Patient/Provider working group and OPEC. Instructional goals and objectives are written for each “product” (i.e. curriculum or other materials) and draft products developed. To pretest patient education materials, all products will go through a “trial run” before final production. During this formative evaluation period, materials will be pre-tested with audiences who are representative of the group for whom the material is developed. Most of this pretesting will be done by OPEC staff. Each patient education intervention piece will be tested with a small group of “trial students” (e.g., members of the different target groups). Pre-testing sessions will be led by a trainer who will focus on the delivery and use of the products. Afterwards, the students will be debriefed about their like for and the utility of the products. As a result of their exposure to the patient education materials, participants will also be tested on changes in their knowledge, attitudes and behavioral intentions. Materials will be modified based on pre-test results. The five REACT sites may then either use the materials as they are produced or they may choose to find further pre-test the materials in their own communities (if they feel the materials need more site-specific tailoring).

## 2. Procedures for Implementing Patient Education Strategies

Community analyses, followed by community mobilization, will set the stage for implementation of intervention strategies. Patient education strategies are categorized as “group interpersonal”, “individual interpersonal” and “impersonal”. Each of these categories contains a number of components which can be selected for use in a community, depending on the community’s needs and resources as identified by the community analysis. The method of implementation is dependent not only on resources available, but also on relationships or partnerships that are established with existing organizations through community organization efforts. Individual sites have developed “Site Action Plans” which detail activities within specific strategies they will utilize as well as the timeline for implementation of the activity. The site action plan also provides a rationale for the selection of specific strategies and actions.

Patient education strategies will be implemented simultaneously across intervention communities to ensure consistency. To further ensure consistency in exposure to educational messages across REACT communities, centrally-developed patient education materials and counseling protocols will be utilized in carrying out these strategies. Through community analyses and key informant interviews, organizations will already have been identified which have goals and objectives in common with the REACT project. REACT staff will collaborate with these organizations to implement patient education strategies and to integrate REACT messages into existing activities of those organizations.

Through community organization efforts, lead agencies (highly visible, highly respected, powerful organization) or coalitions, identified by community analyses, will be recruited to serve as primary liaisons between REACT and the community. In communities in which the lead agency approach will be used, REACT intervention staff will work closely with these agencies to provide the necessary assistance and resources to carry out patient education strategies.

### Implementation of Individual Interpersonal Strategies.

Much of the individual interpersonal counseling will take place in hospital and clinic settings, which will require that health care providers in these settings be informed about REACT and are encouraged to include REACT messages in patient counseling where appropriate. In participating hospitals, REACT staff will work closely with interdisciplinary teams, established (in most sites) for the purpose of carrying out REACT health promotion activities, including in-person, patient-centered counseling by hospital staff -- nurses, cardiologists, primary care physicians, patient educators, cardiac rehab staff, etc.

Home health care organizations such as VNA, which sends health care workers into homes, will be involved in patient-centered counseling. Opportunities also exist for in-person, patient-centered counseling during community activities such as health fairs. Telephone contacts for one-on-one patient-centered counseling will be carried out by hospital and REACT intervention staff.

### Implementation of Impersonal Strategies

A multimedia approach will be implemented in an effort to saturate the intervention community with REACT messages. Impersonal intervention strategies targeted at patient groups include posters, brochures, key chains, wallet cards, refrigerator magnets, and videotapes. These materials will be distributed to health care providers who have contact with high risk patients, (health) organizations which are frequented by the target population (e.g. pharmacies), or in other settings (e.g. health fairs, patient support groups). Additionally, REACT staff will generate ongoing “patient stories” - scenarios that convey REACT messages for placement in local newspapers or newsletters circulated by organizations such as HMO’s and AHA.

## **H. Interactions with Health Care Providers**

Through community organization and mobilization efforts, many health care providers in the communities will not only be aware of the REACT project, but many will be involved in community organization activities, and possibly, development of hospital teams. REACT’s patient education intervention staff will interact with health care providers throughout the project to continuously promote REACT’s goals and objectives and facilitate implementation of patient education strategies among health care providers.

## **VI. PROCESS EVALUATION ON REACT**

### **A. Rationale For Process Evaluation On React**

REACT, as a multi-site trial testing the effectiveness of a community intervention, will be subject to considerable inter-site variability. This variability will arise from a number sources including:

1. a protocol which requires completion of a standardized core set of intervention tasks yet permits adaptation of the intervention activities to the local circumstances of each site;
2. differences by site and over time in the extent to which selected activities are conducted;
3. differences by site and over time in the proficiency with which selected activities are carried out, and;
4. differences by site in the type of competing events occurring during the course of the trial.

Intervention activities and sources of variation outside of REACT must be documented to better understand study outcomes, intervention impact, monitor the quality of the intervention and facilitate making future modifications to increase intervention efficacy. The process evaluation data collected on REACT can be used to provide feedback during the course of the trial and help explain outcomes at the end of the trial. The multiple functions of process data are to:

1. document and describe the intervention actually carried out in each of the ten intervention communities;
2. document exposure to the intervention among the general public, local organizations, patients with coronary heart disease and other high risk chronic conditions, patients who are hospitalized or visit the ED for AMI symptoms, and health care providers;
3. provide information for quality control and monitoring of the intervention phase of the trial;

4. describe the intervention in aggregate for the whole trial;
5. document competing events or secular trends occurring in the 20 study communities;
6. provide information to explain study outcomes;
7. provide information that will be useful in the future for modifying the intervention to maximize its efficacy.



## **B. Questions To Be Answered By Process Evaluation**

Each of the intervention working groups (community organization, community education, provider, and patient) identified up to three key questions which should be answered by process evaluation. Additional questions about dose-response relationships between REACT educational efforts and outcomes were developed. The questions relevant to each of the four intervention components are described below in their corresponding sections. In addition, the questions and the sources of information to answer each question are listed on Tables 6.1 and 6.2.

## **C. An Overview Of Data Sources For Process Evaluation**

There are six sources of information for process evaluation on REACT. They include:

### 1. Community Assessment Profiles

These profiles will contain descriptive information on both the intervention and control communities. The profiles will cover 7 community sectors (employers, education, health care, emergency medical services, media, social organizations, religious organizations). They will also include information on the demographic characteristics of each community.

The primary function of the profiles is to collect background information about the intervention sites for the purpose of planning intervention activities. This information will include the identification of community structures (organizations, networks) within each site that might provide a foundation and support for REACT activities. In addition, key individuals (called Key Influentials) in the various community sectors who can assist REACT staff with intervention activities in each site will be identified. A secondary function of the profiles is to document selected features of both the intervention and control communities. The profiles completed in the control sites will offer some information about competing events and secular trends that may impact REACT outcomes.

### 2. Community, In-Patient and Emergency Room Patient Telephone Surveys

The community RDD, in-patient and ER patient telephone surveys will provide information on knowledge and awareness of REACT messages in both the intervention and control sites. The surveys will furnish some data to monitor program impact in the intervention sites and competing events in the control sites. The in-

patient and ED patient surveys will supply information on patient exposure to REACT messages, patient exposure to REACT education programs, in addition to information about the impact and delay outcome measure. These surveys are described in Chapter VII.

### 3. REACT logs or records

Activity logs will be the primary source of information on program implementation and variation in implementation over time. Process data collection instruments are designed to document the intervention activities conducted in each site for each of the four intervention components.

The guidelines for the intervention activities include implementation standards. These standards specify the number of activities and/or the percentage of a target population that should be reached and the educational mode (e.g. inter-personal contacts, group contacts, impersonal contacts) to be used. Given the limited resources of REACT, the complexity of the proposed intervention standards and the difficulty in estimating counts of intervention target populations, the process data cannot provide information on the degree to which sites reach a percentage of the target population. The process data will provide, however, some estimate of the degree of implementation of expected activities for each of the four intervention components.

The tracking logs for REACT will document:

- a. training of community teams, health care providers and key network participants to support and conduct REACT activities. These will be documented through education tracking and coalition or partnership logs.
- b. implementation of REACT activities either carried out by REACT staff or community volunteers trained by REACT staff. These will be documented through the use of the education tracking and volunteer contacts' logs.

### 4. Tracking mass media exposure

Transmission of REACT mass media messages will be monitored through a centralized media clipping service and a public service advertising (PSA) tracking service. The former will monitor REACT-related news stories appearing in the print

and broadcast media of all REACT communities (intervention and reference).

Copies of news stories and broadcast transcripts will be forwarded to the University of Minnesota where they will be entered into a media exposure data base. Similarly, the PSA tracking service will monitor plays of REACT broadcast PSAs (intervention communities only) and report to the Minnesota site for database entry. Reports will be provided to site and intervention staff on a regular basis.

While these services will cover mass media, they will NOT include distribution of printed or video material in channels other than the mass media (i.e., public distribution of brochures, core message videos). Intervention staff will need to utilize a tracking form and protocol described below to gather information on exposure to these materials.

#### 5. Standardized Participant Feedback Forms

Feedback forms will be routinely collected from providers participating in formal REACT CME programs, from patients participating in group education programs and from participants in community-based educational programs. The feedback forms will serve to:

- a. collect data regarding the characteristics of program participants such as gender, age, ethnicity, how the participants heard about the program, as well as, for providers, practice specialty and type.
- b. provide information regarding the program facilitator's adherence to REACT protocol by obtaining the participants' report of elements covered in the program he or she attended;
- c. assess participants' ratings of the program (process and content)
- d. assess selected impact measures.

#### 6. Site Narratives

Narratives will offer qualitative data on the course of the intervention and competing events occurring at each site. This information can be used to describe the implementation of the intervention and key issues or problems confronted by REACT staff in each community. In addition, suggestions for improving the efficacy and feasibility of the intervention can be recorded in this document.

## **D. Data Collection Protocols For The Logs And Tracking Forms**

### 1. Community Organization

#### OVERVIEW

The process evaluation for the community organization component of REACT will involve two documentation activities: 1) the community assessment profiles, and 2) the coalition or partnership meeting logs.

#### COMMUNITY PROFILE

##### **PURPOSE AND CONTENT OF THE COMMUNITY PROFILE:**

The community profile will document community characteristics and activities related to REACT in the intervention and control communities. Information about the intervention community is important for describing the implementation of the community organizational approach, community structures that might offer a foundation for the intervention, and competing events or competing priorities in the intervention community that might enhance or impede the intervention. In the control site, the community profile can provide information about community structures and events that might impact the community in a manner similar to a REACT intervention. The competing events in the control sites might arise from contamination from the intervention site or from secular trends occurring regionally or nationally. In addition, data collected through the community profiles will serve as the primary source of contextual information about the 20 REACT sites. This information can be used when describing and comparing the intervention and control communities

##### **INSTRUCTIONS FOR COMPLETING THE PROFILE:**

The community profile will be completed by obtaining information on a standardized set of items detailed on the profile grid in Appendix F.1. All items listed on the profile should be collected for each of the intervention communities. In the control communities, the extent of information collected will vary by item. This variation is indicated by a system of single or double stars marked on the profile. Information on all of the starred items (single or double) should be

completed in the control communities. For the items with single stars, full information, as listed on the protocol grid should be collected. For those items with double stars, only counts of the number of organizations within the control communities are required. Items without stars do not have to be documented in the control communities.

Since some of the information on the profiles will form a database for contextual information on the 20 REACT communities, selected portions of the profile will be data entered into a computer file at the Coordinating Center.

Community profiles will be completed twice during the study, once before beginning the intervention and a second time after completing the intervention. Sources of information for the profiles will vary by topic and site. Sources might include archival information such as census data, organization lists, the Chamber of Commerce, annual reports and contacts with key influentials. Suggested sources are listed on the grid in Appendix F.1.

#### DATA CODING AND SUMMARY

To be completed.

#### COALITION, PARTNERSHIP, TEAM MEETING LOG

##### PURPOSE AND CONTENT OF THE LOGS

Coalitions, partnerships or teams may be community-wide or confined to one organization such as a hospital. The Coalition, Partnership, Team Meeting Log (Appendix F.2) is intended as a mechanism for documenting REACT-related meetings with these groups. Logs will document the community sectors represented at the meetings, React-related action items covered at the meeting, decisions made, and other relevant information about the group. Meetings to be reported on these logs include those which were scheduled to discuss substantive issues related to REACT. They do not include brief contacts to seek or confirm information. Appendix F.3 provides the question-by-question specifications for the Coalition, Partnership, Team Meeting Log.

##### DATA CODING AND SUMMARY:

A Coalition, Partnership, Team Meeting Log will be completed by intervention staff members for every meeting with a coalition, partnership, or team that included attention to substantive issues related to REACT. The log will not be

completed for brief contacts to arrange meetings or to seek or confirm information. Every Monday, the intervention staff should submit logs for those meetings that occurred in the previous two weeks to the Site Coordinator. The Site Coordinator will forward the logs to the Coordinating Center. The Coordinating Center will confirm receipt of the forms with the Site Coordinator. The Coordinating Center will data enter the logs and provide a monthly report of intervention activities. See the Analysis section for further discussion of this report.

## 2. Community Education

### Overview

The process evaluation for the REACT community education strategy will: a) document education contacts, sessions, events, and materials distribution by REACT staff or community volunteers in group, organizational, and neighborhood; and b) document any media materials distribution of the REACT message not covered by commercial tracking services.

### EDUCATION CONTACT TRACKING FORM

Purpose and Content of Education Contact Tracking Form:

The Education Contact Tracking Form (see Appendix F.4) is a multi-purpose log designed to gather information about patient, provider, and public education contacts in a variety of settings and types. It is the same form described below for use in tracking patient and provider education events.

### DATA CODING AND SUMMARY:

An Education Contact Tracking Form will be completed by intervention staff for every educational contact. Appendix F.5 provides the question-by-question specifications for the Education Contact Tracking Form. Every Monday, the intervention staff should submit logs for educational contacts that occurred in the previous two weeks to the Site Coordinator. The Site Coordinator will forward the logs to the Coordinating Center. The Coordinating Center will confirm receipt of the forms with the Site Coordinator. The Coordinating Center will data enter the logs and provide a monthly report of intervention activities. See the Analysis section for further discussion of this report.

#### TRACKING THE APPEARANCE OF MEDIA MESSAGES:

The appearance of media messages will be tracked through the use of a clipping service. During the intervention period, the clipping service will monitor all daily and weekly newspapers, radio and television stations (excluding local cable television stations) in the intervention and control cities for articles and news stories including the following key words: heart attack(s), chest pain, heart disease, Emergency Medical Services, 9-1-1, EMS (only with heart attack), REACT Project, REACT study. Each article appearing in print will be clipped and transcripts provided for each broadcast news story on radio or television. Estimated reach numbers for each article and broadcast story will be provided by the clipping service.

The clippings will be sent to the University of Minnesota. Staff at the University of Minnesota will forward to each site, copies of the clippings and transcripts appearing in their local media. In addition, the clippings from all sites will be logged by message topic along with the estimated reach figures.

The appearance of REACT PSAs will be tracked through Nielsen tracking services. Electronic signals will be embedded in all REACT PSA's and the appearance of these signals during television broadcasts will be documented by Nielsen. The timing the PSA aired and the Nielsen audience ratings will be provided to the University of Minnesota on a periodic basis.

#### DATA CODING AND SUMMARY:

To be completed

#### LAY VOLUNTEER CONTACT TRACKING LOG

##### PURPOSE AND CONTACT OF LAY VOLUNTEER CONTACT TRACKING LOG:

The purpose of the Lay Volunteer Contact Tracking Log (Appendix F.6) is to document the extent and nature of contacts completed by REACT volunteers for the purposes of disseminating REACT messages throughout the community. These contacts may include promotion of REACT or education of community members (groups or individuals).

#### DATA CODING AND SUMMARY:

A Lay Volunteer Contact Tracking Log will be completed by intervention staff every two weeks for every lay volunteer. Appendix F.7 provides the question-by-question specifications for the Lay Volunteer Contact Tracking Log. Every Monday, the intervention staff should submit logs for lay volunteers that worked during the previous two weeks to the Site Coordinator. The Site Coordinator will forward the logs to the Coordinating Center. The Coordinating Center will confirm receipt of the forms with the Site Coordinator. The Coordinating Center will data enter the logs and provide a monthly report of intervention activities. See the Analysis section for further discussion of this report.

#### 3. Provider Education

#### OVERVIEW

Information about provider education will be documented by recording REACT staff educational contacts with providers on the Educational Contact Tracking Form. Process data will also be collected through the participants feedback form.

#### EDUCATIONAL CONTACT TRACKING FORM

#### PURPOSE AND CONTENT OF THE EDUCATIONAL CONTACT TRACKING FORM:

The Education Contact Tracking Form (Appendix f.4) is a multi-purpose log designed to gather information about patient, provider, and public education contacts in a variety of settings. It is the same form described above for use in tracking community education and described below in tracking patient education efforts. One of the key activities by REACT intervention staff is to recruit, educate and support health care providers in their efforts to educate the public and patients about REACT messages. This log is a primary source of information about work with the health care providers in each intervention community.

#### DATA CODING AND SUMMARY:

An Education Contact Tracking Form will be completed by intervention staff for every educational contact with providers. Appendix F.5 provides the question-by-question specifications for the Education Contact Tracking Form. Every



Monday, the intervention staff should submit logs for educational contacts that occurred in the previous two weeks to the Site Coordinator. The Site Coordinator will forward the logs to the Coordinating Center. The Coordinating Center will confirm receipt of the forms with the Site Coordinator. The Coordinating Center will data enter the logs and provide a monthly report of intervention activities. See the Analysis section for further discussion of this report.

## PARTICIPANT FEEDBACK FORM FOR PROVIDERS

### PURPOSE AND CONTENT OF THE PARTICIPANT FEEDBACK FORM FOR PROVIDERS:

The participant feedback forms (Appendix F.8) will serve three functions: 1) they will provide information about the demographic profile of individuals participating in the provider education programs, specifically the continuing education programs; 2) they provide information about the program participant's reactions to the program including ratings of utility of the information, quality of the materials and comments about the program; 3) they will provide information on selected measures of participant's knowledge, intentions and self-efficacy with regard to REACT goals.

### INSTRUCTIONS FOR COMPLETING THE FEEDBACK FORM:

The participant feedback forms should be distributed to participants in all CME and CEU programs for providers. They should be handed out at the conclusion of the program and collected as participants leave the room. The information on these self-administered questionnaires will be anonymous. Completed forms should be attached to the Education Contact Tracking form completed for the corresponding training session.

### DATA CODING AND SUMMARY:

The Participant Feedback forms will be data entered by the Coordinating Center. A monthly report will summarize the demographic characteristics of participants as well as their knowledge, intentions, self-efficacy and reaction and assessment of the program.

#### 4. Patient Education

## OVERVIEW

The patient education component of REACT will be documented through two sources: 1. records of educational contacts with patients; 2. patient feedback forms completed by patients at the conclusion of educational sessions; and 3. impact and exposure measures obtained through the ED and in-patient surveys Impact measures are described in chapter VII of this manual..

### EDUCATIONAL CONTACT TRACKING FORM

#### PURPOSE AND CONTENT OF THE EDUCATIONAL CONTACT TRACKING FORM:

The Education Contact Tracking Form (Appendix F.4) is a multi-purpose form designed to gather information about patient, provider, and public education contacts in a variety of settings. It is the same form described above for use in tracking community and provider education efforts. A key part of the REACT intervention is to educate and counsel target patients about REACT goals. The contact tracking form is a key source of information about REACT staff efforts to educate patients, families and community members through interpersonal (individual or group) contacts.

#### DATA CODING AND SUMMARY:

An Education Contact Tracking Form will be completed by intervention staff for every education contact with patients. Appendix F.5 provides the question-by-question specifications for the Education Contact Tracking Form. Every Monday, the intervention staff should submit logs for educational contacts that occurred in the previous two weeks to the Site Coordinator. The Site Coordinator will forward the logs to the Coordinating Center. The Coordinating Center will confirm receipt of the forms with the Site Coordinator. The Coordinating Center will data enter the logs and provide a monthly report of intervention activities. See the Analysis section for further discussion of this report.

### PARTICIPANT FEEDBACK FORM FOR PATIENTS

#### PURPOSE AND CONTENT OF THE PARTICIPANT FEEDBACK FORM FOR PATIENTS:

The participant feedback forms for patients (Appendix F.9) will serve three functions: 1) they will provide information about the demographic profile of individuals participating in the provider education programs, specifically the

continuing education programs; 2) they provide information about the program participant's reactions to the program including ratings of utility of the information, quality of the materials and comments about the program; 3) they will provide information on selected measures of participant's knowledge, intentions and self-efficacy with regard to REACT goals.

#### INSTRUCTIONS FOR COMPLETING THE FEEDBACK FORM:

The participant feedback forms should be distributed to participants in all existing group stand-alone presentations for patients and consumers. They should be handed out at the conclusion of the program and collected as participants leave the room. The information on these self-administered questionnaires will be anonymous. Completed forms should be attached to the Educational Contact Tracking form completed for the corresponding training session.

#### DATA CODING AND SUMMARY:

The Participant Feedback forms will be data entered by the Coordinating Center. A monthly report will summarize the demographic characteristics of participants as well as their knowledge, intentions, self-efficacy and reaction and assessment of the program.

## **E. Site Narratives**

### THE PURPOSE AND CONTENT OF THE INTERVENTION NARRATIVES

The purpose of the narratives is to provide qualitative information about the course of the intervention in each of the REACT sites and potential competing events in the intervention communities. The narratives will be used to document intervention progress, critical issues arising in the intervention communities while the intervention is being conducted, potential competing events occurring in both the intervention communities, and ideas for improving the effectiveness and feasibility of the intervention. The narratives will serve a very different purpose than the community profiles. Unlike the community profiles, which will only be updated once or twice during the project period, the narratives will be developed on an ongoing basis, while the events are occurring, so as to give the process evaluation timely and complete qualitative information. It should also be recalled that the community profiles are primarily for the purpose of planning interventions, and process evaluation is a very secondary aim, whereas the narratives can be utilized as evaluation information, including providing important information to make mid-course corrections. Also, when coupled with the activity logs, the narratives provide critical information to future researchers or practitioners who may wish to replicate the intervention.

### INSTRUCTIONS FOR COMPLETING THE INTERVENTION NARRATIVES

The narratives will be obtained through a short interview completed with each intervention staff person on a biweekly basis. A REACT investigator with experience in open-ended interviewing will be designated to complete the narratives. This investigator should preferably, be someone who participated in development of the intervention plan in the multi-site study and who is acquainted with the behavioral and implementation theories underlying the trial. An investigator is required to do this debriefing since it is expected that they will be one step removed from the daily implementation activities and not immersed in to the day-to-day work of the intervention. It is expected that this "outside" perspective will facilitate reflecting on , and describing, the intervention.

Interviews at each site will take place in the context of normal management and supervision. The site narrative developers will work in tandem with the site coordinators. Initially, site narratives will be updated by interviewing interventionists every two weeks. After the start up period the time period may be lengthened to a month if appropriate.

Each interview with intervention staff will take between 15 and 30 minutes. It is anticipated that they will be shorter after the startup period. The central coordinator of site narratives will meet by phone with the designated site narrative developers. Initially, these meetings will be bi-weekly and as procedures become smoother, the cycle of calls will fall to monthly or bi-monthly.

Information is sought that is different from, and expands on, the numbers that will be reported in tracking forms. The narratives ask for "what" and "how" rather than "how many." The information can and should be collected in conjunction with management and supervisory meetings. Not every aspect needs to be described in every bi-weekly call -- we are requesting new developments from each bi-weekly period.

For each of the four intervention components, the interview will cover the following general questions: the nature of progress in implementation, barriers to implementation, facilitators to implementation, and plans to overcome barriers. Follow-up interviews should address the plans and how they worked. Although the interview should cover these topics, it is not confined to them. It must also cover ANY new developments in implementation that appear to be important, including those that cannot be anticipated in advance.

#### THE PURPOSE AND CONTENT OF THE CONTROL SITE NARRATIVES

The purpose of the control site narratives is to provide data on potential competing or extraneous events related to REACT goals which may occur in the control communities during the intervention period. This information will be used in conjunction with the media clips and follow-up community profile assessments. The narratives will provide information on the presence of potentially competing awareness or educational campaigns, the establishment of additional chest pain clinics and changes in the EMS system which may decrease delay time for MI arrivals to an ED.

#### INSTRUCTIONS FOR COMPLETING THE CONTROL SITE NARRATIVES

Control site narratives will be completed by a REACT investigator experienced with open-ended interviewing. In contrast with the narratives developed at intervention sites, no intervention staff will be interviewed. Instead, a very select few key informants will be interviewed as described below. Contacts will be made with a limited set of organizations

in the control sites on a six monthly basis to determine if relevant changes occurred in the past 6 months. The interviews will ask about: any new developments in the area of education of MI patients or changes in management of MI patients. Contacts in the EMS will be asked about any financial or structural changes which might make community residents more likely to use the EMS system or decrease delay time. A short interview will be conducted with a selected individual in the following organizations: hospitals (Emergency Departments, Cardiac Rehabilitation Units, and/or Coronary Care Units), EMS agencies, and other major health care organizations such as a major HMO.

## **F. Monitoring The Quality Of Process Data**

The site plans will be used as a guide to determine a range of the number of forms expected from each study site during the intervention. CC staff will estimate the number of expected forms from the site plans and confirm this number with staff at each site at the beginning of the intervention period. If, during the course of the intervention, the number of forms falls below that expected, CC staff will check with site staff to determine if plans have changed, resulting in fewer forms than initially expected. However, site staff should also keep the CC staff informed of any significant changes to the site plans as the intervention develops.

## **G. Analysis Of Process Data**

### DOCUMENTATION, MONITORING, AND QUALITY CONTROL OF THE INTERVENTION

During implementation of the intervention, the function of the process data is to describe intervention activities and exposure. This information will both document the intervention and permit quality control and monitoring of the intervention. To achieve these goals, the CC will produce two reports each month. The first report, the Monthly Intervention Activities Report, will summarize the intervention activities that are reported on the Coalition/Partnership Meetings Log Forms, the Education Contact Tracking Forms, and the Lay Volunteer Contacts Tracking Forms returned for that month. The second report, the Participant Feedback Report, will summarize information from the feedback forms returned by persons who participate in intervention events during that month. Both reports will provide both monthly and cumulative information on intervention activities and exposure within each of the 10 intervention communities. In addition to these two reports, a summary of the print and broadcast stories appearing in local media will be provided by the University of Minnesota staff.

Figure 6.1 provides a preliminary example of the Monthly Intervention Activities Report. This report is designed to provide rapid feedback to project staff about the extend of their intervention activities. This information will facilitate monitoring and quality control of the intervention by project staff.

Figure 6.2 provides an example of the Participant Feedback Report. [to be developed after the Participant Feedback Forms are finalized]

## LINKING PROCESS AND OUTCOME DATA

After completion of the intervention, the process data may provide information that can be used to explain study outcomes. That is, variation in the extent of the intervention activities or the exposure of providers, patients, or the general public to intervention messages may explain variation in study outcomes. Since the primary events of interest in REACT occur at times randomly distributed throughout the intervention period, the variation in the intervention activities captured by the process data occur both over time and between the intervention communities. This unique design may provide an opportunity to sort out the effect of different intervention activities as well as to explain variation in the primary outcome of delay time.

As an example, the following analytic strategy will be pursued to accomplish these goals:

1. The analyses would be restricted to intervention communities,
2. Delay time would be the outcome measure,
3. Each delay time would be an observation
4. For each delay time observation, process measures (such as those presented in Figure 1) will be calculated for the time period prior to the date on which the delay time occurred in the appropriate intervention community.
5. Delay time would be regressed onto a model including:
  - a. process measures
  - b. individual covariates such as age, gender, history of MI,
  - c. measure of random effects for communities nested within sites
  - d. measures of secular trends/competing events such as other on-going programs related to REACT
6. The regression model would yield a regression coefficient for each process measure allowing us to estimate the reduction in delay time with each additional unit of an intervention activity.

Similar analytic strategies can be applied to the impact measures, using knowledge, attitudes, beliefs and intentions as secondary outcomes.



The analytic plan will be further developed, including particular attention to issues including the process measures, correlations between the process measures, and the timing of the process measurements.

### ANALYSES OF THE INTERVENTION SITE NARRATIVES

Content analysis will be performed in conjunction with quarterly debriefing with members of the Process and Impact working group. Content analysis will proceed as follows. The general categories of progress, barriers, plans to address barriers, and result of those plans will be set up for each of the four program components, for eight general categories in all. Within each of these categories, some specific themes can be identified in advance, while others will emerge over time as staff members mention unanticipated events, and investigators elicit further detail on the unfolding of those events. For each of the eight categories, the themes that can be anticipated include the following:

#### I. Community Organization:

##### A. Progress in community organization

- the nature of new contacts
- the apparent effort and commitment by participants
- the gatekeepers involved and which sectors or organizations they control
- how community organizations contacts advanced intervention activities.

##### B. Community barriers to implementation

- political strife within coalitions or committees
- commitments not pursued
- personality conflicts
- changes in health care coverage or access that affect community organizations.

##### C. Actions to resolve barriers and their results

#### II. Community Education

##### A. Progress

- reception of magnet events and community meetings

- types of people attending events and meetings
- appropriateness of materials
- level of participation and tone of media messages

B. Barriers to community education

- refusals to participate
- messages that are "off strategy"
- competing and contradictory messages

C. Actions to resolve barriers and their results

III. Provider Education.

A. Progress

- general reception of providers to the materials
- evidence that they retained and understood information

B. Barriers

- resistance of opinion leaders
- low attendance or interest
- feeling that "chest clinics solved this for us already"
- feeling that "we are already doing everything we can"

IV. Patient Education

A. Progress

- indications that materials are being used, by setting
- how the materials are being used
- indications of patient acceptance, understanding

B. Barriers

- lack of staff time
- lack of leadership in organization
- materials are not accessible or run out

- lack of interest in providing materials or verbal education
  - staff turnover at institutions
- C. Actions to resolve barriers and their results

At the end of the trial, themes consistent across the 5 sites will be related to measures of program impact. For example, changes, or lack of changes, observed in patient exposure, knowledge or attitudes related to REACT might be explained by implementation barriers described in the narratives. To draw this example out further, intervention staff across the 5 sites may have encountered resistance from the managed care sector reducing the extent of REACT programs implemented in the intervention communities and leading to diminished patient impacts. Although a casual relationship cannot be drawn between the narrative data and the impact or outcomes observed, the narrative data might yield important insights for interpreting REACT results.

#### ANALYSES OF CONTROL SITE NARRATIVES

The narratives will be summarized in a checklist format to indicate the presence of competing or extraneous programs.

Table 6.1. PROCESS EVALUATION QUESTIONS

	Key Questions	Measures	Existing Form Source	Timing
<b>Community Organization</b>	1. What existing health care efforts concerning heart attack predate REACT?	Existing Programs	Community Profile	Pre-Intervention
	1. What community health care relationships are formed as a result of REACT?	Sector representation on REACT teams/ coalitions Number of new coalitions or teams	Coalition logs Narratives Community Profile	During Intervention Post-Intervention
	2. What organizational policies concerning heart attack predated REACT?	List of policies pre REACT	Community Profile	Pre-Intervention
	3. What organizational policy changes were initiated or modified as a result of REACT?	Number, type of policies during and post REACT	Narratives Coalition Logs Community Profile	During Intervention Post-Intervention
<b>Community Education</b>	1. Does estimated exposure to the messages differ <u>between communities</u> receiving the campaign and those acting as reference?	Estimated share or ratings Number of media activities Number of media events	Clipping service PSA tracking Education Contact Logs Volunteer Contact Logs	During intervention
	2. Does estimated exposure to the messages differ <u>in channels</u> across intervention communities; and also compared to reference communities?	Estimated share or ratings Number of media events Number of volunteers contacted	Clipping service PSA tracking Education Contact Log Volunteer Contact Log	During intervention

	Key Questions	Measures	Existing Form Source	Timing
<b>Provider Education</b>	1. What are the competing events that might influence provider impact measures in both experimental and reference communities?	CME programs CQI programs	List of grand rounds Community Assessment Profile	Pre-intervention and during intervention
	2. What is exposure of providers to the intervention activities?	Count of provider education materials distributed  Count of attendees  Number of meetings	Education Contact Log Feedback forms	During intervention
	3. What is the impact of the provider intervention in terms of provider behavior change?	Policy changes instituted  Counseling performed	Community Assessment Profile Consenting Patient survey	During intervention Pre-intervention and during intervention
<b>Patient Education</b>	1. What is the estimated exposure of patients and their family to educational materials?	People counts at group sessions	Education Contact and Feedback forms Re-stocking records or tallies of brochures	During Intervention
	2. What proportion of hospitalized/ER patients remember being counseled or receiving patient education materials during the intervention period?	Survey Items: D1 - D3 E5 - E7 I2 - I2b	Patient surveys	During intervention
	3. How many patient education programs (and materials) are available in control communities during intervention period?		Community Assessment Profile	Pre/Post intervention

	Key Questions	Measures	Existing Form Source	Timing
<b>Community Organization</b>	1. Is delay time associated with (explained by) number or type of community, coalition or partnerships related to the REACT intervention?	<ul style="list-style-type: none"> <li>• Delay time</li> <li>• # of coalitions</li> </ul>	<ul style="list-style-type: none"> <li>• Medical records</li> <li>• Logs</li> </ul>	<ul style="list-style-type: none"> <li>• During intervention</li> <li>• During intervention</li> </ul>
	2. Is delay time associated with (explained by) number of community sectors involved in REACT intervention?	<ul style="list-style-type: none"> <li>• Delay time</li> <li>• # of sectors represented</li> </ul>	<ul style="list-style-type: none"> <li>• Medical records</li> <li>• Logs</li> </ul>	<ul style="list-style-type: none"> <li>• During intervention</li> <li>• During intervention</li> </ul>
	3. Is delay time associated with (explained by) number of REACT policy changes in Intervention community?	<ul style="list-style-type: none"> <li>• Delay time</li> <li>• Count of policy changes</li> </ul>	<ul style="list-style-type: none"> <li>• Medical records</li> <li>• Logs</li> </ul>	<ul style="list-style-type: none"> <li>• During intervention</li> <li>• During intervention</li> </ul>
	4. Is the type of partnerships and teams formed associated with policy changes?	<ul style="list-style-type: none"> <li>• # of coalitions</li> <li>• # of policy changes</li> </ul>	<ul style="list-style-type: none"> <li>• Logs</li> </ul>	<ul style="list-style-type: none"> <li>• During intervention</li> </ul>
<b>Community Education</b>	1. Is delay time associated with media activities conducted in REACT?	<ul style="list-style-type: none"> <li>• Delay time</li> <li>• # and reach by type</li> </ul>	<ul style="list-style-type: none"> <li>• Media records</li> <li>• Clipping service</li> <li>• Media tracking log</li> </ul>	<ul style="list-style-type: none"> <li>• During intervention</li> <li>• During intervention</li> <li>• During intervention</li> </ul>
	2. Is community awareness of REACT associated with REACT media activities?	<ul style="list-style-type: none"> <li>• Items C2, H</li> <li>• # and reach by type</li> </ul>	<ul style="list-style-type: none"> <li>• Community survey</li> <li>• Clipping service</li> <li>• Media tracking log</li> </ul>	<ul style="list-style-type: none"> <li>• During intervention</li> <li>• During intervention</li> <li>• During intervention</li> </ul>
<b>Provider Education</b>	1. Is delay time associated with providers interaction or training through REACT?	<ul style="list-style-type: none"> <li>• Delay time</li> <li>• #, % and/or type of provider trained</li> <li>• Surveys (Items E, H, I, D)</li> </ul>	<ul style="list-style-type: none"> <li>• Medical records</li> <li>• Activity log</li> </ul>	<ul style="list-style-type: none"> <li>• During intervention</li> <li>• During intervention</li> </ul>
<b>Patient Education</b>	1. Is delay time associated with patients exposure to REACT programs: group, individual	<ul style="list-style-type: none"> <li>• Delay time</li> <li>• #, % by type of patients exposed</li> <li>• Items D1 - D3, E5 - E7, I2 - I2b</li> </ul>	<ul style="list-style-type: none"> <li>• Medical records</li> <li>• Logs</li> <li>• Hospital and ED surveys</li> </ul>	<ul style="list-style-type: none"> <li>• During intervention</li> <li>• During intervention</li> <li>• During intervention</li> </ul>

## **VII. REACT IMPACT EVALUATION**

### **A. Rationale**

The goal of REACT is to reduce patient delay time from the onset of acute myocardial infarction (AMI) symptoms to contact with hospital-based emergency care. This will be accomplished via interventions planned to impact three groups of factors: community, health care delivery and individual factors. See Figure 1.1 in the Overview chapter. While the primary aim of the study is to improve the outcome variable of pre-hospital delay time, there are several secondary aims related to the *impact* of the project activities. (See REACT Protocol, Section I. B.). These secondary aims include the following:

1. Evaluate the impact of the intervention program on factors hypothesized to be important influences on patient delay, including knowledge, skills, and behaviors of the general public, 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.
2. Study factors associated with various phases of the delay interval as well as overall delay time, including situational characteristics (e.g., previous events, presence of others, etc.).
3. Study patterns of behavior, including patient actions such as coping strategies, including self-care, in response to AMI symptoms.
4. Determine the impact of the various program components on knowledge, attitudes, skills, and behaviors of the general public and patients with acute coronary disease.

### **B. Objectives and Design of the Impact Evaluation**

Broadly speaking, the overall objectives are to:

1. Document the impact of REACT community components on the general public's awareness, attitudes, knowledge and intentions related to REACT goals.
2. Document the impact of REACT community and patient education components on hospitalized patient awareness, attitudes, knowledge, behavior and intentions.
3. Document the impact of REACT community and patient education components on ED patient awareness, attitudes, knowledge, behavior and intentions.

4. Document the impact of REACT provider intervention components on provider behavior. This includes provider education prior to, and during the ED visit; provide education prior to, during, and after an AMI related hospitalization; and primary care clinicians' education to all at-risk patients.
5. Provide data to explore bivariate and multivariate relationships of personal and encounter variables which affect knowledge, beliefs, intentions and behavior.
6. Provide data to verify theoretical and practical assumptions used in intervention planning.

The impact evaluation will be carried out using a pre-post control group design, as well as a single group case study non-experimental design. Certain measures will be tracked in both demonstration and comparison communities, with data primarily collected over time via community and patient surveys. Other measures will be collected primarily in demonstration communities via observation and interviews.

### C. Impact Measures Overview

Figure 1.1 outlines the broad general categories of impact measures. For monitoring community impact we will be looking at activities such as the building of coalition activities, community program sponsorship and changes that occur in policies and procedures within health care organizations such as hospitals, HMOs and community health centers.

For the *provider education component* we will attempt to investigate impact measures such as clinicians' awareness and knowledge, attitudes and beliefs, counseling skills and capabilities as well as their patient education behaviors. For the impact measures of the *patient and community education* efforts we will be looking at individual factors such as awareness and knowledge, attitudes and beliefs, skills and care seeking and coping and behavioral intentions as well as behaviors related to care seeking.

Operational definitions for these goals and objectives, and their measures, are being formulated as we proceed with delineation of the specific goals and objectives of protocols for the activities of the three components of the intervention. These operational definitions then prescribe the items for the three surveys (described below). These include items related to barriers and facilitators to fast action, beliefs and perceptions, intentions, knowledge, self-efficacy, and preparation for an acute coronary event. These can be seen on the left hand column of the survey item chart, Table 7.1. In addition, a survey will collect data concerning the measure effect modifiers and background information that will be used in the impact analyses. These include the usual sociodemographic measures, as well as health status and health care utilization and satisfaction with care measures.



## D. Data Sources

### 1. Surveys

The impact of the 3 major intervention components on relevant knowledge, attitudes, skills and behaviors will be assessed directly through 3 surveys conducted in both intervention and comparison communities: a) random-digit-dial survey of adults; b) post-hospital discharge telephone interview of AMI/UA patients, and c) a telephone survey of patients who sought hospital care for acute chest symptoms, but were sent home from the ED. Survey constructs and items are reported in Table 7.1. Decisions about the inclusion of survey items were made according to the following criteria:

- Does the measure provide information to guide modification of the intervention?
- Does the measure provide information on change in an important process or impact measure?
- Does the measure provide information on an important effect modifier?
- Does the measure provide information on a primary or secondary outcome measure?

#### a. Community RDD Survey

A series of random-digit-dial cross-sectional surveys will be 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). 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 that is the secular trend in information. For most communities in the study, an average of two to five percent of households lack telephones. However, a few study communities indicate a lack of household phones at between 10-15%. Because the survey impact evaluation is limited in power to examine differences in outcomes in individual communities, it will summarize impact measures across all intervention and comparison communities *as a group*. Thus the higher lack of phone in a few communities is not regarded as a serious limitation. Details of the survey methodology can be found in the Measurement Manual.

#### b. Follow-up Telephone Interview of Hospital Patients

At seven to nine weeks following hospital discharge, a telephone interview will be conducted by the coordinating center with a subsample of 200 patients per community who have confirmed discharge diagnoses of ICD codes 410 or 411. The purposes of the telephone interview are to: 1) more fully characterize these individuals, their symptom experiences, and their reasons for seeking treatment; 2) identify specific factors, including intervention components, that prompted these patients to seek treatment; 3)

collect self-reported information on decision and delay time; 4) assess the impact of clinician interventions on their (the clinicians) educational behavior; 5) assess the impact of the community patient interventions on the awareness, knowledge, beliefs and attitudes, and behaviors of these individuals; and 6) to assess the intentions and preparations to take action if another coronary event occurs. This survey will provide an assessment of the impact of intervention messages delivered in the hospital and during the rehabilitation period. (Process data will also be collected on the specific content and sources of educational messages received.)

c. **Telephone Survey of Patients Sent Home From the ED**

A follow-up telephone interview will be conducted by the coordinating center 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 purposes of the telephone interview are to: 1) characterize these individuals, their symptom experiences, and their reasons for seeking treatment; 2) identify specific factors including intervention components, that prompted these patients to seek treatment; 3) collect self-reported information on decision and delay time; 4) assess the impact of the patient and professional education interventions on the knowledge, beliefs and attitudes, and behaviors of the clinician's educational behavior; 5) assess the impact of the community patient interventions on the awareness, knowledge, beliefs and attitudes, and behaviors of these individuals; and 6) assess the intentions and preparations to take action if another experience of acute coronary-related symptoms occurs.

2. **Site Narratives**

As discussed in Chapter VI., Process Evaluation, site narratives will provide qualitative information about the course of the interventions. The narratives will include information on the key informants' perceived impact of REACT activities. These data will be particularly important in trying to capture changes in hospital, HMO, community health center and other organizational policies and procedures.

3. **Participant Feedback Forms**

Participant feedback forms will be required of attendees at the community group programs, the group patient education programs and provider CME programs. Providers will give feedback on CME facilitator skill as part of the process evaluation and quality monitoring. Community people and patients will do the same for group education programs. We will also ask selected questions about their respective knowledge, skills, beliefs and attitudes, and current and proposed behavior. While this is a weak measure of impact, it is the only one possible in view of current resource constraints; for community and patients, the responses will provide indication of selection bias. As resources permit, some sites may initiate pre-

tests as well as post-tests on selected populations to gauge short-term impact.

## **E. Data Analyses**

A conceptual study framework of the hypothesized causal pathway from community intervention activities to impact measures to health outcomes is shown in Figure 1.1 in the Overview chapter. The analysis plan will reflect evaluation questions related to this hypothesized causal pathway.

### **1. Basic Approach for Survey Analyses [rewrite after sampling strategies for each survey are clarified]**

All three surveys can be analyzed independently on a cross-sectional basis. The community survey will also be conducted at two additional points, allowing for a time series analysis. In addition, given that some measures are identical or similar, comparisons of these measures across surveys are also possible.

a. ***Preliminary analyses*** will describe potential non-response bias to the phone surveys. For the hospital and ED surveys, we will profile the survey respondents as compared with those who refuse to participate. Of a priori interest are differences between survey participants and survey refusers with respect to age and gender, diagnosis, REACT site and demonstration or comparison condition.

b. ***Descriptive statistics***. The demographics and health history of the study populations of each survey will be profiled using descriptive statistics. We will also profile comparison and demonstration community profiles to assess comparability at baseline. For example, it will be important to assure comparability on sociodemographic variables, heart health and comorbidity status, and insurance status. The distributions of continuous variables will be summarized using means, standard deviations, and selected percentiles. For discrete variables, frequency distributions will be computed.

Bivariate analyses will be performed to identify modifying or mediating variables with significant crude associations with impact measures; and potential significant crude associations of impact variables with study outcomes. Prior to hypothesis testing, correlational analyses will be completed to evaluate the interrelations of all primary independent variables and covariates with a similar analysis evaluating the interrelations of primary dependent variables. Correlational analyses may uncover highly correlated and therefore redundant variables in either independent or dependent variable sets which potentially can be eliminated from analyses. Given the limited power of the surveys due to relatively small sample sizes, variable set reduction could increase the power of multivariate regression analyses for primary and secondary outcomes.

c. ***Scale development***. Many potential covariates will be assessed by single items

- f) Awareness of symptoms/fast action via media
- g) Coping procedures undertaken

2) Survey of those sent home from the ED. The effects of the intervention on patients' self-efficacy to cope with renewed symptoms of AMI will be tested by multiple regression. The following variables (examples only) are hypothesized to affect patients' self-efficacy:

- a) Health professionals review of symptoms of AMI with patient
- b) Health professionals review use of nitroglycerine with patient (for those taking it)
- c) Health professionals encouragement of quick action in future after previous episode(s) in ED
- d) Perceived barriers and facilitators
- e) Satisfaction with ED encounter
- f) Patient's report of post-ED instructions

3) Community Survey. The effects of the intervention on community members' knowledge of the benefits of early action for symptoms of AMI will be tested by multiple regression. The following variables (examples only) are hypothesized to affect community members' knowledge:

- a) Recognition of REACT media messages
- b) Attendance at magnet events
- c) Attendance at community meetings
- d) MI experience within social network
- f) Perceived barriers and facilitators

e. *Pre-post comparison multivariate analyses.*

Two different statistical models will be used to assess the effect of the intervention. Logistic regression will be used for categorical variables and the usual linear regression model will be used for created scale variables. Models to be used to provide unadjusted effects will contain parameters for community, time period, and the community by time period interaction. Fitted models will need to test numerous hypotheses. For example:  $P_1$  assesses the equality of change in the experimental and control cities at base line and at follow-up.

With the help of investigator statisticians and the coordinating center, a detailed analysis plan will be designed for the several dependent variables. Decision rules will be documented. For example, stepwise logistic regression may include only those selected variables meeting a criterion for entry significance of 0.15. Multivariate analyses will

then evaluate a priori hypotheses regarding the impact of the intervention on the primary endpoints as mediated by theoretical constructs (e.g., “barriers” or “knowledge”) and moderated by variables such as gender and age.

2. Site Narrative Analyses

The reader is referred to Chapter 5.5 for discussion of data management and analyses for measures obtained via the site narratives.

3. Participant Feedback Forms

Operational decisions have yet to be finalized. It is expected that the forms will be designed for Op-Scan reading. This minimizes cost and handling at both the site and coordinating center levels. Frequency distributions can be periodically fed-back to the sites and appropriate sub-committees and working groups. An analysis plan for descriptive, bivariate and multivariate analyses will be delineated.

CONSTRUCTS	IN-PATIENT F-U SURVEY	ED F-U SURVEY	COMMUNITY SURVEY
<b><u>Current Event Information - Self-Regulatory Theory Concepts</u></b>			
Time-line (times of symptom evaluation and action)			
Time of acute symptom onset	A2,A2a	A2,A2a	
Time of arrival at hospital			
Time called 911	A6a,A6b	A6a,A6b	
Time leave for hospital	A7,A7a	A7,A7a	
Situational context (alone when decision made)	A5	A5	
Symptoms and Labels			
Symptom description - acute symptom point	A1	A1	
Existence of premonitory symptoms	A9		
Premonitory symptoms (type)	A9a		
Cause			
Attribution at acute symptom point	A4	A4	
Attribution of premonitory	A10		
Transport mode	A8	A8	
911 use	A6	A6	
Reason for not using 911	A6c	A6c	
Coping procedures			
Coping actions at acute point (active, passive)	A3	A3	
Decision to go to hospital (who made/influence)	A5a,A5b	A5a,A5b	
<b><u>Barriers/Facilitators</u></b>			
Facilitators (cause go quickly)	B1,B1a	B1,B1a	
Barriers (cause delay)	B2,B2a	B2,B2a	
<b><u>Provider Interaction/Exposure - ED</u></b>			
ED explanation/reason		C1	
ED instruction to manage symptoms		C2,C2a	
Post ED see doctor about symptoms		C2b	
ED instruction if symptoms return		C3	
Post ED doctor told heart-related problem		C4	

CONSTRUCTS	IN-PATIENT F-U SURVEY	ED F-U SURVEY	COMMUNITY SURVEY
<b><u>Provider Interaction/Exposure - Hospitalized</u></b> In hospital, anyone talk about signs and symptoms/who In hospital, anyone talk about getting to hospital quickly/who In hospital, anyone provide heart attack literature or video After discharge, go to cardiac rehab program After discharge, case manager, nurse, nurse practitioner visit home After discharge, meet with cardiologist After discharge, meet with primary case physician After discharge, talk about signs and symptoms/who After discharge, talk about getting to hospital quickly/who	C1,C1a C2,C2a C3 E1 E2 E3 E4 E5,E5a E7,E7a		
<b><u>Satisfaction with ...</u></b> ED explanation of what caused ED explanation of what done ED explanation of what to do <b><u>Affective Response</u></b> Did the right thing by going to ED ED staff felt did the right thing by going Embarrassed not having heart attack Experience increased ability to decide when symptoms require ED visit		E1 E2 E3  D1 D2 D3 D4	
<b><u>Beliefs/Perceptions</u></b> Health problem of greatest concern Personal risk perception Expectation - embarrassment (hospital, 911) Preference for transport (have someone drive) Because of cost wait until very sure Wait until very sure before going to hospital People should drive to hospital Most people have crushing pain Women rarely have attacks Go in 15 minutes for chest pain Chest pain and not sure, go	H1 H2 H4  H3	I1 I2 I4  I3	D1 F1 J5 J7 J8 J6 J1 J2 J3 J4 J9





CONSTRUCTS	IN-PATIENT F-U SURVEY	ED F-U SURVEY	COMMUNITY SURVEY
<b>Effect Modifiers</b>			
Perceived health status	K1	L1	K1
Ever had heart attack		L2	K2
Ever had chest pain before this event	K3	L3	
Parent, sibling had heart attack	K4	L4	K3*
Relative, close friend had heart attack			K4*
Doc ever told ...			
heart condition		L5	K5
diabetes		L6	K6
high blood pressure		L7	K7
high blood cholesterol	D2*	L8	K8
Ever/now smoke	K5,K5a	L9,L9a	K9,K9a*
Gender			L1
Date of birth			L2
Ethnicity			L3
Race			L4
Education	L4	M4	L5
Income			L6
How long live in community			L7
Marital status	L1	M1	L8
Live alone	L2	M2	
Number of people in household			L10
Work for pay	L3	M3	L9
Description, if not working for pay	L3a	M3a	L9a
Type of health insurance	L5a	M5a	L11
Insurance cover ambulance/ED visit	L5b	M5b	L11a
Regular doctor	L6	M6	L12
See doctor in year before hospital/ED visit	L6a	M6a*	L12a*
Seen cardiologist before hospitalization/ED visit	L7	M7	L13
Seen cardiologist (date)			L13a
Seen cardiologist in 6 months prior to hospital/ED visit	L7a	M7a	

\* difference in wording

## **APPENDIX A: INTERVENTION STANDARDS**

### **Appendix A.1**

#### **REACT Community Organization Standards**

##### **I. Introduction**

The community organization component of the REACT intervention builds on the foundation established in prerandomization community organization activities described in the protocol. It is important to involve the community in the process of planning as early as possible, and to clarify roles and responsibilities. It is also important to acknowledge and inform communities that REACT is a somewhat prescriptive program by nature, which limits the opportunities for the communities involved to make some decisions. However, staff must communicate that there is flexibility for modification and fine-tuning.

Community organizers/interventionists will identify the history of communication and cooperation in each community through key informant interviews, establish an inventory of formal/informal community resources, and promote collaboration through shared leadership and responsibility among partners. They will develop a knowledge and understanding of cultural and community values through key informant interviews, community meetings, and review of focus group results. They will also participate in centralized training for REACT staff.

##### **II. Standards for the Local Director**

A. There will be a paid REACT staff member and assistant who will coordinate community activities in each intervention community. These persons will have knowledge, skills, and experience in: processes and management of community interventions; networking of agencies and lay and provider leaders, and a community-wide approach; and group facilitation and motivation.

A local planning group will consist of the local field director, other REACT staff as appropriate, and key informants or others in the community who are identified through the community analysis process. This group will refine the intervention plans to reflect local needs and culture, and facilitate the development of the community structures described below.

##### **III. Local Organizational Structure Standards**

These are two basic community structures which may be established and/or utilized to accomplish REACT's goals. Each has the common feature of involving members of a given community, but the definition of that community will differ, as well as other features of the structure. Sites will be using on or more of these structures:

A. Most sites will use, to varying extents, one or more of the following structures: community advisory groups and/or partnership; coalitions; individual interviews/meetings; lead agency models; hospital teams; advisory networks and/or boards; and neighborhood networks. In Alabama community advisory groups are called councils and are for the most part pre-existing. In Minnesota the term and structure to be used is coalition. An existing emergency cardiac and/or related community group could be used and should be considered prior to a new group being established. The size of such groups is determined locally.

B. One site (TX) will use a lead agency model which also includes a network approach of volunteer community members in peer modeling and peer leadership roles to reach persons at high risk and the general public, especially low education and income groups. Networkers will distribute information, encourage emulation of role models, verbally convey basic messages, and provide referral for services or sources for additional information. The networkers will also provide information and feedback to REACT staff about appropriate messages and programs for their communities.

#### **IV. Partnership Roles and Responsibilities Standards**

REACT functions as a partnership approach to intervention(s). It is important that, as early in the process as feasible, participating individuals, agencies and groups have a clear understanding of their own roles and responsibilities and those of the other players. The mutual education and negotiation required to achieve this understanding may be ongoing or oft-repeated as the project proceeds, players come and go, etc. The local field director and other REACT staff, hospital boards, and community advisory groups will facilitate this process. Community Health professionals should be notified of the project in advance.

#### **V. Membership and Key Informants**

Membership will be recruited from the sectors of the community identified in the community profile instrument (see Appendix F.1). Key informant interviews will also be conducted in the community to update information prior to the start of the intervention.

Community organizers/interventionists will contact representatives from each of the following community sectors to determine if willing and appropriate organizational members can be identified to serve as REACT community board members (coalition model) or ensure that representatives are presently affiliated with the existing lead service organization affiliated with the REACT intervention (lead agency model). Community sectors to be contacted include: city/regional government; major business/work sites; predominant medical/health institutions; local newspaper/radio/television agencies; principal health voluntary groups and; EMS agencies. Other suggested community sectors that may be contacted to provide membership include: major religious organizations; social service agencies; senior citizen's groups; public and private educational organizations; women's clubs; public health agencies and; labor unions. The qualifications and skills of board members should be quickly identified to avoid duplication and ensure adequate internal resources to carry out the REACT intervention. If a predominant organization is identified that will champion REACT activities, organization representatives should be recruited early to assure community involvement and ownership

#### **VI. Community Profile Updates**

Updates of the original community profile data done pre-randomization will occur:

- 1) approximately March 1 immediately after randomization
- 2) during the mid-course of the intervention period

See Appendix F.1 for Community Profile instrument.

**Appendix A.2**  
REACT Community Education Standards

**I. MASS MEDIA**

**A. News**

Each intervention site will generate a minimum average of two news stories per month across mass media channels (equivalent of two "hits" per household). It is recommended, but not required, that at least one-third to one-half of the stories be generated through television.

News opportunities may include assisting media in developing news stories; appearances on radio or television talk or call-in programs; newspaper or magazine inserts; with the commercial or alternative press.

**B. PSA/Advertising**

Each intervention community will generate a minimum average of 5 public service advertisement (PSA) placements per month across mass media channels (equivalent of five "hits" per household). It is recommended, but not required, that at least one-third to one-half be generated through television.

If communities decide not to use PSA's, it is assumed that they will focus their resources on developing news stories (as above) in the range of 4-5 per month across channels.

**II. SMALL MEDIA**

**A. Small Media Materials for the Public**

During the intervention, communities will implement distribution of displays of small media materials, choosing a minimum of two options from the following list:

1. Direct Mail

At least one direct mailing to every household in the community;

2. Point of Purchase Displays

In the 10 largest pharmacies or grocery stores;

3. Brochure/Pamphlet Distribution

Materials handed out regularly in high traffic areas, such as malls and shopping centers;

#### 4. Billboards

At least two billboard displays in high traffic locations for one month each minimum;

#### 5. Posters

Displays in at least 10 high traffic areas, such as shopping centers, malls, large employers, libraries, hospitals, or other similar areas; and

#### 6. Material inserted regularly in organizational newsletters, paychecks, school backpacks, or other organizational small media channels.

### **III. GROUP/NETWORKING STRATEGY**

#### Organizations/Groups

During the intervention, each community will deliver presentations and small media materials to a minimum of:

1. Ten of the largest volunteer, service, and other non-profit organizations in the community

#### OR

2. the 10 largest religious organizations in the community;
3. The 10 largest employers in the community;
4. The 10 largest (if applicable) senior citizen high-rises or senior center organizations in the community

#### OR

5. engage public or private social service agencies (e.g., welfare, charities, Urban League, etc.) to distribute materials to clients

#### OR

6. networking -- during the intervention, each community will make direct contact with a minimum of 50 percent of households or the five most populous neighborhoods to deliver the program message verbally and with small media materials.

### **IV. MAGNET EVENTS**

During the intervention, each community will implement a minimum of two magnet events, one near the beginning of the intervention to increase awareness and public visibility and one near the middle or during the last half of the intervention to provide a "boost" to public visibility and awareness.

## **V. MEETING THE STANDARDS**

If any community believes they cannot meet a particular standard, they should draft a proposal detailing the reasons why meeting this standard is not feasible and propose an alternative standard. This proposal should be submitted to the chair of the Intervention Subcommittee, Jim Raczynski.

**Appendix A.3**  
REACT Provider Education Standards

**SECTION I - STRATEGIES**

This section briefly describes the strategies of the intervention. These are referred to in the Standards (Section II).

**I. INTERPERSONAL STRATEGIES**

- A. CME Programs  
(protocol centrally produced, site tailored for specific groups)  
(slides, packets centrally produced)
- B. Academic Detailing-phone or in-person (Also see Community Organization Standards)  
(small media centrally produced)  
Substantive encounters which cover a)goal and rationale, b)basic study design,  
c)description of intervention components, d)specific examples of actions they can take
- C. Brief presentations to pre-existing groups  
(small media centrally produced - site tailored for specific groups)  
Substantive encounters which cover a)goal and rationale, b)basic study design,  
c)description of intervention components, d)specific examples of actions they can take
- D. Site tailored presentations/workshops (e.g., presentation at a cardiac rehab unit)  
Substantive encounters which cover a)goal and rationale, b)basic study design,  
c)description of intervention components, d)specific examples of actions they can take

**II. IMPERSONAL STRATEGIES**

- A. Mailings ("1 shot")  
(small media centrally produced)
- B. Periodic newsletter  
(template centrally produced)

**III. COALITION/WORKING GROUP STRATEGIES [See Community Organization Standards]**

- A. Facilitate hospital teams  
(guide centrally produced)  
(small media centrally produced)
- B. Facilitate site/specific work-groups (e.g., in an HMO)  
(small media centrally produced)
- C. Tailored target group newsletter (e.g. hospital newsletter)/mailing locally produced
- D. Hand delivered packets/info without detailing

## **SECTION II - STANDARDS**

This section outlines the standards for the interventions by target group.

### **I. PHYSICIANS (required)**

#### **A. Cardiologists**

1. Reach 90% of practicing cardiologists; 50% of these reached via any combination of interpersonal strategies at least once in first twelve months. Priority focus for interpersonal strategies on MDs with "high volume" hospitalizations. If the targeted proportion cannot be reached via a direct interpersonal strategy, phone or in-person academic detailing with the physician's nurse or practice manager will be acceptable.
2. Reach 90% of practicing cardiologists by an impersonal strategy at least once.

#### **B. ER Physicians**

1. Reach 90% of practicing ER MDs; 50% of these reached via interpersonal strategies at least once in first twelve months. Priority focus on docs in "high volume" hospitals. If the targeted proportion cannot be reached via a direct interpersonal strategy, phone or in person academic detailing with the physician's practice manager or department administrator will be acceptable.
2. Reach 90% of practicing ER MD's by an impersonal strategy at least once.

#### **C. Primary Care Physicians**

1. Reach 60% of practicing MDs; 25% of these reached via interpersonal strategies at least once in first twelve months. If the targeted proportion cannot be reached via a direct interpersonal strategy, phone or in-person academic detailing with the physician's nurse or practice manager will be acceptable.
2. Reach 60% via an impersonal strategy at least once.

### **II. NURSES (required)**

#### **A. Hospital based nurses**

1. Reach all Directors of Nurses via interpersonal strategy in first six months.
2. Reach all CCU and ER Department Head Nurses via any interpersonal strategy in first six months.
3. Reach at least one nurse on the first and second shift in the following departments via an interpersonal strategy in first twelve months: cardiac care or ICU, telemetry, emergency, general adult medicine or any other appropriate department.



4. Reach 50% of ER, CCU nurses in intervention hospitals; 50% via interpersonal strategies at least once in first twelve months. Priority focus on "high volume"

#### **B. Ambulatory care nurses**

1. Reach 90% of nurse/nurse practitioner coordinators/administrators by an interpersonal strategy in 80% of "group" sites (HMOs, community health centers, larger group practices) in first twelve months.
2. Reach 50% of practicing nurses in sites serving adults (including cardiology offices, internal medicine, general or family practice), 20% of which are reached by interpersonal modalities

### **III. CARDIAC REHAB STAFF (required, some overlap with II)**

- A. Reach 80% of staff; 50% of these by personal strategy in year 1.
- B. Reach 80% by any strategy in year 2.

### **IV. EMTs**

- A. Reach all EMT organizations by any interpersonal strategy at least once.

### **V. OTHER (optional)**

#### **A. Pharmacists**

1. Reach by any strategy.

#### **B. VNA staff or case managers**

1. Reach all vendors by interpersonal strategy.

#### **C. Cardiology Office staff**

1. Reach all offices who request academic detailing.

#### **D. Discharge Planning Nurses**

1. Reach by any strategy

## **Appendix A.4**

### REACT Patient Education Standards

#### **I. Hospitalized Patients (MI's, CHD (no MI))**

These patients will be reached via health care providers and office staff who have been educated by REACT staff to counsel their patients. None of the health care provider/patient activities will be explicitly measured by NERI. However, the more providers are educated about REACT, the greater the chance they'll talk to their patients. It is a goal of REACT to reach a very high percentage of these patients, through REACT trained providers.

#### **II. Non-hospitalized Patients (MI history; CHD (no MI); Diabetes, Hypertension, Hypercholesterolemia, Smokers, Spouses of MI patients)**

##### **A. Interpersonal Strategies**

Provide a minimum of 18 co-sponsored group interpersonal education programs connected with the health care delivery system, voluntary health agency or community group which is patient targeted (e.g. Heart Menders), (i.e. formal patient education programs as well as community groups which are convened around a specific health issue). Try to reach as many of the different target groups as possible. Examples: cardiac rehab\*, mended hearts, diabetes class, smoking cessation. Note that patient programs in cardiac rehab will reach both hospitalized and non-hospitalized MI patients as well as their spouses.

##### **B. Impersonal Strategies**

Provide a minimum of:

5 impersonal (mass or small media strategies) targeted at patients with a history of MI

6 impersonal (mass or small media strategies) targeted at CHD patients (no MI)

1 impersonal (mass or small media strategies) targeted at other high risk patients (diabetes, hypertension, hypercholesterolemia, smokers)

2 impersonal (mass or small media strategies) targeted at patient's families

Note that strategies which can be used include: newspaper stories, TV or radio stories, PSA's, direct mail, point of purchase displays, brochure or pamphlet distribution, posters, stuffers, outdoor/transit advertising.

## **APPENDIX B: SITE ACTION PLANS**

**Site Action Plan - Alabama**  
**Standards and Timeline for Intervention Planning**

COMPONENT AND ACTIVITIES	Intervention Quarter					
	1	2	3	4	5	6
<b>COMMUNITY ORGANIZATION COMPONENT</b>						
I. Establish and maintain Community-Based Partnerships to support all facets of the REACT Project						
A. County Health Councils	X	X	X	X	X	X
II. Hiring the Intervention Field Director						
A. Enlist assistance of County Health Councils	X					
B. Enlist assistance of hospital contact groups	X					
III. Update Community Profiles	X					
IV. Conduct Key Informational Interviews	X					
V. Planning for the Kick-Off Magnet Event	X					
A. Enlist assistance of County Health Councils	X					
B. Enlist assistance of hospital contact groups	X					
VI. Formation of grassroots advisory panel	X					
A. Enlist assistance of County Health Councils						
B. Conduct key informant interviews	X	X	X	X	X	X
VII. Planning and implementing other Community Education activities	X	X	X	X	X	X
A. Input of County Health Councils	X	X	X	X	X	X
B. Input of hospital contact groups						
C. Input of grassroots advisory panels						
<b>PROVIDER EDUCATION COMPONENT</b>						
I. Physicians						
A. Cardiologists						
1. One CME program offered through County Medical Society	X					
2. Academic detailing	X	X		X		
3. Quarterly newsletter	X	X	X	X	X	X
B. ER Physicians						
1. One CME program offered through County Medical Society	X					
2. Academic detailing	X	X		X		
3. Quarterly newsletter	X	X	X	X	X	X

COMPONENT AND ACTIVITIES	Intervention Quarter					
	1	2	3	4	5	6
C. Primary Care Physicians						
1. One CME program offered through County Medical Society	X					
2. Academic detailing	X	X		X		
3. Quarterly newsletter	X	X	X	X	X	X
II. Nurses						
A. Hospital-based Nurses						
1. Academic detailing for all Directors of Nursing	X					
2. CME program for CCU and ER Department Head Nurses	X					
3. Academic detailing as needed for CCU and ER Department Head Nurses		X				
4. General CME program for nurses in departments	X					
5. Quarterly newsletters for all nurses	X	X	X	X	X	X
6. Academic detailing, as needed, for CCU nurses		X				
B. Ambulatory Care Nurses						
1. CME program for nurses	X					
2. Quarterly newsletters	X	X	X	X	X	X
III. Cardiac Rehab Staff						
1. CME program	X					
2. Academic detailing	X	X		X		
3. Quarterly newsletter	X	X	X	X	X	X
IV. Other						
A. EMT's						
1. CME program	X					
2. Quarterly newsletter	X	X	X	X	X	X
B. Pharmacists						
1. Mailings		X				
2. Point of purchase displays in 10 largest pharmacies (see Community Education)		X		X		X
C. Cardiology Office Staff--academic detailing for those requesting		X		X		
D. Discharge Planning Nurses--academic detailing if appropriate		X				

COMPONENT AND ACTIVITIES	Intervention Quarter					
	1	2	3	4	5	6
<b>PATIENT EDUCATION COMPONENT</b>						
I. Highest Risk Patients - had MI						
A. Patients hospitalized during study period						
1. In-person, patient-centered counseling by hospital staff	X	X	X	X	X	X
2. In-person, counseling by primary care staff	X	X	X	X	X	X
3. Counseling by cardiac rehab staff	X	X	X	X	X	X
B. Patients referred by cardiac rehab						
1. Work with established group programs to integrate an "act-fast" discussion	X	X	X	X	X	X
2. Counseling by cardiac rehab staff	X	X	X	X	X	X
C. Other patients with MI history						
1. In-person, counseling by primary care staff	X	X	X	X	X	X
2. Counseling by cardiac rehab staff	X	X	X	X	X	X
3. "Patient stories" in local print media"	X	X	X	X	X	X
4. Small media in physicians' offices	X	X	X	X	X	X
II. Highest Risk Patients -- CHD						
A. Patients hospitalized (but no MI) during study period ("rule-out admissions")						
1. In-person, patient-centered counseling by hospital staff	X	X	X	X	X	X
2. In-person, counseling by primary care staff	X	X	X	X	X	X
3. Counseling by cardiac rehab staff	X	X	X	X	X	X
B. Other CHD patients (not hospitalized)						
1. Work with established group programs to integrate an "act-fast" discussion	X	X	X	X	X	X
2. "Patient stories" in local print media"	X	X	X	X	X	X
3. Small media in physicians' offices	X	X	X	X	X	X
III. Patients with Chest Pain presenting at ED						
1. In-person, patient-centered counseling by hospital staff	X	X	X	X	X	X
2. In-person, counseling by primary care staff	X	X	X	X	X	X
3. Counseling by cardiac rehab staff	X	X	X	X	X	X
4. Brief advice by trained staff	X	X	X	X	X	X
IV. Other Higher Risk Patients -- diabetes, hypertension, hypercholesterolemia, smokers, no CHD						
1. Work with established group programs to integrate an "act-fast" discussion	X	X	X	X	X	X
2. "Patient stories" in local print media"	X	X	X	X	X	X
3. Small media in physicians' offices	X	X	X	X	X	X

COMPONENT AND ACTIVITIES	Intervention Quarter					
	1	2	3	4	5	6
V. Spouse/Families of Above Target Groups						
1. Work with established group programs to integrate an "act-fast" discussion	X	X	X	X	X	X
2. In-person, patient-centered counseling by hospital staff	X	X	X	X	X	X
3. In-person, counseling by primary care staff	X	X	X	X	X	X
4. Counseling by cardiac rehab staff	X	X	X	X	X	X
5. Brief advice by trained staff	X	X	X	X	X	X
6. "patient stories" in local print media	X	X	X	X	X	X
7. Small media in physicians' offices	X	X	X	X	X	X
<b>COMMUNITY ORGANIZATION COMPONENT</b>						
I. Mass Media						
A. News -- total of 2 "hits" per household per month across following channels:	X	X	X	X	X	X
1. Newspaper story -- 1 per month	X	X	X	X	X	X
2. Radio or TV talk or call-in show -- 1 per quarter	X	X	X	X	X	X
3. Newspaper inserts -- 1 per month	X	X	X	X	X	X
B. PSA/Advertising -- totals of 5 placements per month across following channels:	X	X	X	X	X	X
1. TV -- 1/3 - 1/2 of total "hits" where feasible	X	X	X	X	X	X
2. Newspaper	X	X	X	X	X	X
3. Radio	X	X	X	X	X	X
II. Small Media						
A. Direct mailing	X		X		X	
B. Point of purchase displays in 10 largest pharmacies/grocery stores		X		X		X
C. Brochure/pamphlet distribution in shopping malls, through church programs, through schools		X		X		X
D. Billboard displays -- 2 billboards in high traffic locations for one month each	X			X		
E. Posters -- at least 10 in high traffic areas			X		X	
F. Materials inserted in worksite newsletters or through internal mail systems		X		X		X
III. Group/Networking Strategy						
A. 10 largest employers in the community		X		X		X
B. 10 largest religious organizations in the community	X		X		X	
C. Engage public and private social service agencies to distribute materials (e.g., AAAs, Kiwanis, etc.)		X	X	X	X	X
IV. Magnet Events -- at least two magnet events	X		X			

**Massachusetts Site Action Plan**  
**\*dor = depending on randomization**

COMPONENT AND ACTIVITIES	Intervention Quarters					
	1	2	3	4	5	6
<b>COMMUNITY ORGANIZATION COMPONENT</b>						
<b>1. Update community profiles - preintervention 12/95 - 2/96</b>	X					
<b>2. Conduct community interviews (in person, phone or mail)</b>	X					
a. voluntary health organizations - AHA, other?						
b. local and regional health officials (health directors, Boards of Health, AHECC, Prevention Centers)						
c. councils on aging, senior center directors, senior nutrition center director, senior housing director						
d. social service agencies						
e. CPR instructors - Red Cross, etc.						
f. interfaith leaders, 10 most important religious organizations						
g. women's clubs, League Women Voters						
h. service and fraternal organizations: Rotary, Kiwanis						
i. 10 largest employers						
j. neighborhood, ethnic groups						
<b>3. Contact media representatives</b>	X					
a. daily/weekly local papers						
b. local radio stations with appropriate format						
c. broadcast television if appropriate						
d. community access cable television						
e. alternative media						



COMPONENT AND ACTIVITIES	Intervention Quarters					
	1	2	3	4	5	6
<b>4. Conduct provider interviews</b>	X					
a. hospital administrator (4-7, dor)						
b. administrators, other health facilities organizations (HMOs, (2-7) community health center (1-3), VA (1))						
c. hospital CME directors (4-7)						
d. directors, VNA, (10-15, dor)						
e. nursing directors, CCU and ED dept. heads						
f. FMS directors						
g. Fire Dept./Police Dept. If emergency medical services role						
<b>5. Establish and maintain Advisory Network</b>	X	X	X	X	X	X
a. identify potential advisors (key informants and/or their recommendations)	X					
b. contact potential advisors, explain REACT, explore availability	X					
c. meet with advisors in small or large group (s) or individually as needed	X					
d. Solicit Advisor Network input to decide: (e.g., groups and people to approach for collaborative programs, and places and methods to distribute materials	X	X	X			
e. keep advisors up to date on project activities through meeting, phone calls, letters, email and other?		X	X	X	X	X
<b>6. Establish and maintain teams at hospitals (4-7, dor) and other health facilities (e.g. HMOs), 2-7, dor)</b>	X	X	X	X	X	X
a. based on interviews, select facilities in which to establish teams	X					
b. identify and contract potential team members by mail and phone (key informants and/or their recommendation)	X					
c. convene team meetings as needed and orient team members to REACT	X	X	X	X	X	X
d. decide on programs to implement and materials to distribute, organization, sequence and timing, staffing	X	X	X	X		
e. identify sub-teams (?) assist with program implementation	X	X	X	X		

COMPONENTS AND ACTIVITIES	Intervention Quarters					
	1	2	3	4	5	6
<b>PROVIDER EDUCATION</b>						
<b>Physician Education</b>						
1. Mass mailing to physicians						
2. Physicians - general CME, one (1) noon or evening CME at each hospital (4-7 day, dor) (fit CME programs into existing CME structure - e.g., lectures, round (interhospital, intrahospital)		X				
3. Resident physicians - presentations where training programs exist (1-2 per city)		X			X	
4. Brief presentations to medical societies and/or other established meetings		X	X	X	X	
5. Academic detail (group if possible) to cardiologists and ER doctors not participating in CME programs who are from high volume hospitals or higher volume practices			X			
6. Mail detailing to those not participating in above CME programs or interpersonal detailing				X		
7. Periodic newsletter (? Every 3-4 months)		X		X		X
<b>Nurse Education</b>						
1. Hospital (see also community organization):						
a. in service programs for all shifts, CCU and ED (24-42, dor)		X				
b. general CEU program with specialized breakout sessions for CCU, ED, discharge planning, cardiac rehab, visiting nurses (2.5 hour workshop in each community)		X				
2. In service programs (VNAs (10-15, dor)		X				
3. Mailings/newsletter (targets to be identified as resources permit)		X		X		X
<b>Education for other providers</b>						
1. Site tailored programs						
a. HMOs: in service programs, programs for case managers (1 at each HMO 0-6, dor)		X				
b. cardiac rehab programs (5-7, dor)		X		X		
c. in service program community health centers (1-3) in service programs		X				
2. EMTs: brief presentations existing meetings			X			
3. Pharmacists: mailing or brief personal contact to selected pharmacies (identified by key information)		X				

COMPONENTS AND ACTIVITIES	Intervention Quarters					
	1	2	3	4	5	6
<b>COMMUNITY EDUCATION</b>						
1. Gather advertising packets and other information about local channels and stations pre intervention		X				
2. Establish contacts with media representatives (mainstreams and alternative newspapers, television, radio)	X					
3. Prepare and place news stories and PSAs - 10 per quarter per community		X	X	X	X	X
a. all daily mainstream newspapers (1 per community)						
b. all weekly/monthly alternative papers (1 per community)						
c. all community access cable TV channels (1 per community)						
d. all local radio stations (6-15, dor)						
4. Contact and collaborate with worksites, community groups and churches to place PSA in organization newsletters, flyers and plan group education sessions, etc.		X	X	X	X	X
5. Coordinating magnet events - 2 large scale, at least 2 smaller scale		X	X	X	X	
6. Place display boards and posters, investigate billboard costs, etc	X	X	X	X	X	X

COMPONENTS AND ACTIVITIES	Intervention Quarters					
	1	2	3	4	5	6
<b>PATIENT EDUCATION:</b>						
A. Provided initially by REACT staff in collaboration with hospitals, HMOs, etc. May become part of institutions' program without ongoing REACT involvement						
1. Group education at cardiac rehab for 90% of patients and spouses - bimonthly or quarterly at each participating facility.			X	X	X	X
2. Group education for CHD at HMOs, community health centers, etc. (6 co-sponsored groups)			X		X	
3. Group education for chronic disease patients at each facility for HBP, high cholesterol, diabetes, smoking cessation, weight control (minimum 6 co-sponsored groups with at least 2 target groups)				X		X
4. Brochure distribution at above activities BI-3			X	X	X	X
<b>B. REACT Staff activities</b>						
1. Local media/HMO/hospital newsletters (11 stories per community: 5 for MI, 6 for CVD)			X	X	X	X
2. Mailings to selected patients. Reach 500 per community (conditional, DOR and physician interest)				X		
3. Bystander stories in local media or organization publication (2 stories per community)			X	X	X	X
4. Patient brochure distribution at community education programs and magnet events			X	X	X	X
<b>C. Provided by professional trained by REACT</b>						
1. Individual counseling for 50% of hospitalized patients and families/spouses. Priority focus: CCU (ICU nurses)			X	X	X	X
2. Individual (office visit) counseling for cardiology patients			X	X	X	X
3. Brief advice for 30% of chest pain ED visits (Ed nurses and EMTs) (verbal and handout)			X	X	X	X
4. Brief advice/individual counseling for chronic disease patients at primary care			X	X	X	X
5. Distribution of materials via MD offices			X	X	X	X
D. Explore resources for in depth evaluation of patient education	X	X				

**MN REACT -- Standards and Timeline for Intervention Planning**

**Standards and Timeline for Intervention Planning**

COMPONENT AND ACTIVITIES	Pre-Inter.	Intervention Quarter					
		1	2	3	4	5	6
<b>COMMUNITY ORGANIZATION COMPONENT</b>							
1. Update community profiles	X						
2. Conduct key informant interviews	X						
3. Form core planning/advisory group	X						
4. Hire intervention Field Director and assistant	X						
5. Kickoff magnet event		X					
6. Expand and maintain core planning/advisory group		X	X	X	X	X	X
<b>COMMUNITY EDUCATION</b>							
<b>1. Mass Media</b>							
a. News -- two news stories/month across all channels (2 hits/household); 1/3 to 1/2 TV		X	X	X	X	X	X
b. PSA/advertising -- five placements/month; 1/2 to 1/2 TV		X	X	X	X	X	X
<b>2. Small Media</b>							
a. For the public							
1. Direct mail -- at least one mailing to every household in the community		X		X		X	
2. Point of purchase displays in 10 largest pharmacies or grocery stores		X	X	X	X	X	X
3. Brochure, pamphlet distribution--handed out regularly in high-traffic areas such as malls			X		X		X
4. Billboards--three displays in high-traffic locations for one month each, minimum		X		X		X	
5. Posters--six versions displayed in high-traffic areas such as malls, large employers, etc.		X		X		X	
6. Materials inserted regularly in organizational newsletters, pay envelopes, etc.			X		X		X

COMMUNITY EDUCATION (CONT.)	Pre-Inter.	Intervention Quarter					
		1	2	3	4	5	6
<b>3. Group/Networking Strategy</b>							
a. Organizations/groups--presentations and small media will be delivered to a minimum of:							
1. Ten largest volunteer, service, non-profit organizations or religious institutions			X	X	X	X	X
2. Ten largest employers			X	X	X	X	X
3. Ten largest (if applicable senior citizen high-rises or senior center organizations or engage public or private social service agencies to distribute materials to clients or networking: make direct contact at least 50% of households or five most populous neighborhoods to deliver the program message verbally and distribute materials			X	X	X	X	X
<b>4. Magnet events</b>							
a. Implement at least two magnet events		X			X		
<b>PATIENT EDUCATION</b>							
<b>1. Highest Risk Patients - had MI</b>							
a. Patients hospitalized during study period							
1. One-on one counseling delivered by hospital staff		X	X	X	X	X	X
b. Patients referred by cardiac rehab							
1. One-on-one counseling delivered by cardiac rehab staff		X	X	X	X	X	X
2. Act-fast message incorporated into existing cardiac rehab group programs		X	X	X	X	X	X
c. Other patients with MI history (not hospitalized)							
1. Brief advice delivered by primary care staff							
2. Small media distributed via physicians' offices		X	X	X	X	X	X
3. Placement of patient stories in local media		X		X		X	
<b>2. Highest Risk Patients – CHD</b>							
a. Patients hospitalized (but no MI) during study period ("rule-out admissions")							
1. One-on one counseling delivered by hospital staff		X	X	X	X	X	X
2. Telephone follow-up where feasible		X	X	X	X	X	X

	Intervention Quarter						
	Pre-Inter	1	2	3	4	5	6
<b>PATIENT EDUCATION (CONT.)</b>							
2. Telephone follow-up where feasible		X	X	X	X	X	X
b. Other CHD patients (not hospitalized)							
1. Act-fast message incorporated into existing patient ed programs		X	X	X	X	X	X
2. Small media distributed via physicians' offices		X	X	X	X	X	X
<b>3. Patients with Chest Pain Presenting at ED</b>							
1. One-on one counseling delivered by hospital staff		X	X	X	X	X	X
<b>4. Other High-Risk Patients--diabetes, hypertension, hypercholesterolemia, smokers, no CHD</b>							
1. Act-fast message incorporated into existing patient ed programs		X	X	X	X	X	X
2. Small media distributed via physicians' offices		X	X	X	X	X	X
3. Placement of patient stories in local media		X		X		X	
4. Act-fast message incorporated into existing group programs		X	X	X	X	X	X
<b>5. Spouses/Families of Above Groups</b>							
1. Act-fast message incorporated into existing patient ed programs		X	X	X	X	X	X
2. One-on-one counseling by hospital/primary care staff		X	X	X	X	X	X
3. Small media distributed via physicians' offices		X	X	X	X	X	X
4. Placement of patient stories in local media		X		X		X	

	Intervention Quarter						
	Pre-Inter	1	2	3	4	5	6
<b>PROVIDER EDUCATION</b>							
<b>1. Physicians</b>							
a. Cardiologists							
1. CME program offered through local medical society		X					
2. Site-tailored presentations at largest practices			X		X		
3. Academic detailing (highest-volume)		X		X		X	
4. Direct mail (letters and newsletter)	X		X		X		X
b. ED physicians							
1. CME program offered through local medical society		X					
2. Brief presentations at existing meetings			X		X		
3. Academic detailing		X		X		X	
4. Direct mail (letters and newsletter)	X		X		X		X
c. Primary care physicians							
1. CME program offered through local medical society		X					
2. Direct mail (letters and newsletter)	X		X		X		X
<b>2. Nurses</b>							
A. Hospital-based nurses							
1. CEU programme		X					
2. Brief presentations at existing meetings			X		X		
3. Academic detailing (ED and CCU head nurses)		X		X		X	
4. Direct mail (letters and newsletter)	X		X		X		X
B. Ambulatory-care nurses							
1. CEU program		X					
2. Direct mail (letters and newsletter)	X		X		X		X
<b>3. Cardiac Rehab Staff</b>							
1. Brief presentations at existing meetings			X		X		
2. Academic detailing		X		X		X	
3. Direct mail (letters and newsletter)	X		X		X		X
<b>4. Other</b>							



**REACT Intervention Action Plan  
TEXAS**

COMPONENT AND ACTIVITIES	Pre-interv 1/1/96-3/31/96		Intervention Period 4/1/96-9/1/97																				
1. Update community profiles		X																					
2. Establish and maintain Advisory Group																							
a. Contact potential advisors	X	X																					
b. Provide orientation to advisors																							
c. Meet with advisors to discuss incentives and regular meeting schedule, etc.																							
d. Solicit first program participants for role model stores and/or volunteer network																							
e. Meet with advisors to discuss project (ongoing)																							
3. Hire and train intervention field staff																							
a. Place ad in intervention sites' newspapers	X																						
b. Conduct interviews	X	X																					
c. Meet with Advisory Group	X	X																					
d. Provide training to field staff																							
4. Establish community networks																							
a. Prepare a plan for systematic utilization of systems, networks and units as channels of access to the community																							
b. Prepare final mapping based on input from local advisors and volunteers																							
c. Recruit community networks based on referrals or preliminary introductions made by gatekeepers and opinion leaders, nominations from peers; direct canvassing																							
d. Train community networkers																							
5. Initial magnet event																							
a. Introduce local physicians to REACT		X																					
b. Develop press kit		X																					
c. Schedule press conference																							
6. Cardiac rehab staff - group pres.																							

COMPONENT AND ACTIVITIES	Pre-interv 1/1/96-3/31/96			Intervention Period 4/1/96-9/1/97																				
7. Other HCPs																								
a. EMT's - group presentation				x																				
b. Pharmacists - site-tailored presentations				x																				
<b>PATIENT EDUCATION</b>																								
Small media role model stores will be distributed to patients through networking-																								
1. Patients hospitalized during study period - in-person patient-centered counseling																								
2. Patients referred for cardiac rehab-counseling by cardiac rehab staff																								
3. Patients hospitalized (no MI) during study period in-person patient-centered counseling																								
4. Persons with CHD presenting at ED - In-patient patient-centered counseling (distribute materials); "act fast" messages by mail																								
5. Other CHD patients - role model stories; small media in physicians' offices																								
6. Patients with targeted chronic illnesses presenting at ED during study period																								
7. Other patients with targeted chronic illnesses																								

## **APPENDIX C: COMMUNITY EDUCATION**

**APPENDIX C.1**  
Sample Media Placement Schedule

Intervention month start date 3/96	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	<b>Total</b>
TV*	1		4		1	1		4		1	1		4		1	1		4	23
Newspaper	1		4		1		1	4			1		1		4	1		1	19
Radio	1		4		1		1	4			1		4		1	1		4	22
<b>Total</b>	3	0	12	0	3	1	2	12	0	1	3	0	9	0	6	3	0	9	64

\* = number of news, advertising placements

**APPENDIX C.2**  
Sample Media Directory Page

**WKTC-TV, Channel 5 (VHF)**

Address: Suite 1200, 342 Winton St.  
Maximillian, SA 04135  
PH: 500-555-1212  
FAX: 500-555-1213  
E-mail: TCTV@ail.com

Manager: Rochelle Franklin  
Prog. Dir: John Rosco  
News Dir: Kent Spence  
Adv Dir: Mary Olsen  
ABC Affiliate  
Number 2 in market

**News, feature programs**

*Five At Five News*

Broadcast: 5 p.m., M-F  
Producer: Kent Spence  
PH: 500-555-1214  
FAX: 500-555-1213  
E-mail: kspence\_TCTV@ail.com

*Community Calendar*

Broadcast: Noon, M-F  
Producer: Ron Howard  
PH: 500-555-1214  
FAX: 500-555-1213  
E-mail: rh\_TCTV@ail.com  
Deadline: 9 a.m. M-F

*Five At Six News*

Broadcast: 6 p.m., M-Sat  
Producer: Kent Spence  
PH: 500-555-1214  
FAX: 500-555-1213  
E-mail: kspence\_TCTV@ail.com

*Health on Five*

Broadcast: 6:30 p.m. Weds.  
Producer: Janelle Reichert  
PH: 500-555-1215  
FAX: 500-555-1213  
E-mail: jre\_TCTV@ail.com  
Deadline: 5 p.m. Mondays  
Health features, news

*Five At Ten News*

Broadcast: 10 p.m., M-Sun  
Producer: Janelle Reichert  
PH: 500-555-1215  
FAX: 500-555-1213  
E-mail: jre\_TCTV@ail.com

**Notes**

**PSA format:** 3/4'' U-Matic; will accept video inserts for use in news if professional quality.

**Market info:**

Women 45+ (40% share; 5-6 p.m. News)  
(Number 1 in market this group)

Men, 18-44 (30% share; 10 p.m. News)  
(Number 2 in market this group)

## **APPENDIX C.3**

### Sample Guide to Media Relations

#### **Overview**

This section discusses managing relations with the mass media as part of organizing a community intervention to reduce delay in seeking care for MI symptoms. It suggests an "active approach" to effective relations and discusses the following elements:

- Who are "the media"?
- Mass media roles
- The need for a planned approach to media relations
- Media news judgment and obtaining sustained coverage
- Influencing the "framing" of news about an issue
- Practical steps to take in planning media relations

#### **Introduction**

The intervention seeks to educate individuals about the MI delay issue but also to seek to build the issue as an important community public health concern. Mass media are among important community institutions that can help to achieve (or thwart) this objective. How well or poorly the mass media help to achieve this objective is in large measure a product of good management of media relations. In this context, managing media relations means that you seek to represent your organization and its point of view to the media as effectively as you can. This requires understanding the media's role in making community policy, how the media work on a daily basis, and what's involved in establishing one-on-one relationships with news reporters and editors.

#### **Who are "the Media"?**

When most of us talk about "the media," we really mean the highly visible "big time" media outlets serving vast national and even global audiences like the New York Times, Washington Post, major television networks, and national news magazines. But these actually compose a very small percentage of media outlets in the United States. The overwhelming majority of media outlets actually are small operations serving their immediate communities' news, editorial, entertainment, and advertising needs. Although many may be owned by large corporations, their focus is usually the local community or region.

In very small towns (e.g., 200 to 2,000 population), "the media" probably consist of little more than a local weekly newspaper with fewer than perhaps a half-dozen employees. In larger towns (e.g., 15,000 or more population), "the media" compose a more complex system often including a daily newspaper, weekly publications, radio and television stations, and perhaps even a magazine. The number of people employed depends on the size of the market.

Whatever the size of the market or outlet, a key to good relations with the media is to recognize that they are composed of individuals a lot like yourself who have a job to do, who live in the community, have families, and who want the best for themselves, their families, and their community. This doesn't guarantee, of course, that the media will always see things your way, but it is meant to help you understand that you and the media people with whom you work have some common ground.

## **Mass Media Roles**

At the most basic level, the media survey the environment. That is, they provide news reports of events and happenings that editors judge to be of interest to their readers, listeners, and viewers. Weekly newspapers focus almost exclusively on local news. Larger daily newspapers and electronic outlets include a mixture of international, national, and local news.

News stories are usually written according to a formula that places the most important information at the top of the story (especially in the first paragraph, called a "lead"), and less important information later. Editorials and opinion pieces are usually written in an "essay" style. At another level, the media also provide opinion and interpretation about the news they report. In newspapers, this is usually separate from news coverage, appearing on the Editorial or Op-Ed (opposite editorial) pages, or labeled "analysis" if appearing in regular news sections. Weekly newspapers usually have fewer editorials and opinion pieces than the daily press. The electronic media also do few formal editorials or opinion pieces, but often work in "analysis" and opinion in regular stories.

The complexity of the media's social and political influence, however, belies the simplicity of just reporting the news and giving opinions about it. Although the media's role will vary depending on community size and complexity, they are important actors in influencing decisions and policies that affect the communities they serve.

First, through news and editorial coverage, they alert the public to important social and political problems that need solutions. Second, they help to build the public agenda for specific solutions to realize some beneficial social or political goal. Third, they feed back to community leaders public opinion about specific problems or proposed solutions. And fourth, media news and editorial coverage often determine the framework within which problems and solutions will be discussed and treated in the community.

How the media function in community policy-making depends in part on whether the community is large or small; whether policy-making is concentrated in the hands of a few or widely dispersed among many actors; whether groups are organized to push a particular policy; and the extent to which problems and solutions affect large or small groups of people and special interest groups of greater or lesser influence in communities.

A first step in making effective use of the media in this process is to have a good understanding of community dynamics and community actors and interest groups in each of these areas. What leaders, groups, and interests will want to see your issue high on the community agenda? Which will not? What is the range of solutions to the problem that various leaders, groups, and interests will support?

### **An Active, Planned Approach**

As community organizers, part of your mission on CMCA is to help build a place on the community agenda for the issue of adolescent access to alcohol and to pave the way for public support of solutions to the problem. With regard to the media's role, this requires an active approach wherever possible. That is, your community strategy team must organize sufficiently to influence the media not only to cover the issue in the first place, but to cover it over a sustained period of time, and how to cover it as well. This involves planning -- forethought about the kinds of events, happenings, spokespersons, information that will appeal to the media's news judgment as deserving of their sustained attention. In addition, it involves planning about how to present the issue of adolescent alcohol access to the media -- that is, how you frame the issue.

## **Media Work Routines: How the News Gets Out**

Time urgency is a primary characteristic of media work. Because news and advertising are regarded as "perishable" products, deadlines are a way of life. The newspaper must go to print at a specific hour or day to assure that the product reaches its readers. The same is true of broadcast news. If a story or advertisement isn't ready by deadline, it waits to the next cycle.

Because news and advertising are so time-urgent, media work consists of highly organized routines to gather, write, edit, and publish (or broadcast) the news rapidly and efficiently. Although there may be many people involved in these efforts in larger media, work routines are much the same even at small media outlets. For example, on a daily newspaper, there are editors to assign stories to be covered; to copyread and correct stories, and to write headlines; and to place stories on specific pages. There also are reporters who gather and write the news. Most are "general assignment" and cover whatever stories editors give them; a few are "beat" reporters who cover institutional goings-on (e.g., "police", or "city government"); and fewer still cover only special subject areas (e.g., "health", or "the environment"). On small weekly newspapers, two or three people may perform all editing and reporting tasks.

At a large or small media outlet, reporters and editors are heavily dependent on "sources" to get the news. The term "source" is used broadly here to mean any individual, group, or organization that provides the media information they want the public to know. Sources of news may include everything from the person who calls to alert a reporter to an important meeting; to a press release from an organization; to an expert or spokesperson who is quoted in a news story.

From where does news mainly originate? Large numbers of news stories come from press releases sent by public and private organizations of all kinds. They arrive by the dozens each day in even small newspaper offices. In fact, some researchers estimate that as much as half of all news stories each day originate in this way.

Of course large newspapers and broadcast outlets often use the press releases as "tips" about important stories to cover. They seldom use the press release as is. On the other hand, small weekly newspapers and "mom and pop" radio stations are much more likely to use the press release with very little, if any, change.

Another myth about news is that reporters gather most of their stories through face-to-face interviews with sources. In fact, the overwhelming majority of stories are gathered and written right in the office using the phone. "Field work" generally is reserved for covering public meetings and other events that aren't practical to cover by phone.

## **Media in Smaller Towns**

As you probably already realize, media organizations in smaller towns don't operate the same way or look the same as media in large, urban areas. They also don't perform the same function. The primary way that people in a small town communicate with each other is interpersonal communication. A local weekly newspaper or small radio station in that town often serves to fill in the gaps with news of community affairs, news of record (city administration, police reports) and news of social activities and events. The tone of reporting in a small newspaper is generally supportive and positive of its community, even to the point of "playing down" controversy or conflict and presenting a "united front." Many weekly newspaper editors believe it's their role to promote the community and be a booster for it, not to report all its problems or shortcomings.



Therefore you may find it difficult getting publicity and support for what a small town editor might consider "dirty laundry." Pay close attention to how you "frame" your issue, which is addressed in more detail in an upcoming section.

## **Media Work and Representing Your Organization**

Because of the media's time-urgent work routines, it probably has crossed your mind that an effective way to get your organization's views across to the public is to make it as easy as possible for reporters and editors to do their jobs. The more organized you are in this respect increases the likelihood that the media will attend to things that you believe are important.

There are several practical issues here: 1) establishing personal relationships with reporters and editors; and being a good news "source;" 2) learning to think "news" like a reporter or editor; 3) planning in advance the language and symbols that will best frame your issue for the public.

## **Establishing Relationships and Being a Good Source**

Good media relations begin by identifying local reporters and editors that are most likely to be interested in your organizations' work. On small newspapers and broadcasting outlets, this isn't difficult since they have only a few staffpersons. On larger newspapers or broadcast stations, you may need to make a few discrete inquiries. On larger newspapers, you may want to find out who is the principal editor that assigns reporters to stories. This person's title typically is City Editor or News Editor but sometimes may be the Managing Editor. At larger broadcast stations, you will probably want to know who is the News Director.

Call for an appointment and stop by to introduce yourself and your organization. Tell about yourself and your organization. Provide some written background on the issue of alcohol and adolescents, your organization, and any upcoming activities. Be sure to provide telephone numbers where you and the chairperson of your organization may be reached. For newspapers and television stations, ask about visual requirements and needs; some media are receptive to submitted photos or videos, while others may be limited in accepting them because of union contracts or other rules. During your conversation, inquire about deadlines and whether there is a particular reporter that might be assigned to cover your group's activities. Ask to be introduced to the reporter. Be sure to obtain their phone numbers. Keep your initial contact upbeat and friendly and be sensitive to the editor's or reporter's daily routine. Use the information about contacts and deadlines to create your own media directory.

Here are a few common sense rules of etiquette in dealing with the media and being an effective news source:

- Be honest and straightforward in your dealings; don't dissemble or distort, but advocate clearly for your group and its point of view. If a reporter or editor suspects you are "pulling her chain," your relationship will be severely impaired. If you don't know the answer to a question, say so. If you can, offer to get the answer or to provide the information the reporter or editor needs. Be sure to follow through.
- Don't overdue or overwork your media contacts. Call when you have a story or drop by with a "tip" or news release. Make yourself easily available, but don't call for every little thing or overstay your welcome. Also, avoid "hovering" over reporters at an event they may be covering. Let them do their jobs.

- Don't ask reporters to let you see a story before it is published or broadcast. They regard this as an insult to their professionalism. Do offer to be available if they want to check the accuracy of quotes or other information.
- Sometimes, the media will get it wrong. If you think the error was substantial (e.g., a bad misquote or incorrect information in the story), don't hesitate to bring it to the reporter's or editor's attention. They want to be accurate. When you have such a bone to pick, do so professionally, politely, and clearly. If you believe a story was distorted or insufficiently covered, you may want to send a letter to the editor for clarification. In other cases, you may want to ask for a news story "correction" or "clarification." In any case, don't "nit pick" and don't develop a reputation as a complainer. Some mistakes simply aren't important and certainly aren't worth jeopardizing your media relations. Also, don't forget to call a reporter or editor with compliments about their coverage when they deserve them.

## **Newsworthiness**

Getting a single news story published or broadcast is not usually difficult if it remotely meets any of the criteria of "newsworthiness" described below. But sustained media attention is key to raising and keeping an issue part of the community's agenda. This is much more difficult. The media often act like a "restless searchlight" moving from issue to issue. In part this is due to the media's need to report something new and different (issues get old fast), but it is also due to competition for media attention to other issues. Yours will not be the only group in the community that wants attention to an important issue. The ability to "think like a news person" and to build personal relationships with reporters and editors become critical in getting sustained attention.

While the media, especially in smaller towns, are very amenable to publishing or broadcasting notices about meetings and other "bulletin board" fare, raising an issue to the public agenda requires special attention to newsworthiness. Keep in mind that "news judgment" is highly subjective. Some elements that reporters and editors regard as newsworthy include, but are not limited to, the following:

- an issue, event, or problem that affects large numbers of people;
- a novel approach to an issue or problem;
- conflict among different interests or groups;
- drama or sensation;
- community organizing for action to solve a problem;
- human interest "success" and "tragedy" stories
- what's being done locally to solve a problem of national scope

## **Framing the Issue**

While one of your important goals is to achieve sustained media attention, another equally important goal is to influence how the heart attack delay issue gets reported. What we mean by this is that news stories also set the definitions, language, and terms within which an issue is considered by the public.

A couple of examples will help to make this point. Those wishing to restrict smoking in public places talk about the issue in terms of the public's health (tobacco is key in some 350,000 deaths in the U.S. each year) and the right of individuals not to be exposed to dangerous substances. Tobacco lobbyists, on the other hand, talk about the issue as one of "smokers' rights" and seek to portray the opposition as bent on eliminating individuals' freedom and rights. This may seem like little more than polarized rhetoric, but each side attempts to make its symbols and its

framework prevail in the public mind. The framework within which an issue is considered by the public very frequently paves the way for choosing some types solutions instead of others.

Although we don't anticipate a struggle or a great deal of conflict over the issue of patient delay in seeking care for MI, it is important to recognize the dynamic of framing and to be ready to handle possible conflicts should they occur.

Because of the professional canon dictating "balanced" news stories, reporters will interview and quote people who do not agree with your point of view. They will attempt to portray your organization's issue (and sometimes its leadership) in less than an admirable light. You will not have total control over this symbolic struggle, but you can heavily influence it by being clear and proactive on how best to frame the issue and communicate it to the public. Here are a few ideas:

- Your coalition or lead agency's work on the issue should be seen as involving the local community in an important national project. However, local residents should predominate in public settings and be spokespersons for most activities. As a paid staffperson, you can provide background, information and other help, but local volunteer members should be in the forefront.
- Spokespersons for the coalition or lead agency should be selected and trained in advance. They should be articulate and clear, and have a good grasp of the issue factually and of the language and symbols to best communicate it. Take some time to train several spokespersons.
- Keep the issue focus on MI patient health and safety.
- If conflict does arise, avoid being defensive and personal. Where possible, don't respond directly to opponents' efforts to bait you. That indirectly endows them with credibility. Rather, seek to regain symbolic control of the issue by a positive restatement of what the intervention is really concerned about.

## Summary

Here is a summary of this section's main points:

- Media relations are necessary because the mass media help to build the public agenda of social and political issues and policy solutions;
- Effective media relations begin by recognizing that media people are individuals a lot like yourself who have a job to do, who live in the community, have families, and who want the best for themselves, their families, and their community;
- Effective media relations means in part establishing personal working relationships and understanding the needs and requirements of media work, that is, making it easy for the media to cover your organization's activities and interests;
- To be an effective advocate for your organization and its point of view requires a planned approach including the following:
  - identifying leaders, groups, and interests who will and will not want to see your issue high on the community agenda, and the range of solutions to the problem that various leaders, groups, and interests will support;
  - Planning events, happenings, and programs in which the media will have interest; and learning to think "newsworthy;"

- Planning in advance how best to frame the issue and to communicate it to the public;
- Identifying and training spokespersons who will clearly and articulately represent the issue to the public.

Finally, attached to this section are some brief descriptions of media management "tools" that may be useful to you and your strategy teams, and a lengthier manual resource manual about being a media spokesperson. These include:

## **References**

For general information about media relations, consult the following:

Carole Howard and Wilma Matthews, On Deadline: *Managing Media Relations*. Prospect Heights, IL: Waveland Press, 1985.

## APPENDIX C.4

### Sample Media Kit Outline

- News release to indicate the start of the community intervention, with overview of project plans and purpose of program.
- Fact sheet:
  - Basic heart attack symptom information
  - Delay in MI treatment
  - Average length of delay time before seeking treatment
  - General national heart disease information
  - Number per year as related to 10-20 years ago
  - Number of second MI delay time for second MI patients
  - Number that die from first heart attack
  - Number that survive
  - Women and heart attacks
  - Lost work time due to MI (try to fit this into economic terms)
  - Clot busting drugs
  - History of development value of early treatment
- List of contact people in community with capsule profiles of each
- List of all local physician, ED personnel, project board members, and MI patients who would be available for interview for local press
- List of all local physicians, ED personnel, project board members and MI patients who would be available for interview for local TV and radio news and talk shows
- One or two sample feature stories based on MI patients in the respective communities (names and important data to be supplied by field coordinators)
- Photographs of MI patients and principle people
- Video and/or audio clip for local w/radio interviewer with national figure talking about importance of program (perhaps two versions using both a black and a white cardiologist or emergency room physician)
- Program brochure; information available on Internet(?)

**APPENDIX C.5**  
Sample PSA Script (TV)

**Rapid Early Action for Coronary Treatment (REACT)**  
**FORMAT: REAL HEART ATTACKS. REAL STORIES.**  
**6/30/95**

<b>NARRATION</b>	<b>VISUAL</b>	<b>FX</b>
I woke up feeling bad...dull pain in my chest...a little short of breath.	Open on re-enactment of older man waking up in bed in obvious discomfort.	Fade in/fade out white on black overlay: REAL HEART ATTACKS. REAL STORIES.
I knew something was wrong...it didn't go away.	Fade in re-enactment: man sitting on edge of bed; concerned wife in conversation with him.	Fade in/fade out white on black overlay: CHEST PAIN. SHORTNESS OF BREATH.
I wasn't sure it was a heart attack...I thought there'd be more pain...but my wife said that we shouldn't wait.	Fade in re-enactment: woman called 9-1-1. Ambulance coming to house; EMTs stabilizing patient; rushing to hospital; arriving at hospital; coming through hospital ED doors.	Fade in/fade out white on black overlay: ACT FAST
She call 9-1-1.		
I'm glad she did. They were wonderful...they said we did the right thing...it was a heart attack alright...but they got it under control before it did any real damage.	Shots of ED staff working on patient.	Fade in/fade out white on black overlay: GET TO A HOSPITAL
	Man and wife, doctor in cardiac rehab; man on treadmill; in obviously better health.	Fade in/fade out white on black overlay: DRUGS CAN STOP A HEART ATTACK IN ITS TRACKS.
I'm recovering now. My advice? If you have chest pain, act fast. Don't delay.		Fade in/fade out white on black overlay: CHEST PAIN. ACT FAST.
		LOGO

## **APPENDIX D: PROVIDER EDUCATION**

# **HEART ATTACK REPERFUSION THERAPY AND PATIENT DELAY: IT'S ABOUT TIME**

**Target Audience:** Physicians, nurses, and other health professionals in a one-to-one academic detailing or small group setting

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## ***GOALS AND OBJECTIVES***

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### **Goals**

1. Establish credibility of Heart Attack REACT within the health care professional community.
2. Motivate participants to support Heart Attack REACT goals.
3. Gain the cooperation of health care providers and their participation in the implementation of the Heart Attack REACT project by becoming spokespersons for Heart Attack REACT project activities.
4. Motivate participants to engage patients in patient-centered counseling and supportive activities (brief advice, distribution of materials, posters).
5. Motivate participants to examine policies and procedures in their work setting relating to patients at high risk for myocardial infarction (MI).
6. Enhance awareness of emergency medical services (EMS)/hospital structures and policies that may have an impact on rapid identification and treatment of MI patients, as well as provide strategies for appropriately modifying structures and policies that are causes of delay.

### **Knowledge Objectives**

1. Understand the need for quick patient and health care professional response to symptoms, including the rationale for patient bypass of regular physician to immediately access EMS and emergency departments (EDs).
2. Understand the empirical evidence related to patient delay.
3. Know the steps patients should take in seeking appropriate medical care for MI symptoms.
4. Understand the special issues related to patient subgroups, such as women, African-Americans, and others, and special needs of patients and family members.
5. Be aware of the role of all providers in giving and reinforcing messages to patients and family members about responding to MI symptoms (symptom recognition, coping, and fast action).
6. Understand Heart Attack REACT project goals and objectives and Heart Attack REACT activities in hospitals, HMOs, other health organizations, and the community.
7. Identify patient communication needs.
8. Be able to outline those elements that should be included in a standard protocol for his/her office/ED, responding to patients who call with MI symptoms.

### **Attitude Objectives**

1. Exhibit a positive attitude toward Heart Attack REACT goals, project activities, and possible participation in these activities.

### **Behavior Objectives**

1. Demonstrate support for Heart Attack REACT project activities, including participation in preexisting and magnet community activities.
2. Promote structural changes within the practice environment.
3. Use Heart Attack REACT materials in their practice.
4. Sponsor a Heart Attack REACT in-service training program for staff.
5. Encourage their staff—particularly nurses—to provide consistent and reinforcing messages about response to MI symptoms to patients and their families.
6. Encourage and support staff, particularly nurses, to provide patient-centered counseling.
7. Develop or enhance current protocols for the response of staff to patients with MI symptoms.

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## ***GETTING READY TO TEACH***

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### **Total Time Needed to Teach This Lesson**

Approximately 10 minutes without videotape; 25 minutes with videotape.



## **Resources and Materials Needed**

- The illustrations used in this lesson are available in three formats: (1) 35mm slides, (2) Microsoft PowerPoint 4.0 presentation, and (3) 8.5 x 11 full-color prints bound in a notebook. You may use the format that is best for the setting in which you will teach. Slides work best with small groups. The PowerPoint and print formats work best with a single learner. Depending on the format you select, you will need the following:

### For 35mm slide presentation

- Slide projector
- Projection screen
- Slide set for One-to-One Academic Detailing and Small Group Lesson Plan

### For PowerPoint 4.0 presentation

- Diskette containing PowerPoint slide set for One-to-One Academic Detailing and Small Group Lesson Plan
- Color laptop with PowerPoint 4.0 or higher installed.

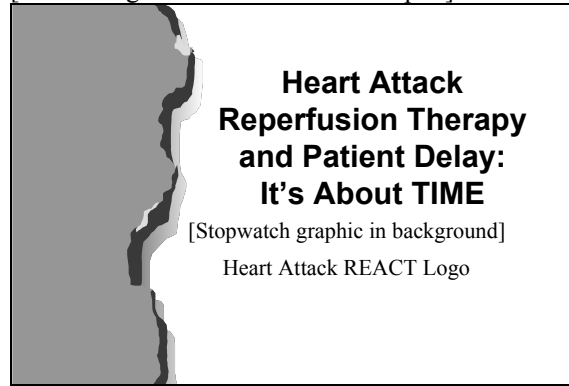
### For full-color print presentation

- Notebook containing 8.5 x 11 full-color prints for One-to-One Academic Detailing and Small Group Lesson Plan
- If you are presenting the lesson to a small group, you will need:
  - VHS videocassette player
  - Video monitor
- Professional education videotape
- A folder for each participant containing sample patient education materials, the TIME method handout and pocket card, an order form, and a list of upcoming local Heart Attack REACT events

## WELCOME AND INTRODUCTIONS

Show slide 1.

[Insert image of slide here. For example:]



Introduce yourself.

Tell participant(s) your name and your connection with Heart Attack REACT.

Show slide 2.

[Insert image of slide here.]

Briefly outline orientation agenda.

*During the next 10 minutes, we'll discuss these four things:*

- 1. The advent of reperfusion therapy has been shown to reduce morbidity, disability, and mortality from myocardial infarction.*
- 2. The primary barrier to saving viable myocardium is patient delay.*
- 3. The Heart Attack REACT program is designed to reduce patient delay time.*
- 4. Health care professional involvement in Heart Attack REACT is critical if the program is to achieve its objectives. There are specific things you can do to reduce MI delay in your patient population.*

## THE PROMISE: SAVING MYOCARDIUM

Show slide 3.

[Insert image of slide here.]

Review how the treatment of MI has evolved during the past 20 years.

*As you know, the treatment of MI has evolved dramatically over the past 20 years. Two decades ago, the standard of care for MI patients was bed rest, observation, and management of acute clinical complications. Today, the goal is to limit myocardial damage by achieving and maintaining coronary reperfusion. Results from many studies have pointed to the importance of rapid treatment with reperfusion therapy, with earlier treatment leading to reduced hospital mortality.*

Show slide 4.

[Insert image of slide here.]

Describe the relationship between rapid reperfusion and dramatic reductions in morbidity, mortality, and disability.

*The curve on this graph reflects the relationship between the time to reperfusion following onset of symptoms and the degree of benefit obtained from thrombolytic therapy. The most benefit—the lowest mortality—accrues when the time to reperfusion is under 1 hour. The curve clearly demonstrates two maxims often heard in MI treatment:*

*"Time is muscle"*

*"Minutes mean myocardium"*

*The decrement in benefit associated with use of thrombolytic therapy and time is not linear. Benefit is greatest in the first few hours following the onset of MI symptoms.*

## THE PROBLEM: PATIENT DELAY

Show slide 5.

[Insert image of slide here.]

*Thrombolytic therapy for MI is generally safe and effective. However, only a minority of MI patients actually receive thrombolytic therapy. Late hospital arrival is a frequently cited reason for not giving thrombolytic treatment.*

**Show slide 6.**

[Insert image of slide here.]

**Discuss the intervals where treatment delay can occur.**

*There are several critical time intervals where treatment delay can occur:*

- *The first interval—between the onset of symptoms and the patient's decision to seek care. This is sometimes called patient delay.*
- *The second interval—between the decision to seek care and arrival at the hospital, also called transportation delay.*
- *The third interval—between arrival at the hospital and the start of reperfusion therapy (door-to-needle delay).*

*Our focus today is going to be on the first two intervals, especially the first interval—patient delay.*

**Show slide 7.**

[Insert image of slide here.]

**Describe the research related to patient delay.**

*The median patient delay time ranges from just under 2 hours to as much as 6½ hours. Between one-quarter and one-half of patients wait longer than 4 hours before seeking care.*

**Depending on your site, show slide 8AL, 8MA, 8MN, 8TX, or 8WA.**

[Insert image of slides here.]

**Discuss local data for local studies regarding delay time.**

If available, present local data regarding patient delay time. This will help make the problem of patient delay more relevant to the audience.

**Show slide 9.**

[Insert image of slide here.]

**Explain the reasons why patients delay.**

*There are a number of reasons why patients delay seeking medical care:*

- *Patients may not be certain that their symptoms are heart attack related. They may attribute their symptoms to a noncardiac cause.*
- *Patients may have mild, nonspecific, or slow onset of symptoms.*
- *Patients may not perceive that they are at risk for a heart attack, so they may not consider that possibility.*
- *Patients may be concerned that they will unnecessarily alarm their family, that they will be embarrassed by the arrival of an ambulance at their home or office, that they will be "a bother," or that their chest pain will end up being a "false alarm."*
- *Patients may be fearful of—or reluctant to use—medical care in general or emergency medical services in particular.*

**Show slide 10.**

[Insert image of slide here.]

**Discuss risk factors for delay.**

*Although delay is a problem for the entire patient population, studies have suggested certain risk factors that may be associated with even greater patient delay:*

- Older age
- Being female
- Low education level
- Low socioeconomic status
- Being African-American or Hispanic
- A history of previous MI/CHD
- A history of chronic diseases (e.g., diabetes)
- Slow onset or mild presentation of symptoms

*These kinds of patients need special attention to prevent delay.*

**Show slide 11.**

[Insert image of slide here.]

**Describe other cause of delay in the prehospital setting.**

*Although patient delay is the major barrier to rapid treatment, it is not the only one. Once the patient decides to seek care, there are often other factors that contribute to delay:*

- *Patients may try to call their managed care plan to obtain preauthorization for emergency care. Patients may lose time waiting in a queue for their call to be answered.*
- *Patients may try to call their personal physician. Sometimes physicians are not immediately available when patients call. It may take some time for physicians to return patients' calls. If the physician's office has unclear telephone triage procedures, true emergencies may not be recognized and patients may not be connected with emergency medical services.*

## **THE PROGRAM: HEART ATTACK REACT**

**Show slide 12.**

[Insert image of slide here.]

**Describe the meaning of the Heart Attack REACT acronym.**

*To address the problem of patient delay, the Heart Attack REACT project was initiated. REACT stands for Rapid Early Action for Coronary Treatment.*

**Show slide 13.**

[Insert image of slide here.]

**Describe the goal of Heart Attack REACT.**

*Heart Attack REACT is designed to reduce delay time and save lives by teaching people to recognize MI symptoms and act fast when a heart attack begins. Ultimately, Heart Attack REACT may play a significant role in decreasing morbidity, disability, and mortality from MI.*

**Show slide 14.**

[Insert image of slide here.]

**Describe the program design.**

*This community, along with nine others across the country, has been chosen to participate in Heart Attack REACT. Each Heart Attack REACT community is engaging in a common educational strategy modified for local needs. Heart Attack REACT involves the entire community—health care professionals, hospitals, emergency medical services systems, newspapers, television and radio, worksites, community organizations, and citizens. Local Heart Attack REACT project staff members coordinate the numerous program components. They work with community leaders, physicians, nurses, emergency medical technicians, paramedics, and local residents to develop specific activities that are appropriate for this community.*

**Show slide 15.**

[Insert image of slide here.]

**Explain the funding source.**

*Heart Attack REACT is funded by the National Heart, Lung, and Blood Institute (NHLBI).*

*Heart Attack REACT grew out of the efforts of the National Heart Attack Alert Program (NHAAP), which is a nationwide NHLBI education program.*

## **YOUR PARTICIPATION: ESSENTIAL**

**Show slide 16.**

[Insert image of slide here.]

*As a health care professional, your participation in Heart Attack REACT is essential if this community program is to effectively reduce heart attack delay time for patients with signs and symptoms of MI.*

**Show slide 17.**

[Insert image of slide here.]

**List the three ways health care professionals can improve heart attack survival.**

*There are three main ways you can help to provide quality care and improve patient outcomes after a heart attack: (1) educate your patients before they have an MI, (2) optimize systems in your health care setting, and (3) participate in community awareness activities.*

**Show slide 18.**

[Insert image of slide here.]

**Begin discussion of patient education.**

*The most important thing you can do is to talk to your at-risk patients and their families about the symptoms of a heart attack and the appropriate action steps they should take to ensure rapid treatment. Advice from health professionals can have a significant impact on patient behavior. There is ample evidence that patients listen to and act appropriately to health messages given by physicians. For example, rates of compliance with screening procedures are highest among patients who receive a physician recommendation. And even with very complex behavior change problems, such as smoking cessation, recommendations and reinforcement by physicians improve the chance of success for many patients.*

**Define high-risk patients.**

*There are two types of at-risk patients—those at high risk for delay and those at high risk for having an MI. Both types of patients need to be educated about heart attack symptoms and what to do if they experience them.*

**Show slide 19.**

[Insert image of slide here.]

**Discuss patients' knowledge of MI risk.**

*We have already discussed those patients at high risk for delay. As health care providers, we know which patients are at high risk for MI—but many patients do not realize that they are at risk of having a heart attack. In our preliminary research, we found this to be the case with people with certain risk factors such as high blood pressure, high cholesterol, and diabetes. We also were interested to find that some people who had undergone bypass surgery thought that they were no longer at risk, since their heart had been “fixed.” Also, women do not seem to be well informed about their risk, perceiving breast cancer in particular to be a larger threat despite the fact that heart disease is the number one killer of women. People who work hard to maintain a healthy lifestyle (no smoking, exercise, etc.) also seem to feel that they have completely protected themselves and are not at risk. We would like to emphasize that all patients are at risk for MI, even without the presence of risk factors.*

**Show slide 20.**

[Insert image of slide here.]

**Introduce TIME algorithm.**

*The Heart Attack REACT project has developed a method for brief patient-centered counseling that health care professionals can use to better prepare their patients for a possible heart attack. Although the time pressures on health care professionals are intense, even brief advice can have a significant positive effect on patient behavior. A busy health professional can provide heart attack survival education to a patient in*

**Provide TIME algorithm handout and pocket card.**

*only 3 minutes using this method.*

*Here is a handout of the TIME method as well as a pocket card for your lab coat.*

*The method uses the letters T-I-M-E to outline the four basic steps.*

*T stands for Talk to your patients.*

*I stands for Investigate barriers and solutions.*

*M stands for Make a plan.*

*E stands for Evaluate the plan.*

*The TIME method provides content, approach, and scripts that can be used to implement brief patient-centered counseling. Use of the TIME method promotes opportunities for your patient to identify and acknowledge feelings and potential barriers to seeking care and ways of dealing with the barriers. It also can assist you in helping your patients develop a plan of action if they experience MI symptoms.*

**Option 1: Show the “Time to Talk” health care professional videotape.**

Option 1: If you are teaching a small group, you may wish to show the “Time to Talk” health care professional videotape at this point to share more information on the TIME method.

**Option 2: Offer a copy of the “Time to Talk” health care professional video.**

Option 2. If you are engaging in one-to-one academic detailing, at this point you may wish to offer the “Time to Talk” health care professional a copy of the health care professional videotape so that he or she can learn more about the TIME method at his or her convenience.

**Show slide 21.**

[Insert image of slide here.]

**Discuss optimization of the health care setting.**

*Another way you can improve your patients’ chances of surviving a heart attack is by evaluating policies and procedures in your health care setting that may delay care for patients with MI symptoms and by making changes where necessary.*

Depending on your target audience, discuss the following opportunities for optimizing health care settings:

- *Make sure that your office, clinic, or emergency department gives a clear message for fast action to patients.*
- *Host a brief in-service Heart Attack REACT program for your colleagues and staff.*
- *Form Heart Attack REACT teams in hospitals, HMOs, and other settings to improve patient education as well as the rapid identification and treatment of MI patients.*

**Show slide 22.**

[Insert image of slide here.]

**Discuss ways that patient delay can be decreased in the primary or specialty health care setting.**

Discussion may continue according to the health care setting or specialty of the health care professional(s) present.

*In primary or specialty health care settings, there are some additional things that can be done to enhance patient education and facilitate rapid MI treatment:*

- *Have a telephone triage protocol in place for both*

*office hours and after hours. That is, if a patient calls complaining of chest pain, staff should know how to help the patient get the fastest possible care. In most cases that will mean directing the patient to call 9-1-1. In your packet is a sample telephone triage protocol developed by the National Heart Attack Alert Program.*

- *Make sure that patients are given directions about whom and where to call after office hours. Once again, this will usually mean calling 9-1-1.*
- *Flag medical records as a reminder to provide advice to high-risk patients.*
- *Encourage staff to give advice and hand out educational materials to patients. Tell your patients, “I want you to learn the heart attack warning signs and make a heart attack survival plan. Please see \_\_\_\_\_ in the office after our visit.”*

**Show slide 23.**

[Insert image of slide here.]

**Describe Heart Attack REACT community awareness activities.**

*A final way you can support Heart Attack REACT is by volunteering to help with group education programs for patients and the public.*

Tell participants about Heart Attack REACT events that have already occurred. Describe upcoming events.

**Allow questions and comments.**

Invite participant(s) to ask questions or make comments about Heart Attack REACT. Answer as appropriate.

**Solicit feedback.**

*How do you think Heart Attack REACT messages and materials might be used in your health care setting?*

*With which community awareness activities would you like to help?*

**Distribute materials.**

Provide participant(s) with a folder containing sample patient education materials, TIME method handout and pocket card, an order form, and a list of upcoming local Heart Attack REACT events.

**Adjourn.**

Thank participant(s) for their time.

## **APPENDIX E: PATIENT EDUCATION**



## **REACT PATIENT EDUCATION PROGRAM: STAND ALONE PROGRAM**

**Target Audience:** Patient groups (people with coronary heart disease and people with risk factors for heart disease)

**Program Overview:** The program combines a cognitive, affective and behavioral approach to education in order to prepare participants to take quick action in response to AMI symptoms. Lecture materials are complemented by observation (i.e. video clips), discussion, and behavioral rehearsal to impart new knowledge and reduce personal barriers to quick action during a cardiac emergency.

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### **GOALS AND OBJECTIVES**

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#### **Knowledge Objectives**

1. Describe the basic process of how blockage of the artery occurs and how this can lead to an AMI.
2. Explain how specific risk factor(s) increase the risk for an AMI (tailored for the audience)
3. Name the common signs of an AMI and discuss how these signs may vary from person to person and time to time.
4. Describe the relationship between time and treatment benefit for AMI treatments.
5. List at least three things the EMS system can do for a person experiencing an AMI.
6. List the “steps for survival” in response to symptoms of AMI

#### **Skill Objectives**

1. List at least 3 (personal) barriers to getting help fast and discuss ways in which these barriers can be overcome.
2. Fill in the information requested by the Steps of Survival.
3. Name the four most common signs of an AMI and discuss how these signs may vary from person to person and time to time.
4. Take the survival plan to the doctor.

#### **Attitude Objectives**

1. Express belief in their increased susceptibility for AMI
2. Express belief in the efficacy of reduced pre-hospital delay
3. Express belief in the efficacy of recommended actions to reduce delay
4. Express confidence in their ability to perform the recommended actions
5. Express belief that AMI symptoms may not fit their expectations
6. Express the belief that a false alarm should not be cause for embarrassment.
7. Express belief in the value of a plan of action for AMI

#### **Behavior Objectives**

1. Talk with their family, friends and health care providers about the subject
2. Formulate an action plan with their doctor.
3. Respond quickly in the event of an AMI.
4. Fill out information for Steps of Survival.

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### **HOW TO ORGANIZE A PATIENT EDUCATION SESSION**

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- Identify health care facilities/organizations which are likely to have contact with the patient populations of interest.
- Investigate current patient education classes/groups at these facilities.
- Work with whoever coordinates these classes/groups to explore how REACT can best fit in (i.e. one session in a series, add-on modules to other classes, new program etc.)
- If REACT team (i.e. hospital team) is working in facility, involve them in the planning as appropriate.
- Allow several weeks lead time
- Handle logistical arrangements. For example, reserve training space; arrange for refreshments and equipment; etc.
- Line up and orient any guest speakers
- Promote the program (advertisements, brochures, write-ups etc.)

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## TEACHING TIPS

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### **Think of each class session as an information exchange rather than a lecture**

Although participants come to each class expecting to learn from you, they can also learn from each other. Encourage them (where possible) to offer their own suggestions, to “brainstorm” during activities and discussions and to share their own experience and knowledge.

### **Don’t feel you must have all the answers.**

There are several background articles/brochures in your instructor manual. These are meant for your personal enrichment if you want more detailed information than what is presented in this curriculum. However, you are **NOT** an expert on heart attack prevention, treatment or personal medical issues. If participants have questions that you feel go beyond the scope of the material presented in this session:

- Refer them to their personal physician
- Provide them with phone numbers of organizations where they can get more resources.

### **Build in “flexible” components (i.e. trigger tapes, video, discussions, small group exercises) into your session.**

Although we want you to follow the lesson plan, there are some components that are optional (Special Activities) which can be used or skipped depending on availability of time and type of audience. Make sure you cover the main components (i.e. all the slides).

To give you a sense of how to manage your time, it’s important that you go over all the slides before your presentation. We also want you to have at least 15 to 20 minutes for the section on Steps For Survival.

### **Feel free to add a personal touch to your classes**

Share an anecdote with your listeners about your own life, or bring along anything you feel would enhance class learning - an article from the paper, for example. Again, make sure that you cover the main components outlined in this lesson plan (i.e., all the slides).

## GETTING READY TO TEACH

### **Total time Needed to Teach this Lesson:**

Stand Alone: Approximately 60 minutes (can be easily extended to 90 minutes)

Add-on: Approximately 15 minutes

### **Resources and Materials Needed**

- Enough participant guides for each participant
- Name tags
- Pens
- Class registration form
- Slide projector
- Projection screen
- Slide set for Patient Education REACT Program
- VHS videocassette player
- Core message video tape
- Easel
- Markers
- American Heart Association women’s brochure and add-on piece
- Patient Education Brochure/Survival plan
- Magnets or wallet cards
- Evaluation forms

## **Welcome and Introductions 7 minutes**

**Welcome participants.**

Welcome each participant individually and distribute the workshop materials to them.

**Introduce yourself.**

Tell participants your name and your connection with the Heart Attack REACT.

**Show slide 1.**

[Insert image of slide here.]

**Describe Heart Attack REACT.**

*REACT stands for Rapid Early Action for Coronary Treatment. Heart Attack REACT is a community education project of national scope. The objective of the project is to reduce the time it takes for people to recognize the warning signs of a heart attack and seek help. REACT's goal is to save lives and to improve the quality of people's lives after a heart attacks happens.*

**Show slide 2.**

[Insert image of slide here.]

**Briefly outline the session agenda.**

During this session you will learn. . .

- What an acute myocardial infarction (heart attack) is and how it happens
- What factors increase one's risk of getting an heart attack
- What the difficulties are in recognizing symptoms of a heart attack
- How to recognize heart attack warning signs
- What can be done for people who suffer a heart attack: new treatments
- Why you should call 9-1-1 for heart attack symptoms.
- Steps for survival

## **What Is A Heart Attack And How Does It Happen? # minutes**

**Show slide 3.**

[Insert image of slide here.]

**Describe how heart attacks occur.**

Acknowledge that some audience members may already know most of this—particularly if you are talking to a MI patient group.

*A heart attack, or myocardial infarction, occurs when the blood supply going to a portion of the heart is blocked.*

*The heart is the muscle in the body that is responsible for pumping blood throughout our bodies. It needs oxygen and food to work well. The heart muscle relies on receiving blood from the arteries, called coronary arteries, for this purpose. Under normal circumstances, these coronary arteries to our heart can supply all of the blood that our heart needs to do its work, even when we're working very hard, and the demands on our heart are great. However, when we develop heart disease, over time, fatty tissue builds up on the inside of our coronary arteries, narrowing the diameter so that not enough blood gets through to meet the needs of our heart muscle. If the artery is only narrowed so that the heart is still getting some blood—but not quite enough—then pain or discomfort, called angina, may be felt at times in the chest (or sometimes left arm, jaw, neck, back and/or shoulder). However, when the coronary artery becomes blocked, usually by a clot forming at the narrowed part of the artery, blood flow is closed off and the person has a heart attack. If the blockage continues, parts of the heart muscle will start to die. In fact, the term "myocardial infarction" means "death of heart muscle". If the affected portion is large the heart may stop beating altogether.*

*With the onset of a heart attack, quick action and medical treatment may be used to restore the blood flow to the heart and save parts of the heart from dying. But, this can only happen if the person gets medical help right away. In general, if the blockage of the coronary artery can be opened quickly the extent of the damage will be lessened. Once a part of the heart is dead, there's nothing that can be done to restore the muscle!*

Note to the Instructor: The heart relies on the coronary arteries for blood that carries oxygen and food. It cannot get the oxygen and food it needs from the blood that it pumps.

## **What Factors Increase One's Risk Of Getting A Heart Attack? # minutes**

**Explain the extent of the heart attack problem in the United States.**

*Coronary heart disease, the condition of narrowing of the arteries feeding the heart, is the number one killer of both men and women in the U.S. Each year, more than half a million Americans die of heart attacks caused by coronary heart disease!*

**Show slide 4.**

[Insert image of slide here.]

**List the controllable heart attack risk factors.**

*There are several factors that increase one's risk for developing coronary heart disease (which can lead to a heart attack). Some of these can be controlled or managed, some of these are more controllable than others. Risk factors that you can control include:*

- *High blood pressure*
- *High blood cholesterol*
- *Smoking*
- *Obesity*
- *Physical inactivity*
- *Diabetes*

**Show slide 5.**

[Insert image of slide here.]

**List the uncontrollable heart attack risk factors.**

*List factors that you cannot control include:*

- *Gender (male)*
- *Family history of heart disease*
- *Age (older)*

**Describe the effect of having multiple risk factors.**

*The more risk factors you have the greater the chance that you will develop coronary heart disease. These risk factors do not add their effects in a simple way. Rather, they multiply each other's effect. For example, if you have three of the listed risk factors, you're eight times more likely to develop coronary heart disease than if you have no risk factors, even though each risk factor alone only doubles the chance of developing heart disease. If you have one or more of these risk factors it's especially important that you know what to do if you experience symptoms of a heart attack.*

Note to the instructor: In the example given above: If the effect of multiple risk factors were **additive** the risk of getting heart disease would have been 6 times greater than no risk factors (2+2+2). Since there is a **multiplicative** effect rather than additive effect, the risk is actually larger, 8 times greater (2 x 2 x 2).

### **What Is Your Personal Risk? # minutes**

Note to the instructor: Depending on your audience, you may want to provide more information on various risk factors. Pick and choose the text and slides in this section that suitable are for your audience.

**Show slide 6.**

[Insert image of slide here.]

**Discuss high blood pressure.**

*High blood pressure (also called hypertension) is a condition in which the blood pressure is elevated above the normal range. Blood pressure measurements are usually reported with two values such as 120/80. The lower value determines the presence of high blood pressure. When it is 90 or higher, high blood pressure is said to be present. High blood pressure doubles the chance of developing heart disease. High blood pressure makes the heart work harder.*

**Show slide 7.**

[Insert image of slide here.]

**Discuss high blood cholesterol.**

*Cholesterol is a soft, fat-like substance found in human and animal tissue. Research tells us that a high cholesterol level (usually a blood cholesterol value of 240 mg/dl and higher) is a major risk factor for heart disease. High blood cholesterol doubles the chance of developing heart disease. The higher your blood cholesterol level, the more likely that fats and cholesterol will build up in your artery walls. This buildup is a disease called atherosclerosis (sometimes called hardening of the arteries). It can narrow the arteries and slow the blood flow. Sometimes a blood clot forms in the narrowed artery and blocks off the blood vessel completely. When this happens in an artery leading to your heart, it causes a heart attack.*

**Show slide 8.**

[Insert image of slide here.]

**Discuss diabetes.**

*Diabetes is the inability of the body cells to take up sugar from the blood. As a result too much sugar builds up in the blood which is bad. Diabetes comes in two types: One type requires daily shots of insulin. The other type can be managed with pills and diet.*

*Diabetes doubles the risk of developing heart disease*

*High sugar in the blood appears to speed up fatty build up in the coronary arteries.*

**Show slide 9.**

[Insert image of slide here.]

**Discuss smoking.**

*One-fifth of deaths from cardiovascular diseases are attributable to smoking. Smoking doubles your chance of developing heart disease. Smoking puts an added strain on the heart because it causes the blood vessels to clamp down or constrict. If some of the blood vessels have been narrowed and damaged by heart disease, smoking only makes the problem worse. Smoking also causes temporary changes in your heart: Smoke makes it beat faster, raises your blood pressure and reduces blood flow. And it increases the level of carbon monoxide in your blood, which robs your heart and other tissues of the oxygen they need. Long-term exposure to tobacco smoke in the environment also increases your risk of heart disease.*

**Show slide 10.**

**Discuss obesity.**

[Insert image of slide here.]

*Obesity increases the risk of developing high blood cholesterol, high blood pressure, and diabetes (which are all risk factors for heart disease). Extra weight puts extra strain on the heart. By contributing to high cholesterol, high blood pressure and diabetes, obesity is an indirect cause of heart disease.*

*Obesity is too much fat on the body. Persons who are 30% overweight are considered obese.*

**Show slide 11.**

**Discuss inactivity.**

[Insert image of slide here.]

*Persons who do not exercise regularly at least 20 minutes 3 times a week or who do not have a physical job are said to be physically inactive.*

*Less active and less fit persons have a 30 to 50 percent greater risk of developing high blood pressure (which is a risk factor for heart disease).*

**Show slide 12.**

**Discuss heredity and race.**

[Insert image of slide here.]

*Heredity refers to the genes you receive from your parents. If members of your family have had heart disease, you are more likely to develop it. Black Americans have a greater risk of heart disease than white Americans - in large part because they have higher average blood pressure levels. The processes for heredity and racial risk factors are not know.*

**Show slide 13.**

**Discuss age.**

[Insert image of slide here.]

*The older you get, the more likely you are to develop heart disease. As one ages the chance of getting hardening of the arteries increases.*

**Show slide 14.**

**Discuss gender.**

[Insert image of slide here.]

*More men develop heart disease and develop it earlier than women, but women narrow the gap starting after menopause. Over 233,000 women die of a heart attack each year. That compares to 43,000 deaths due to breast cancer each year.*

*Women before menopause seem to be partly protected from the risk of heart attack, maybe by the hormone estrogen. One way that estrogen might help reduce a woman's risk of coronary heart disease is to raise her HDL cholesterol level and lower her LDL cholesterol. However, when women reach menopause things change and LDL and total cholesterol levels in most women start to rise.*

**Show slide 15.**

**Discuss heart disease (previous MI and angina).**

[Insert image of slide here.]

*Myocardial Infarction occurs when the blood supply going to the heart muscle is blocked. If the heart gets too little blood, parts of the heart may actually start dying.*

*People who survive the acute state of a heart attack are at increased risk of getting another heart attack. Within six years after a heart attack 23% of men and 31% of women will have another heart attack*

*Angina is a recurring pain or discomfort in the chest that happens when some part of the heart does not receive enough blood. It may be noticed when you are exerting yourself. It's a common symptom of coronary heart disease.*

*People who have been diagnosed with unstable angina have a greater risk of having a heart attack than people who have been diagnosed with stable angina. In unstable angina, the blockage of the coronary arteries may be large. However, even unstable angina is not dangerous to most people who get medical care right away, but it can be very serious if not treated.*

## How To Recognize A Heart Attack # minutes

List heart attack warning signs.

Ask participants to call out symptoms they associate with a heart attack. List them on the blackboard, whiteboard, flipchart, or overhead. Then go over the warning signs using the following slide:

Show slide 16.

[Insert image of slide here.]

Describe the warning signs of a heart attack.

*The warning signs of a heart attack include:*

*Chest discomfort or pressure. Nearly all heart attacks involved some type of chest pain, tightness or pressure, sometimes including pain in the jaw, neck, arms shoulders or back. Such chest discomfort can be mild..*

*Shortness of breath. Along with pressure on the chest may come a feeling of not being able to catch one's breath.*

*Other symptoms. Heart attack victims may feel light-headed, faint or sick to their stomachs. A "cold sweat" sometimes accompanies other symptoms*

Explain that these are the symptoms that are most commonly reported by MI patients.

Discuss atypical symptoms.

Emphasize the "atypical" symptoms (refer back to participants responses were possible) . Emphasize that symptoms may come and go. If people in the audience listed symptoms that are not on your warning sign slide make sure to address that and clear up any misconceptions about MI symptoms.

Discuss the difficulties in recognizing heart attack warning signs.

*What do you think are the difficulties in recognizing heart attack warning signs?*

Ask participants to call out their answers and list them on the blackboard, whiteboard, flipchart, or overhead.

**OPTIONAL ACTIVITY:**  
Introduce video segment on heart attack symptoms.

*Here is a video of some real heart attack sufferers and what they had to say about their symptoms.*

Show video segment on heart attack symptoms.

(For a script of this trigger tapes, see Appendix #.)

**OPTIONAL ACTIVITY:**  
Introduce video segment on movie heart attacks.

*Here is a video of the way heart attacks are usually shown on TV and at the movies.*

Show video segment on movie heart attacks.

(For a script of this trigger tapes, see Appendix #.)

Discuss video segment on movie heart attacks.

*Can anyone us about a heart attack that happened to a family member or friends?*

Discuss with the participants the ways in which the real-life heart attacks were similar to and different from the "movie" heart attacks.

## Reasons for Misinterpretation of Symptoms # minutes

Show slide 17.

[Insert image of slide here.]

Discuss three reasons why people are not sure they are having a heart attack

*Let's talk for a few minutes about three reasons why people often are not sure that the they having a heart attack.*

*One reason is that most people expect a heart attack to cause crushing chest pain. Some people experience the "movie" heart attack, where symptoms are obvious and intense. But many heart attacks begin slowly, with vague symptoms. Heart attacks may begin rather quietly, and a person may not be sure that he or she is having one. Sometimes the pain is relatively mild. Symptoms may come and go. A heart attack is really a process, often not a sudden, deadly event, and a variety of symptoms that overlap may signal that someone is in danger.*

Note to the instructor:

If you are speaking to a group of **AMI patients**, make sure to say the following:

*Even if you've had a heart attack before, this does not mean that the symptoms will be similar if you have another heart attack. Many MI patients report that symptoms of their second heart attack didn't match the first event. Symptoms can be different because another part of the heart muscle may be affected the next time.*

If you are speaking to a group of **diabetes** patients, make sure to say the

following:

*[Text to be written.]*

*A second reason is that people sometimes confuse symptoms of a heart attack with symptoms of other medical conditions that they have—such as arthritis, asthma, or cancer. Or people may confuse heart attack symptoms with symptoms of other health conditions—like muscle spasm, pulled muscle, indigestion, and flu.*

Note to the instructor:

If you are speaking to an audience of **angina** patients address the following: *Angina pectoris (“angina”) is a recurring pain or discomfort in the chest that happens when some part of the heart does not receive enough blood. Angina feels like a pressing or squeezing pain, usually in the chest under the breast bone, but sometimes in the shoulders, arms, neck, jaws, or back. Angina usually occurs during or right after physical activity. It is usually relieved within a few minutes by resting or by taking prescribed angina medicine. An episode of angina is NOT a heart attack. However, people with angina report having a hard time distinguishing angina symptoms from heart attack symptoms. If you have angina, talk to your doctor about the difference between angina symptoms and a heart attack.*

*A third reason why people often are not sure that they are having a heart attack is that some people don’t believe (or don’t WANT to believe) they are at risk for having a heart attack. Thus, when they experience symptoms they tend to ignore them or wait to see if the symptoms get worse before they act*

### **Treatment of AMI and Time # minutes**

Show slide 18.

Discuss the importance of rapid treatment.

*[Insert image of slide here.]*

*The treatment of a heart attack has changed a lot over the years. Two decades ago, there wasn’t much doctors could do to stop the heart attack. Today, there are drugs and other therapies that can break up clots and restore the blood flow in the blocked artery. Several drugs, called thrombolytics, have been found to be safe and effective. Angioplasty surgery is where a balloon is used to reopen the blocked artery. **The sooner these treatments are given, the more heart muscle can be saved.** The more heart muscle is saved, the better chance a heart attack victim has of surviving and resuming a normal life.*

Show slide 19.

*[Insert image of slide here.]*

*Given that these new therapies are available it’s very sad to know that so many people can not be treated with these therapies because they delay care seeking too long. The greatest benefits of these therapies are gained when patients come in early (preferably within the first hour of the onset of their symptoms).*

### **Prehospital Delay Time # minutes**

Describe the problem of delay.

*People often wait too long before they seek medical care. On average people wait at least 2 to 3 hours before seeking care for their symptoms and some even wait a day or more.*

*What could be some of the reasons why people wait so long?*

Invite participants to call out reasons and list them on the blackboard, whiteboard, flipchart, or overhead. Then summarize the reasons for delay with the following slide.

Show slide 20.

Discuss reasons for delay.

*[Insert image of slide here.]*

*These are some of the reasons that heart attack patients have given us for why they delayed seeking care for their heart attack symptoms:*

- 1. They thought symptoms would go away*
- 2. They thought their symptoms were not severe enough*
- 3. They thought symptoms were caused by another illness*

### **OPTIONAL ACTIVITY:**

*Think about yourself and your family member. What might prevent you from seeking rapid care for heart attack warning signs?*

Invite participants to call out reasons and list them on the blackboard, whiteboard, flipchart, or overhead.

Describe the problem of not

*When people with heart attacks do decide to seek care, they do often to not*

calling 9-1-1.

Discuss reasons for not calling 9-1-1.

Show slide 21.

*call 9-1-1. Fewer than half of all heart attack patients arrive at the hospital via 9-1-1.*

*Why do you think people do not call 9-1-1 when they experience heart attack warning signs?*

Invite participants to call out reasons and list them on the blackboard, whiteboard, flipchart, or overhead. Then summarize the reasons for delay with the following slide.

[Insert image of slide here.]

*Here are some reasons that heart attack patients have given us for why they didn't call 9-1-1 for their symptoms:*

- 1. They didn't think their symptoms were severe enough*
- 2. They didn't think of it*
- 3. They thought that transporting themselves to the hospital was faster*
- 4. They were concerned about embarrassment ("flashing lights," fear of having a false alarm)*

## The Role of Emergency Medical Services # minutes

Show slide 22.

List the advantages of using 9-1-1.

[Insert image of slide here.]

There are a lot of advantages to calling 9-1-1 instead of transporting yourself to the hospital:

- 1. Emergency medical personnel can take vital signs to determine patient's medical condition. They are able to determine if additional care is needed.*
- 2. In many places, emergency medical personnel are linked to hospitals and physicians, so they can relay a heart attack patient's vital signs and electrocardiograph (EKG) to the emergency department. This way the patient receives immediate continued treatment by emergency department personnel once he/she arrives at hospital.*
- 3. Emergency medical personnel can give a variety of treatments/medications at the scene. Emergency medical personnel carry oxygen, heart medications (nitroglycerin), pain relief treatments (morphine), defibrillation (equipment to re-start the heart if it stops beating) and other medication (such as aspirin) that can help the patient's medical condition*
- 4. Sometimes during a heart attack, the heart may stop beating normally. This is called cardiac arrest. If emergency medical personnel is with the heart attack patient when this happens, he or she can shock the heart to make the beat normal again.*

Depending on the EMS system at your site, you could discuss the following:

- 4. Quick access to medical care. The fastest way to get the care you need is to call 9-1-1. The average response time for an ambulance to arrive at your door step in this community is \_\_\_\_\_.*
- 5. Ideally you should plan ahead for who will take care of your dependents in an emergency. However, If you are worried about dependents who may need to be taken care off while you are transported to the hospital, do not worry. Paramedics will generally contact a friend or relative or (in case that is not possible) or the police department, to make emergency arrangements for your dependents.*

## Steps for Survival

### # minutes

Note to the instructor: Pick one of the three activities listed below. If you do not have at least **30 minutes** left use activity #3 rather than #1 or #2.

#### ACTIVITY #1: "It's About Time" core message videotape

Introduce video tape.

Watch the 15-minute videotape. Make sure the volume is high enough for all participants to hear it.

After watching the tape, re-emphasize the fact that symptoms can vary from person to person and time to time. Discuss the barriers that people mentioned in the video.

#### ACTIVITY #2: Small Group Discussion

Break participants into groups of four. Ask each group to appoint a recorder. Each group should spend five minutes listing as many barriers as possible to fast action and use of 9-1-1. Each group should then spend five minutes to



**ACTIVITY #3: Large Group Discussion**

discuss ways to overcome each barrier identified. Reassemble. Ask each reporter to share the barriers and solutions identified by his or her group. List the barriers and solutions on the blackboard, whiteboard, flipchart, or overhead. Add to the barriers and solutions if necessary.

As a large group, ask participants to call out as many barriers as possible to fast action and use of 9-1-1. List the barriers on the blackboard, whiteboard, flipchart, or overhead. (Spend about three minutes on this.)

Then ask participants to call out ways to overcome each barrier identified. List the solutions on the blackboard, whiteboard, flipchart, or overhead. Add to participant responses if necessary. (Spend about three minutes on this.)

**Show slide 23.**

**Discuss the three steps for survival.**

[Insert image of slide here.]

Let's get personal about this subject and talk about five steps you can take for heart attack survival.

1. Learn the heart attack warning signs, which we discussed a few minutes ago.
2. Talk to your doctor about your risk for a heart attack and the steps you ought to take if you experience any of the warning signs. "To help you discuss these issues with your doctor, we are going to give you a Heart Attack Survival Plan form that you can ask your doctor to fill out with you during your next office visit.
3. Think through what you would do if you had heart attack warning signs at home, at work, in the middle of the night, and any other place or situation that might require advance planning.

*(Remember, calling 9-1-1 brings medical help to the scene fast! If for some reason you can't call 9-1-1, ask a friend or relative to drive you to the nearest emergency department. Do NOT drive, yourself!*

4. If you're not sure of your insurance coverage, call your insurance company and check on your plan. Most insurance companies cover emergency care for a possible heart attack.
5. Gather important information. There is some information that can help facilitate the care you get once you arrive at a hospital. Take the time to right down the name of a contact person who should be told of your possible heart attack, the name and phone number of your regular physician, a list of medications you are currently taking, a list of health problems you currently have, allergies to medication or foods, and (if you have health insurance) your insurance policy name and phone number. Keep this piece of paper handy (with your insurance papers, for instance).

**Distribute the "Your Heart Attack Survival Plan" patient brochure.**

**Familiarize participants with the parts of the Heart Attack Survival Plan**

*This brochure contains much of the information we have discussed today, including a form for making a Heart Attack Survival Plan. Please turn to page # of the brochure to find the form.*

Lead participants through the parts of the plan. Encourage them to ask their doctor to fill it out with them during their next office visit. Encourage participants to share the completed plan with their significant others and friends. Also encourage them to keep the completed plan in a handy place.

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**Post-Test and Evaluation Form**

**10 minutes**

**Distribute evaluation form.**

*Please help us by filling out this evaluation form*

**Collect the evaluation form.**

Collect the evaluation forms from participants as they are finished.

**Adjourn program.**

Thank participants for attending the program and adjourn .

## **APPENDIX F: PROCESS EVALUATION**



ITEMS	POSSIBLE SOURCE	LIKELY STAFF RESPONSIBLE	TIMING
1) involvement in worksite health programs prior to REACT 2) involvement in worksite health programs during REACT 3) nurses or other health care providers on staff 4) organizational letter 5) health promotion staff e. Potential barriers for REACT 1) other programs which are using resources 2) other programs with a problematic history prior to REACT 3) other programs with a problematic history during REACT f. Overall potential site for intervention activities g. What do major health plans cover (e.g., cardiac rehab., false alarm transport)	Medical Society               REACT Staff Assessment		Pre               Pre
<b>C. Education</b> 1. Number of educational institutions by category a. Technical schools b. Colleges/universities	DOE/BOE		Pre & Post

• *indicates measurement in control community (in addition to intervention community)   \*\*count only in comparison site*

ITEMS	POSSIBLE SOURCE	LIKELY STAFF RESPONSIBLE	TIMING
<p><b>D. Health Care</b></p> <p><b>1. Hospitals</b></p> <p>*a. Address</p> <p>*b. Annual admissions</p> <p>*c. Level/type of emergency care provided</p> <p>    1) emergency cardiac care</p> <p>    2) trauma center</p> <p>    3) urgent care center</p> <p>    4) affiliated chest pain center</p> <p>*d. Teaching vs. community hospital</p> <p>*e. VA vs. non-VA hospital</p> <p>f. Size of workforce</p> <p>    1) Total workforce</p> <p>    2) Nursing</p> <p>        a) Inpatient(# people)</p> <p>        b) Outpatient</p> <p>    3) Social Service</p> <p>    4) Medical staff</p> <p>        a) Cardiology</p> <p>            Resident/House Staff</p> <p>            Faculty/Staff (except Residents/Fellows)</p>	<p>Chamber of Commerce</p> <p>Hospital Annual Reports</p> <p>Hospital Community/Public Relations Office American Hospital Association Annual Directory</p> <p>State Planning Office</p> <p>Human Resources</p> <p>Director of Nursing Services</p> <p>Specialized Medical Directors</p>	<p>PD or Designee</p> <p>PD or Designee</p>	<p>Pre &amp; Post</p> <p>Pre &amp; Post</p>

ITEMS	POSSIBLE SOURCE	LIKELY STAFF RESPONSIBLE	TIMING
<ul style="list-style-type: none"> <li>b) Primary Care Faculty (includes internal medicine, family practice, ob-gyn)</li> <li style="padding-left: 20px;">Resident/House Staff</li> <li>Faculty/Staff (except Residents/Fellow)</li> <li>c) ED Medicine</li> <li style="padding-left: 20px;">Resident/House Staff</li> <li style="padding-left: 20px;">Faculty/Staff (except Residents/Fellows)</li> <li>5) Health Education Department(Y/N)</li> <li style="padding-left: 20px;">If Yes, staff size</li> <li>6) Discharge planning nurses</li> <li>*h. Hospital policies on chest pain admissions</li> <li style="padding-left: 20px;">1) Standard protocol for handling chest pain patients</li> <li style="padding-left: 20px;">2) Procedures for patient pre and post MI management</li> <li>*i. History of quality improvement for MI management</li> <li>j. Names of key contacts for REACT</li> <li>k. Potential strengths</li> <li style="padding-left: 20px;">1) Involvement in patient education prior to REACT</li> <li style="padding-left: 20px;">2) Involvement in patient education during REACT</li> </ul>	<p>Hospital Observations Community Relations Office</p>		<p>Pre &amp; Post</p>
<p>REACT</p> <ul style="list-style-type: none"> <li>3) Involvement in community outreach prior to</li> <li style="padding-left: 20px;">1. Potential problems</li> </ul>			

1) other programs using resources prior to REACT 2) other programs using resources during REACT 3) other programs with a problematic history prior to REACT			
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*\* indicates measurement in control community (in addition to intervention community*

*\*\*count only in comparison site*

ITEMS	POSSIBLE SOURCE	LIKELY STAFF RESPONSIBLE	TIMING
<p><b>**2.Group or individual private practices</b></p> <p>a. List by name and address</p> <p>b. Practice Type</p> <ol style="list-style-type: none"> <li>1) single practitioner</li> <li>2) partnerships</li> <li>3) single specialty group</li> <li>4) multi specialty group</li> </ol> <p><b>**3.HMOs</b></p> <p>a. List by name and address</p> <p>b. Practice Type</p> <ol style="list-style-type: none"> <li>1) group</li> <li>2) staff</li> <li>3) IPA model</li> <li>4) mixed (describe)</li> </ol> <p>c. Percentage penetration in community health care market</p> <p>d. ED benefits coverage</p> <p>d. ED benefits coverage</p>	<p>AMA Listing Chamber of Commerce Telephone Directory State Association Association of Community Health Centers State Insurance Office Enrollment Office Annual Reports Benefit Booklet</p> <p>AMA Listing Chamber of Commerce Telephone Directory State Association Association of Community Health Centers State Insurance Office Enrollment Office Annual Reports Benefit Booklet</p>		<p>Pre &amp; Post</p> <p>Pre &amp; Post</p>



<p><b>**4. Community Health Center</b></p> <p>a. List by name and address</p> <p>b. Primary Insurers</p> <p>    1) Medicaid</p> <p>    2) Medicare</p> <p>    3) Free</p> <p>    4) Other</p> <p>c. Operations Procedure for patient management</p>	<p>AMA Listing</p> <p>Chamber of Commerce</p> <p>Telephone Directory</p> <p>State Association</p> <p>Association of Community Health Centers</p> <p>State Insurance Office</p> <p>Enrollment Office</p> <p>Annual Reports</p> <p>Benefit Booklet</p>		<p>Pre &amp; Post</p>
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*\* indicates measurement in control community (in addition to intervention community)*

*\*\*count only in comparison site*

ITEMS	POSSIBLE SOURCE	LIKELY STAFF RESPONSIBLE	TIMING
<p>*5. Public Health Agencies</p> <ul style="list-style-type: none"> <li>a. List by name and address</li> <li>b. Type of Agency <ul style="list-style-type: none"> <li>1) Local/City Health Department</li> <li>2) Regional Health Department</li> <li>3) County Health Department</li> <li>4) State Health Department</li> </ul> </li> <li>c. Key Contact</li> <li>d. Potential Strengths <ul style="list-style-type: none"> <li>1) Involvement in educational programs/community outreach prior and during REACT</li> </ul> </li> <li>e. Potential Problems <ul style="list-style-type: none"> <li>1) Current local educational/outreach programs overlapping with REACT goals using resources</li> <li>2) Current regional/statewide programs overlapping with REACT goals</li> </ul> </li> </ul>			

<p><b>*6. Continuing education programs for providers</b></p> <p>a. Programs overlapping with REACT goals</p> <p>1) CEUs for nurses, EMTs</p> <p>2) CMEs for MDs</p>	<p>Hospitals</p> <p>Medical Societies</p>		
<p><b>*7. Chest pain facilities</b></p> <p>a. Address</p> <p>b. Key contact</p> <p><b>*8. Cardiac rehab programs</b></p>			<p>Pre &amp; Post</p> <p>Pre &amp; Post</p>

*\* indicates measurement in control community (in addition to intervention community)*

*\*\*count only in comparison site*

ITEMS	POSSIBLE SOURCE	LIKELY STAFF RESPONSIBLE	TIMING
<p><b>*9. Patient support groups</b></p> <p>10. VNA</p> <ol style="list-style-type: none"> <li>a. Number of providers</li> <li>b. Reimbursement for health education</li> </ol> <p><b>*E.EMS System</b></p> <ol style="list-style-type: none"> <li>1. 911 Availability <ol style="list-style-type: none"> <li>a. No/Yes <ol style="list-style-type: none"> <li>1) Basic</li> <li>2) Enhanced</li> </ol> </li> </ol> </li> <li>2. Volunteer vs. non-volunteer service</li> <li>3. System type <ol style="list-style-type: none"> <li>a. Private</li> <li>b. Public <ol style="list-style-type: none"> <li>1) Fire</li> <li>2) Third service(municipality)</li> </ol> </li> </ol> </li> <li>4. Response type <ol style="list-style-type: none"> <li>a. Tiered</li> <li>b. Nontiered</li> <li>c. Who transports</li> </ol> </li> <li>5. Components of 911 response <ol style="list-style-type: none"> <li>a. First response</li> <li>b. BLS</li> <li>c. ALS</li> </ol> </li> </ol>	<p>HMO and Hospital Newsletter  Directors of Nurses  Telephone Directory  Chamber of Commerce</p> <p>EMS Certification Agencies</p>		<p>Pre/Post</p>

*\* indicates measurement in control community (in addition to intervention community)*

*\*\*count only in comparison site*

ITEMS	POSSIBLE SOURCE	LIKELY STAFF RESPONSIBLE	TIMING
<ul style="list-style-type: none"> <li>6. Levels of training               <ul style="list-style-type: none"> <li>a. First response</li> <li>b. BLS</li> <li>c. ALS</li> </ul> </li> <li>7. Fee system               <ul style="list-style-type: none"> <li>a. subsidized (free)</li> <li>b. subscription (partly subsidized)</li> <li>c. private/3rd party payer</li> </ul> </li> <li>8. Any change planned in EMS system that might effect response time               <ul style="list-style-type: none"> <li>a. financial</li> <li>b. structural</li> </ul> </li> <li>9. Any change observed in EMS system that might effect response time               <ul style="list-style-type: none"> <li>a. financial</li> <li>b. structural</li> </ul> </li> <li>10. Potential strengths               <ul style="list-style-type: none"> <li>a. involvement in patient education prior to REACT</li> <li>b. involvement in patient education during REACT</li> <li>c. other</li> </ul> </li> <li>11. Potential barriers               <ul style="list-style-type: none"> <li>a. history of problematic collaboration</li> <li>b. existing programs taking resources</li> </ul> </li> </ul>			<p style="text-align: center;">Pre</p> <p style="text-align: center;">Post</p> <p style="text-align: center;">Pre &amp; Post</p>

ITEMS	POSSIBLE SOURCE	LIKELY STAFF RESPONSIBLE	TIMING
<p><b>F. Media</b></p> <ol style="list-style-type: none"> <li>1. Print channels by type               <ol style="list-style-type: none"> <li>a. Daily (Count of total, estimated reach of each paper)                   <ol style="list-style-type: none"> <li>1) Key papers</li> <li>2) Names of key contacts</li> </ol> </li> <li>b. Weekly (count of total, estimated reach)                   <ol style="list-style-type: none"> <li>1) Key papers</li> <li>2) Names of key contacts</li> </ol> </li> <li>c. Other (count of total, estimated reach)                   <ol style="list-style-type: none"> <li>1) Key papers</li> <li>2) Names of key contacts</li> </ol> </li> </ol> </li> <li>2. Broadcast channels by type               <ol style="list-style-type: none"> <li>a. Radio (count of total, estimated reach of each station)                   <ol style="list-style-type: none"> <li>1) Key stations</li> <li>2) Names of key contacts</li> </ol> </li> <li>b. Television                   <ol style="list-style-type: none"> <li>1) Key stations</li> <li>2) Names of key contacts</li> </ol> </li> </ol> </li> </ol>			

*\* indicates measurement in control community (in addition to intervention community)*

*\*\*count only in comparison site*

ITEMS	POSSIBLE SOURCE	LIKELY STAFF RESPONSIBLE	TIMING
<p><b>G. Social Organizations/Voluntary Agencies</b></p> <ol style="list-style-type: none"> <li>1. Number of social/voluntary organizations by type <ol style="list-style-type: none"> <li>a. Social clubs (e.g., Rotary, Elks)</li> <li>*b. Health Related Volunteers (e.g. American Heart Association, Red Cross)</li> <li>c. Religious/Social Groups (e.g. Eastern Star, Knights of Columbus)</li> <li>d. Other Groups</li> </ol> </li> <li>2. List key social/voluntary organizations in the community for REACT <ol style="list-style-type: none"> <li>a. Address</li> <li>b. Primary contact name</li> <li>c. Primary constituency - ethnic, religious, interest groups</li> <li>d. Membership size</li> <li>e. Existing programs related to REACT goals</li> <li>f. Strengths <ol style="list-style-type: none"> <li>1) involvement in health programs prior to REACT</li> <li>2) involvement in health programs during REACT</li> <li>3) membership with personal interest in topic</li> <li>1) existing programs which are using resources</li> </ol> </li> </ol> </li> </ol>	<p>Chamber of Commerce</p>		<p>Pre &amp; Post</p>

2) other programs with a problematic history 3) history of problematic collaborations 4) other			
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*\* indicates measurement in control community (in addition to intervention community)*

*\*\*count only in comparison site*



ITEMS	POSSIBLE SOURCE	LIKELY STAFF RESPONSIBLE	TIMING
<p><b>H. Religious Organizations</b></p> <p>1. List significant organizations in the community for REACT (defined by prominence of leadership or organization)</p> <ul style="list-style-type: none"> <li>a. Address</li> <li>b. Primary contact</li> <li>c. Strengths <ul style="list-style-type: none"> <li>1) involvement in health programs prior to REACT</li> <li>2) involvement in health programs during REACT</li> <li>3) membership with personal interest in topic</li> <li>4) other</li> </ul> </li> <li>d. Potential barriers <ul style="list-style-type: none"> <li>1) existing programs which are using resources</li> <li>2) other programs with a problematic history</li> <li>3) history of problematic collaborations</li> <li>4) other</li> </ul> </li> </ul>	<p>Chamber of Commerce</p>		<p>Pre &amp; Post</p>

*\* indicates measurement in control community (in addition to intervention community)*

*\*\*count only in comparison site*

ITEMS	POSSIBLE SOURCE	LIKELY STAFF RESPONSIBLE	TIMING
<p><b>I. Summary</b></p> <ol style="list-style-type: none"> <li>1. Priority sectors to target for the intervention               <ol style="list-style-type: none"> <li>a. Why</li> </ol> </li> <li>2. Priority organizations to target for the intervention</li> <li>3. Key individuals to recruit for:               <ol style="list-style-type: none"> <li>a. REACT partnerships</li> <li>b. Speakers Bureau</li> <li>c. Providers to do patient education</li> </ol> </li> <li>4. Possible sites for community education events</li> <li>5. Potential barriers for REACT</li> <li>6. Potential enhancers for REACT</li> <li>7. Anticipated events to monitor</li> </ol>	<p>REACT Staff</p>		<p>Pre &amp; Post</p>

APPENDIX F.2

Site/Community 11

TUSCALOOSA ALABAMA
COALITION, PARTNERSHIP, TEAM MEETING LOG
(Complete one per meeting)

A1. DATE OF MEETING: \_\_\_/\_\_\_/\_\_\_ A2. MEETING LOCATION: MO DAY YR \_\_\_\_\_

A3. TYPE OF MEETING: (Circle One) A4. FORM OF MEETING: (Circle One) Telephone.....1 In Person .....2 New Coalition/Partnership.....1 Existing Coalition/Partnership .....2

A5. NUMBER OF ORGANIZATIONS REPRESENTED AT THE MEETING: |\_|\_|

A6. SECTORS REPRESENTED AT MEETING: (Circle "1" for each sector represented at the mtg):

Table with 2 columns of sectors (a-h and i-p) and 'YES' counts. Includes a 'Specify' field for item p.

A7. Number of REACT related agenda items: Only REACT related items on the agenda.....1 REACT related items are part of larger agenda...2 OTHER .....3 -> (Specify) \_\_\_\_\_

A8. Key Decisions/Action Items related to REACT: \_\_\_\_\_

A9. Key Information: \_\_\_\_\_

**APPENDIX F.3**  
**COALITION, PARTNERSHIP, TEAM MEETING LOG**  
**QUESTION-BY-QUESTION SPECIFICATIONS**

GENERAL INSTRUCTIONS FOR COMPLETING THE COALITION, PARTNERSHIP, TEAM MEETING LOG

One log will be completed for each group meeting. All substantive meetings, (including in-person and telephone meetings) should be documented. Meeting minutes should be attached if they are available.

The following information should be provided for each meeting:

- A1. DATE OF MEETING** -- Record the date the meeting took place.
- A2. LOCATION** -- Record the location of the meeting. For example, if the meeting occurred at the offices of an organization, record the name of that organization. If the meeting occurred over the telephone, leave this question blank.
- A3. TYPE OF MEETING** --If the meeting was a face to face meeting, circle “2” for in person meeting. If the meeting occurred over the telephone, circle “1”.
- A4. FORM OF MEETING** -- If the meeting was with a new coalition, partnership, or team circle “1”. If the meeting was with an existing coalition, partnership, or team, circle “2”.
- A5. # OF ORGANIZATIONS REPRESENTED AT THE MEETING** -- Record the actual number of organizations represented at the meeting. For example, if there are three church organizations, two hospitals and a community health center, ‘06’ should be recorded in this field.
- A6. SECTORS REPRESENTED**-- Circle ‘1’ for “YES” for each of the community sectors listed in a - p that are represented at the meeting. If a sector not listed in a-p is represented at the meeting, circle ‘1’ for Other (p) and specify the sector.
- A7. NUMBER OF REACT RELATED AGENDA ITEMS** -- If the only items on the agenda are REACT related, circle ‘1’. If REACT related items constitute a subset of the agenda, circle ‘2’.
- A8. KEY DECISIONS** -- List any REACT-related key decisions made during, and action items arising out of, the meeting. (The decisions and action items provided during the meetings in the first few months of the intervention will be used to develop a set of codes for this question.)
- A9. KEY INFORMATION** -- Record other key information of importance to REACT observed as a result of the meeting. This might include comments made about the intervention by key influentials present at the meeting, concerns about or ideas for REACT as expressed by members at the meeting.

APPENDIX F.4

BOX FOR NERI USE ONLY

<b>SITE &amp; COMMUNITY CODE:</b> 11
EVENT #  __ __ __

TUSCALOOSA ALABAMA  
**EDUCATION CONTACT TRACKING FORM**  
 Please complete this form for each Interpersonal Contact

A1. INITIALS OF PERSON INVOLVED IN CONTACT: \_\_\_\_\_

A2. DATE OF CONTACT: START DATE: \_\_\_ \_\_\_ / \_\_\_ \_\_\_ / \_\_\_ \_\_\_ A3. END DATE: \_\_\_ \_\_\_ / \_\_\_ \_\_\_ / \_\_\_ \_\_\_  
 MO DAY YR MO DAY YR

A4. CONTACT SETTING CODE |\_\_|\_\_|:

**CONTACT SETTING CODES**

Hospital..... 01	Private office	04	EMS.....07	Home..... 10	Media only	13
Clinic..... 02	Cardiac Rehab Program	05	Church.....08	Worksite..... 11	Other	14
HMO..... 03	ED staff	06	Community Org.....09	Mall/Public venue..... 12	(Specify) _____	

NUMBER OF EDUCATORS: A5a. 1. REACT staff |\_\_|\_\_| A5b. 2. Other |\_\_|\_\_|

B1. WHAT FORM OF CONTACT OCCURED? (Circle One)

- PATIENT..... 1 (SKIP TO B3)
- PROVIDER..... 2 (SKIP TO B5)
- COMMUNITY..... 3 (SKIP TO B7)
- MEDIA..... 4

B2. MEDIA CONTACT CODE |\_\_|\_\_| (SKIP TO C1)

Billboard/Transit cards..... 1
Mailing..... 2
Material inserts..... 3
Poster..... 4
Point of purchase display... 5
Publicity/Advertising..... 6
Brochure Distribution..... 7
Other..... 8
(Specify)

**B3. PATIENT CONTACT CODE**

<b>PATIENT CODE LIST</b>	
Individual education -face-to-face .....	1
Individual education - telephone.....	2
Existing Group-add-on.....	3
Existing group-stand alone .....	4
New patient/consumer group .....	5



**B4. PATIENT AUDIENCE**

<b>PATIENTS</b>	<b>ESTIMATED NUMBER</b>
a) Hospitalized MI pt	
b) Cardiac rehab. pt	
c) Hospitalized CHD pt	
d) Chest pain pt	
e) Risk factor pt	
f) Spouse/Family	
g) Patients (unspecified)	

**GO TO C1**

**C1. COMMENTS** (Write in the space below)

<b>PROVIDER CODE LIST</b>	
CME Program.....	1
Short presentations add-ons.....	2
Site tailored short presentations...	3
Face to face academic detailing...	4
Telephone academic detailing.....	5



**B6. PROVIDER AUDIENCE**

<b>PATIENTS</b>	<b>ESTIMATED NUMBER</b>
a) Cardiologists	
b) ER MD	
c) Primary Care	
d) In-patient RN	
e) Out-patient RN	
f) Cardiac Rehab Staff	
g) EMT's	
h) Pharmacists	
i) Office Staff	
j) Educators	
k) Case Managers	
l) VNA Nurses	
m) Discharge Nurses	

**GO TO C1**

**B5. PROVIDER CONTACT CODE**

**B7. COMMUNITY CONTACT CODE** |

<b>COMMUNITY CODE LIST</b>	
Newspaper/Media Editor/Producer .....	1
Reporter or Other media contact .....	2
Magnet Event .....	3
Volunteer Training .....	4



**B8. COMMUNITY AUDIENCE**

<b>PATIENTS</b>	<b>ESTIMATE D NUMBER</b>
a) Worksite	
b) Church	
c) Public Service Agency	
d) Home	
e) Community Organization	
f) Neighborhood	
g) Store	
h) General Public	
i) Other Specify _____	

**GO TO C1**

**APPENDIX F.5**  
**REACT EDUCATION CONTACT TRACKING FORM**  
**QUESTION-BY-QUESTION SPECIFICATIONS**

General Instructions for completing the Education Contact Tracking Form

Intervention staff should complete this log for every public education contact or event as it occurs. This will include REACT presentations by staff or volunteers to various groups, organizations, or in neighborhood settings. However, the form should also be used to collect information about media contacts not covered by the commercial tracking services. For example, the form should be used to record the distribution of videotapes, display of billboards, the placement of publicity and advertising in small publications such as newsletters, in establishing point-of-purchase displays at pharmacies, malls or in other public places, for local direct mailings of materials to groups, or for magnet events such as press conferences.

For public education events or media materials not included in the commercial tracking services, the form should be completed as follows:

- A1. INITIALS OF PERSON INVOLVED IN THE CONTACT** -Record the first, middle and last initial of the person who administered the contact or event.
- A2. START DATE OF CONTACT** -- Record the beginning date of the contact or event. If it is a one day event record the same date under start and end dates.
- A3. END DATE OF CONTACT** -- Record the ending date of the contact or event. If it is a one day event record the same date under start and end dates.
- A4. CONTACT SETTING CODE**-- Record the appropriate setting code in the space provided according to the place or type of education event. For example, if the event took place in a church, record '08' in the space provided. If the event occurred in a "media only" setting, record code '13' in the space provided. If the event occurred in a setting not listed in the Contact Setting Codes, record 14 for "other" and specify the setting in the space provided by the code for "other" in the list of Contact Setting Codes.

- A5. NUMBER OF EDUCATORS** -- Interpersonal contacts might be conducted by REACT staff, key volunteers or other people. Record the number of REACT staff involved in the educational contact in A5a. Record the number of other people involved in the educational contact in A5b. For example, if the educational contact involved one REACT staff member and two volunteers, '01' should be recorded in A5a and '02' should be recorded in A5b.
- B1. FORM OF CONTACT** -- Circle the type of education contact that occurred. Do not circle more than one type of contact. Each contact must be recorded on a separate Education Contact Tracking Form. If the type of contact was Media, circle "4" and proceed to the next question, B2. If the type of contact was Patient Education, circle "1" and **skip to question B3**. If the type of contact was Provider Education, circle "2" and **skip to question B5**. If the type of contact was Community Organization, circle "3" and **skip to question B7**.
- B2. MEDIA CONTACT CODE**--Record the code which most accurately reflects the type of media contact completed. For example, if brochures were distributed during this particular interpersonal educational contact, record "7" in the space provided and **skip to question C1**.
- B3. PATIENT CONTACT CODE**--Record the code which most accurately reflects the type of patient contact completed. For example, if the education contact involved individual education on the telephone, record "2" in the space provided and proceed to the next question B4.
- B4. PATIENT AUDIENCE**--Record the estimated number of people in the patient audience for each of the categories listed, a-g and **SKIP TO C1**. If there are no people present from a particular audience category, record '0'. For example,
- B5. PROVIDER CONTACT CODE**--Record the code which most accurately reflects the type of provider contact completed. For example, if the education contact involved conducting a CME Program, record "1" in the space provided and proceed to the next question B6.
- B6. PROVIDER AUDIENCE**--Record the estimated number of people in the provider audience for each of the categories listed, a-m and **skip to C1**. If there are no people present from a particular audience category, record '0'. For example,



- B7. COMMUNITY CONTACT CODE**--Record the code which most accurately reflects the type of community contact completed. For example, if the education contact involved conducting a magnet event, record “3” in the space provided and proceed to the next question B6.
- B8. COMMUNITY AUDIENCE**--Record the estimated number of people in the community audience for each of the categories listed, a-i and **skip to C1**. If there are no people present from a particular audience category, record ‘0’. For example,
- C1. COMMENTS** -- Note comments about any key findings or concerns germane to REACT arising during the contact described.

**TUSCALOOSA ALABAMA  
LAY VOLUNTEER CONTACTS TRACKING FORM**  
Please complete for each REACT Volunteer on a biweekly basis.

REPORTING PERIOD

A1a. START DATE: \_\_\_ \_\_\_/\_\_\_ \_\_\_/\_\_\_ \_\_\_ A1b. END DATE: \_\_\_ \_\_\_/\_\_\_ \_\_\_/\_\_\_ \_\_\_  
 \_\_\_/\_\_\_ \_\_\_ MO DAY YR MO DAY YR

A2. VOLUNTEER NAME:  
 FIRST NAME \_\_\_\_\_ LAST NAME \_\_\_\_\_ MI \_\_\_\_\_

A3. ESTIMATED NUMBER OF HOURS WORKED FOR REACT DURING PERIOD:  
 [ ][ ][ ][ ][ ][ ]

**ESTIMATED NUMBER OF COMMUNITY CONTACTS:**

COMMUNITY	ESTIMATED NUMBER	ESTIMATED % WOMEN
A4. Worksite	a)	b)
A5. Church	a)	b)
A6. Public Service Agency	a)	b)
A7. Home	a)	b)
A8. Community Organization	a)	b)
A9. Door-to-door canvassing	a)	b)
A10. Store	a)	b)
A11. General public	a)	b)
A12. Other (Specify) _____	a)	b)
A13. Other (Specify) _____	a)	b)

**APPENDIX F.7**  
**LAY VOLUNTEER CONTACTS TRACKING FORM**  
**QUESTION-BY-QUESTION SPECIFICATIONS**

**GENERAL INSTRUCTIONS FOR COMPLETING THE LAY VOLUNTEER CONTACT TRACKING LOGS**

A volunteer contact tracking log should be completed on a biweekly basis for each volunteer working with REACT. All volunteer contacts should be counted on this form. These contacts are defined as contacts with patients, community residents and even providers in a REACT intervention site, including: 1) distribution of REACT materials; 2) encouraging emulation of REACT role models; 3) verbally conveying REACT messages; 4) referring individuals to sources of additional information related to REACT. The length of the contact may vary from a few minutes to 15 minutes or longer. Solely distributing REACT materials, without verbally interacting with a participant, does not constitute a volunteer contact.

The logs should be completed as follows:

- A1. REPORTING PERIOD** -- Record the month, day and year the reporting period began and ended. Reporting periods are biweekly, beginning on a Sunday and ending on a Saturday.
  
- A2. VOLUNTEER NAME** -- Record the first and last name of the REACT volunteer.
  
- A3. ESTIMATED HOURS** -- Record the estimated number of hours the volunteer worked for REACT during the reporting period.
  
- A4-A13. ESTIMATED NUMBER OF CONTACTS** -- Record in section (a) the estimated number of contacts the volunteer made in the community through out the reporting period by type of possible contact. If it is a contact not included on the list record under "other" and specify the type. Record the estimated percentage of women among the contacts in section (b).

**APPENDIX F.8**  
 Provider CME Evaluation/Feedback Forms

Please tell me some information about yourself by circling the number for the appropriate response:

Gender:                    1 F    2 M

Discipline:    1 MD                    3 LPN    5 PA/NP    7 RPH  
                   2 RN                    4 MA    6 OTHER (specify\_\_\_\_\_)

Specialty (e.g. cardiac rehab, emergency medicine):\_\_\_\_\_

Please tell us your age:        Age\_\_\_\_\_

Please circle the number of the response that gives your opinions of the program:

1. How relevant was this presentation to your professional practice?

1 Extremely relevant    2 Very relevant    3 Somewhat relevant    4 Not at all relevant

2. What is the utility of the information in this presentation in your daily practice?

1 Extremely useful    2 Very useful    3 Somewhat useful    4 Not at all useful

	<b>EXCELLENT</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
3. The educational value of this program was:	1	2	3	4
4. The presenter's knowledge of the subject matter was:	1	2	3	4
5. The presenter's presentation skills were:	1	2	3	4
6. The audiovisual and written materials were:	1	2	3	4
7. The materials distributed for my use were:	1	2	3	4

8. What did you like best about the presentation?

\_\_\_\_\_

9. What did you like least about the presentation?

\_\_\_\_\_

10. Is there any content that should be added to the presentation?

\_\_\_\_\_

11. Is there any content that should be deleted from the presentation?

\_\_\_\_\_

12. Did this program meet your expectations? 1 Yes 2 No

If No, explain\_\_\_\_\_

Please give us some feedback on the program content:

1. In terms of time to reperfusion, the lowest mortality from AMI occurs when reperfusion occurs:

- |   |   |   |  |
|---|---|---|--|
| 1 less than 2 hrs.<br>from symptom<br>onset | 2 less than 3 hrs.<br>from symptom<br>onset | 3 less than 4 hrs.<br>from symptom<br>onset | 4 less than 6hrs.<br>from symptom<br>onset |
|---|---|---|--|

2. Age has clearly been associated with increased delay in seeking treatment for AMI symptoms with younger patients delaying longest. 1 True 2 False

3. On average, the time between the onset of acute AMI symptoms and the patient's decision to seek care is:

- |             |             |             |                     |
|-------------|-------------|-------------|---------------------|
| 1 2-3 hours | 2 4-5 hours | 3 6-8 hours | 4 more than 8 hours |
|-------------|-------------|-------------|---------------------|

STRONGLY DISAGREE    AGREE    DISAGREE    STRONGLY AGREE

DISAGREE

4. I am likely to review/revise my office procedure for responding to in-person and telephone contacts by patients with symptoms of AMI. 1 2 3 4

5. The goals of Heart Attack REACT place unreasonable burden on physicians given the time limitations of patient encounters. 1 2 3 4

6. I feel comfortable using brief advice methods such as TIME, described in this presentation to educate patients about AMI symptoms and fast action. 1 2 3 4

7. I feel comfortable empowering my office staff to use brief methods such as TIME, described in this presentation to educate patients about AMI symptoms and fast action. 1 2 3 4

8. I plan to educate high risk patients further about AMI symptoms and the need for quick action. 1 2 3 4

9. I will encourage all my patients, particularly those at high risk for AMI, to call 911 or get to the emergency department ASAP if they have AMI symptoms or if they are in doubt as to the cause of their symptoms. 1 2 3 4

10. Patients with known angina should contact their primary care doctor or cardiologist first before going to the emergency department for suspected symptoms. 1 2 3 4

11. Educating the general public (or my low AMI risk patients) about AMI symptoms and telling them to call 911 after only 15 minutes of these symptoms will flood emergency departments with "false alarms". 1 2 3 4

**APPENDIX F.9**

**Community Presentation Evaluation/Feedback Form**

Please tell me some information about yourself by circling the number for the appropriate response:

Gender:                    1 F     2 M

Are you Hispanic?        1 Yes   2 No

What is your race? 1 African American/Black                    2 White  
                          3 Asian/Pacific Islander    4 Other (specify \_\_\_\_\_)

Please tell us your age:      Age \_\_\_\_\_

Please circle the number of the response that gives your opinion of the program:

1. How useful to you was the information presented?

1 Extremely useful   2 Very useful                    3 Somewhat useful   4 Not at all useful

**EXCELLENT      GOOD      FAIR      POOR**

- |   |   |   |   |   |
|---|---|---|---|---|
| 2. The audiovisual and written materials were:                                | 1 | 2 | 3 | 4 |
| 3. The presenter’s knowledge of the subject matter was:                       | 1 | 2 | 3 | 4 |
| 4. The presenter’s skills in leading discussion and answering questions were: | 1 | 2 | 3 | 4 |
| 5. The materials distributed for my use were:                                 | 1 | 2 | 3 | 4 |

6. What did you like most about the presentation?  
\_\_\_\_\_

7. What did you least like about the presentation?  
\_\_\_\_\_

8. Is there any content that should be added to or deleted from the presentation?  
\_\_\_\_\_

9. Did this program meet your expectations?      1 Yes    2 No

If No, explain why not: \_\_\_\_\_

Please circle the number of the response that best answers the question:

1. Most people do not experience the “movie heart attack” in which the victims have sudden chest pain, clutch their chests, and then pass out falling to the ground.      1 True   2 False

2. On average in the US today, the amount of time between a person noticing symptoms of a heart attack and deciding to seek medical care is:

- 1 2-3 hours    2 4-5 hours    3 6-8 hours    4 more than 8 hours

3. New clot-busting drugs can stop or minimize the damage from a heart attack. These drugs have their greatest effect on reducing the damage of a heart attack if used 2 hours or less after the start of acute symptoms.

- 1 True    2 False

4. Most people experience some type of chest pain or chest discomfort when they have a heart attack. Which of the symptoms in the following list are also frequently experienced during a heart attack.

(Circle 1 for Yes or 2 for No for each symptom)

- |                 |       |      |                         |       |      |
|-----------------|-------|------|-------------------------|-------|------|
| nausea/vomiting | 1 Yes | 2 No | feeling short of breath | 1 Yes | 2 No |
| arm pain        | 1 Yes | 2 No | sweating                | 1 Yes | 2 No |
| pain in legs    | 1 Yes | 2 No | headache                | 1 Yes | 2 No |

5. A person who feels chest pressure or pain, especially if accompanied by other symptoms such as shortness of breath or arm pain should get to a hospital if the symptoms last:

- 1 about 15 mins    2 about 30 mins    3 at least an hour    4 overnight

STRONGLYAGREE    DISAGREE    AGREE    STRONGLYAGREE

- |  |   |   |   |   |
|--|---|---|---|---|
| 6. I would rather be a little bit embarrassed by going to the emergency room for a “false alarm” for my acute symptoms than run the risk of dying from a heart attack. | 1 | 2 | 3 | 4 |
| 7. When it comes down to it, there is very little that can be done for someone who is having a heart attack.   | 1 | 2 | 3 | 4 |
| 8. The best way to get help if I or someone around me is having the symptoms of a heart attack is to call 911.   | 1 | 2 | 3 | 4 |
| 9. As a result of this presentation I am better able to recognize the symptoms of a heart attack in myself and others.   | 1 | 2 | 3 | 4 |
| 10. As a result of this presentation I feel more comfortable calling 911 if I or others have the symptoms of a heart attack.   | 1 | 2 | 3 | 4 |

- |   |   |   |   |   |
|---|---|---|---|---|
| 11. I plan to discuss my level of risk for having a heart attack with my physician so I can be prepared, just in case.                                | 1 | 2 | 3 | 4 |
| 12. I will discuss with my family the common symptoms of a heart attack and create a plan to get to the hospital quickly should these symptoms occur. | 1 | 2 | 3 | 4 |
| 13. I will make a list of medications that I and my family members take near the phone so that information is available in a heart attack emergency.  | 1 | 2 | 3 | 4 |