



EHAC Course

The Deputy Heart Attack Program & Early Heart Attack Care (EHAC) Education

The Deputy Heart Attack program disseminates Early Heart Attack Care (EHAC) education. The Deputy Heart Attack program garners its name from earlier days when the sheriff would deputize every citizen in order to protect the town from imminent danger. By participating in this program, participants become “deputies” who learn the early heart attack symptoms and provide immediate medical care in order to prevent a death or serious heart damage.

The History:

The Deputy Heart Attack Program and Early Heart Attack Care education was created by a cardiologist - Dr. Raymond Bahr. Although he was not a cardiologist at the time, Dr. Bahr’s life was forever changed when he did not recognize the signs in a friend who died from a heart attack. From that point on, Dr. Bahr made it his mission to prevent unnecessary deaths by becoming a cardiologist and dedicating his life to educating people on the early symptoms.

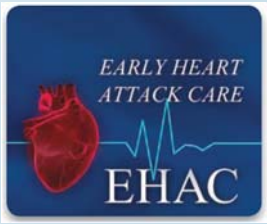
The Deputy Heart Attack Symbols:

Deputy Heart Attack uses two badges that are given to deputies. The first badge, “Heart Attacks Have Beginnings,” is worn after a new deputy takes the course and the pledge. The second badge is known as the “Good Samaritan” or “Buddy Badge.” The imagery depicts one person helping another into a chest pain center. This is symbolic of someone who sees the early signs and becomes an empowered bystander versus a heart attack enabler who will ignore the signs.



The Message:

Our message is simple - like other diseases and illnesses (cancer, diabetes, etc), **there are early symptoms of a heart attack that are apparent long before a massive event occurs.** Early detection is vital to prevent death or severe heart damage. Use the Early Heart Attack Care (EHAC) education to help reduce the annual death rate of approximately 800,000 people. *Will you help us spread the message?*





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EHAC Course: Section 1

The Early Heart Attack Care (EHAC) program is designed to educate the public to the early warning signs of heart attack. These symptoms can be non-specific or specific.

SPECIFIC HEART ATTACK SYMPTOMS (PRODROMAL ANGINA)

- Chest discomfort
- Chest pressure
- Chest ache
- Chest burning
- Chest fullness

NON-SPECIFIC HEART ATTACK SYMPTOMS

- Weakness
- Sweating
- Nausea
- Dizziness

These mild symptoms may indicate the onset of a heart attack. Early recognition and response can save lives. Don't wait until chest pain becomes severe. At the first signs of chest discomfort, seek medical attention.

1. What do we know about heart attacks?

It is the number one killer of the adult population in the United States. There are 800,000 heart attack deaths each year.

2. What causes a heart attack and why do people die?

Consider the heart as a great pump with amazing reserve capacity. It is a muscular pump and as such needs a blood supply with nutrients to survive. There are three major blood vessels supplying it. When a blockage takes place, there is interference of blood supply and the muscle supplied by the blocked vessel easily dies. This damages the pump and we either die or live with less of a pump and become less of a person.

3. What causes the blockage?

A disease called atherosclerosis or "hardening of the vessels." Our lifestyle allows the risk factors such as hypertension, cholesterol and cigarette smoking to incubate over a long period of years leading to a 90 to 95 percent cholesterol plaque build-up which finally ruptures allowing a clot and spasm to close the vessel. Within six hours there is usually total damage.

4. Can heart attacks be helped?

Yes, they can be helped. Risk factor reduction during the incubation stage can reduce heart disease. What we need is the identification of a risk factor when the heart attack is starting. Chest pain is the main risk factor and we have to understand it. Let's put this under a microscope and look at what is taking place.

Over time plaque builds up in the areas that feed blood to the heart. When the plaque tears away or ruptures, it creates a hole. The body immediately begins to repair itself by clotting in order to heal the tear. But as the clot gets bigger and bigger, it blocks the heart from getting blood flow. Without blood, the heart begins to die.

The sequence in most cases is: chest discomfort which leads to chest pain which leads to unstable angina worsening which leads to damaging myocardial infarction which leads to sudden death.

Before chest pain there is in most cases a milder form of chest discomfort that is centrally located coming and going that may be present for hours and/or days before the chest pain becomes severe and does not go away. The real problem of the heart attack situation lies here, in that patients don't come into the hospital until the crash takes place. The early symptoms are called prodromal and can be likened to the prodromal symptoms of a cold. If it is treated early, prevention can take place, and namely, sudden death and cardiac damage can be averted.



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5. What kinds of heart attacks are there and how can I help?

There are actually three presentations of a heart attacks and if you are the first person upon the scene, you are called the first responder. The first responder is the good samaritan who performs CPR, calls 911 or convinces a potential victim to get medical help as soon as possible.

Type 1: The heart attack stops you dead in your tracks. This is called the CPR scene. In the first type of heart attack, we need to know cardiopulmonary resuscitation (CPR) and perform it well.

Type 2: A heart attack where damage is taking place (the six hours we have talked about). The patient is experiencing the Mack truck sitting on his chest. Call 911 and behave as an executive spouse because the patient usually does not put up much of a fuss, is in severe pain and is weak like a kitten.

Type 3: The heart attack is just beginning and EHAC provides a beneficial impact. This is the most difficult time to get someone to seek medical care. The victim will normally complain, but then excuse it as food poisoning or gas. The patient has minimal symptoms but is practicing maximal deniability. The patient to first responder interaction can be frustrating. The patient may be embarrassed or wants to ignore it. At this point, they can convince the first responder to contribute to the denial. Even paramedics find it difficult to convince a conscious patient to go to the hospital. This is the reason why the heart attack remains the number one killer of the adult population.

6. Is there a secret to working out the problem? How can it be turned around?

The first responder (or bystander) has to become knowledgeable and know that the time to help the patient is when the heart attack is in the beginning stages. Be prepared to argue for the patient to seek out an early check up in an emergency room. It is important to be active or proactive and be heart smart. A good samaritan will solve the problem with their timely actions.

7. Why is denial such an important part of the heart attack problem?

Because it is part of our lifestyle. We constantly forget about ourselves and live our lives as if we are indestructible or immortal, and only are brought to reality when we are taken to our knees. However, we can minimize the damage and change the outcome. A heart attack - even in its infancy stages - is a great transformer and a great reality check. The secret is to nip it when it is in the beginning stage, i.e., chest discomfort before the severe damage or the sudden death.

8. How can I help someone?

We review several strategies in Section 3 of this document, but a great tip to remember is that the faster someone receives medical care, the better chance they have to regain their full life. If someone manages to survive a heart attack, their life is forever changed and they have a slim chance of living the life they once enjoyed.

9. Any final words?

Yes, I ask people if they were to develop a blockage in one of their heart vessels, what scenario would they like to be in and have action taken? Pumping on the chest for a cardiac arrest victim, helping a patient with a Mack truck sitting on his chest and trying to get him into the hospital or perhaps encouraging a patient with minimal symptoms to have it checked out - to be safe rather than sorry. Several hours here can make the difference between a pleasurable and enjoyable life versus no life or cardiac invalidism. Be alert, be active, be heart smart - be an Early Heart Attack Care provider.



Section 2: Why Don't Patients Seek Immediate Medical Attention?

1. The patient may not perceive the mild discomfort as life-threatening. Mild symptoms are easy to ignore and put on the back burner. Patients may even be upset if we encourage them to seek medical advice.
2. Because we all lead busy lives, we do not usually respond to mild discomfort. We continue with the task at hand, hoping the discomfort will just go away. We do not expect that it will worsen and perhaps even incapacitate.
3. If mild symptoms turn out to be nothing of importance, the patient would be embarrassed by the fuss made. It is embarrassing to go to the emergency room of a hospital if nothing of consequence is wrong. Ambulance sirens attract attention.
4. First responders or bystanders may be easily swayed by the rationalizations and denial of the patient. It is easier to go about your business than to be persistent.
5. Patients may not be informed of the importance of a quick response. They may not know that 85% of damage takes place in the first two hours of a heart attack. They may not recognize the early warning signs and may not know the extent of damage that can take place without intervention.
6. Patients may confuse the early warning signs of heart attack with heartburn or indigestion and self-medicate, delaying a lifesaving visit to the hospital.
7. Patients may not appreciate the heart pump for its marvelous role in the pursuit of full activity. They do not see the cardiac engine as a finely built apparatus which must be exercised and cared for.
8. Patients just wait it out, hoping the symptoms will go away. They do not realize that time is critical and that full damage can take place within hours.

*Tell a potential victim,
“85% of heart damage
occurs within the first
two hours of a
blockage.”*



Section 3: Overcoming a Patient's Reluctance

The mild pain of angina is easily denied by the victim and by others nearby, because:

- The symptoms are mild.
- The onset of pain is not easily noticed.
- There is a strong tendency to continue business as usual.
- In many cases, there are no risk factors.
- The victim is seldom ill and feels indestructible.
- The victim needs to feel in control.
- The victim is worried about what others will think.

The following are strategies to overcome denial and resistance to medical attention:

- Find out the most critical issue on the victim's mind. This is any idea or conflicting responsibility which interferes with the victim's decision to seek immediate medical help. Offer to take care of that concern yourself or have someone else do it.
- Suggest that the victim check out any early symptoms, no matter how mild they may seem.
- If the victim is experiencing mild symptoms and refuses to call 911, offer to drive the patient in a private car, which may be less embarrassing than an ambulance.
- If the victim is anxious regarding a spouse or family members, offer to make the contact.
- Enlist family members to help you.
- Try to relieve tension with appropriate humor.
- Be personal and persistent. Sit and talk - don't walk away.
- Congratulate the victim on his or her good judgment: "Great! You are early...you can be helped."
- If all else fails, take charge and be aggressive about getting a victim to a hospital.

The ideal approach to intervention can be recalled through a simple acronym, ACT WISELY. The Early Heart Attack Care giver should:

ACT WISELY:

A - Acknowledge the problem.

C - Be Calm.

T - Be Tenacious and do not give in!

W - Be Willing to give your time.

I - Be Influential.

S - Keep it Simple

E - Be Empathetic

L - Help Link the patient with early symptoms to the hospital.

Y - Say Yes - I will do it!



Section 4: Television Heart Attack

Unfortunately heart attacks seen on television programs are not what really happens. It is television “drama” and completely gives viewers the wrong message. Heart attacks seen on television programs present as dramatic cardiac arrest situations or collapsing chest pain patients. Yet despite these end stage presentations, a study was carried out of such television programs as ER, Chicago Hope and Rescue 911 and the long term survival rate was 67%. ***This contrasts greatly with the actual CPR survival rate of 14.7% in the (real) medical literature.***

Thus, television programs not only teach the wrong message but also readily acknowledge this fact. Neal Baer, MD the writer and producer of ER is quoted as saying in a JAMA article “that while efforts are made to depict accurate and credible medical care, the show’s dramatic foundation is primary.”

Unfortunately this does little for the high mortality seen in the United States from the heart attack problem. It is estimated that 800,000 Americans each year lose their lives. It is the loss equivalent of a large metropolitan city such as Baltimore, Maryland. This shouldn’t be. Heart attacks have been the number one killer of the adult population since 1900 and continues to be so. So many Americans do not realize that a heart attack is a preventable illness even when the heart attack is beginning to take place. In over 50% of the cases heart attacks have beginnings and these beginnings occur as stuttering chest discomfort presentations for hours to days that could easily lend themselves to intervention bringing about the prevention of damage to the heart muscle.

These beginning symptoms of a heart attack are never portrayed on television programs because they are not dramatic enough to get the viewer’s attention. It is a sad commentary, but it is true. One would hope that some day the television programs would see the value as well as the potential drama that could result in bringing out this message. Heart attacks can be cured when sniffed out early. When that day arrives, we will have maintained a proper balance between capitalism and altruism; only then will heart attacks be taken out of first place.

If you have a heart attack on TV, your survival rate is 67%.

If you have one in the real world, your survival rate is 14.7%.



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Section 5: What is Early Heart Attack Care (EHAC)?

Early heart attack care consists of two parts -- recognition and response. Recognize the subtle early warning signs. Whenever there is chest discomfort or pressure, become aware. Is the discomfort recurring? Does it originate in the center of the chest? Does it subside while resting and reoccur when active?

The response to the symptoms must be decisive. Seek medical attention immediately. Early signs of a blockage may occur hours or even weeks before an acute heart attack. To save lives, we must recognize and respond.

Why is it so important to promote Early Heart Attack Care?

We have learned that CPR saves lives by intervening when there is an acute heart attack. When the heart stops we can shock it into action. But, the heart damage has already occurred and sometimes death cannot be averted. Doesn't it make more sense to check out the mild chest discomfort before a complete blockage takes place, resulting in heart damage. We can stop the progression of a heart attack if we are alert to the early signs.

Why is this necessary?

Eighty-five percent of the damage takes place in the first two hours of a heart attack. If the message of early recognition and response penetrates the country, it may be the force that topples heart disease as the number one killer.

What is the game plan?

1. Heart attacks have beginnings. Educate the public to recognize the early warning signs:
 - Mild chest pain, pressure, or discomfort
 - Recurring pain or discomfort in the chest that occurs with activity and subsides while at rest
 - Shortness of breath
 - A burning feeling in the throat and chin that can be confused with heartburn or indigestion
2. Educate the public to respond immediately to prevent heart damage and avoid sudden death.

Your action can save lives. Whether you are experiencing the early symptoms yourself or you are a witness to someone else experiencing early symptoms of heart attack, you can become an early cardiac care giver by insisting on medical attention.

How can Early Heart Attack Care be taught to others?

The more ways we reach people, the better chance we have of stopping heart attack as the number one killer of adults in the United States. The message is simple. Share the message to "Recognize the symptoms and act immediately." Health courses in high schools and community colleges can teach early warning signs and responses. Paramedics, fire firefighters, police officers, educators, physical fitness instructors, the general public, and you may be the first responders to someone experiencing the early signs of heart attack. Your action can save a life.



Section 6: The Challenge - Become Deputized

American medicine has the ability to break up blood clots and stabilize arteries in the early stages of a heart attack, thus saving lives and preventing severe and irreversible damage to heart muscle. But these lifesaving medications are effective only when the patient receives them within the first hours of a heart attack or - better still - before the arteries have been totally blocked.

- Meeting this challenge requires a major educational effort. We must awaken the public to the warning signs of an imminent heart attack, and motivate individuals to heed those signals promptly.
- Such an educational effort must also recognize that the battle against fatal heart disease is intertwined with the battle against our preoccupation with schedules, routines, and commitments, when the chest symptoms persist.

THE 5 STEPS TO BECOMING A DEPUTY FOR HEART ATTACK CARE:

- Read the material and become familiar with the concept.
- Learn about the three presentations of a heart attack.
- Test your understanding of the basic concepts with the short quiz provided.
- Become a deputy by taking the pledge.
- Print your certificate.

Section 7:

Early Symptom Graphic

Heart attacks are not created equal. Recognizing their differences allows early intervention to bring about prevention.

The three presentations are depicted on this cliff scene:

1. Cardiac arrest CPR needed deep in the valley
2. Crushing heart attack large amount of damage clinging on the edge of cliff
3. Stuttering heart attack minimal damage warning signs

Heart Attacks Have Beginnings.

YOU KNOW CPR — GREAT! BUT DO YOU KNOW EHAC — EARLY HEART ATTACK CARE?

ALL HEART ATTACKS ARE NOT CREATED EQUAL!
Heart attacks come in different sizes and shapes. In most cases, they begin with warning signs that tell us something — this is, heart damage and/or death — is impending. The road to destruction and the “crash” of your life has stop-off points that can save you if you recognize the signs.

THE 5 STEPS TO BECOMING AN EARLY HEART ATTACK CARE GIVER:

1. Learn the warning signs.
2. Take the quiz.
3. Take the Caregiver's Oath.
4. Become deputized.
5. Spread the word & save a life!

CHOOSE EARLY - DON'T DELAY
Don't take chest pain lightly. It often is a warning signal for a heart attack. And that's when your prompt action may be the key to your survival. Research shows that treatment of heart attacks in the first hour offers the best opportunity to prevent damage to heart muscle, and to ensure survival and faster rehabilitation.

EARLY HEART ATTACK CARE GIVERS OATH
I hereby solemnly swear that when a person in my presence is experiencing the early symptoms of a heart attack, I will make every effort to get that person to go to the nearest hospital emergency room to get those symptoms checked out.



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Section 7: Deputization Program

The Activation of the Community in Heart Attack Response

In concept, the word activation implies going from a latent phase to one of a heightened activity. In regards to the problem of heart attacks, knowledge of what takes place is not enough. Knowing and responding is what is needed. To this extent the Society of Cardiovascular Patient Care has put together a program for answering this problem of activating the knowledge of events taking place in heart attacks. It is called the Deputy Heart Attack Program.

It takes its origin from the early and wild west in which each township had a sheriff and two deputies. In times of crisis (outlaws coming to town, indians on the war-path, etc.) the sheriff activated the community by deputizing all of the people in the town in order to protect everyone! The heart attack problem can be likened to a crisis in which we also need to deputize Americans to take action to fight this #1 killer.



The program instituted here at the Society of Cardiovascular Patient Care has to do with delivering a creative message of Early Heart Attack Care using a short education course and then challenging the individuals to see if they truly understand what early heart attack care is all about. Once accomplished the individuals are deputized by standing up and taking a solemn pledge to intervene when a person in their midst is experiencing early signs of a heart attack. It has been our experience that such individuals are truly moved by this approach. They are given a badge which they are to proudly wear displaying the words "*Heart Attacks Have Beginnings.*" If questioned by other individuals, they take the time to explain what this is all about. They then become educators as well.

Hopefully this first generation approach can spread across the communities of America in order to activate and educate Americans about the preventive aspects needed in early heart attack care. The Deputy Heart Attack program is an activated community program designed to respond aggressively to the Nation's #1 health problem, i.e. heart attacks. In today's world we don't have Marshals coming upon the scene, but we do have millions of Americans who can be deputized into action.

With this approach, the Society has set about educating hospital communities by first educating their employees. All employees are given the chance to participate in this program. It is hoped that the possibility (wiping out heart disease) will have been solidified by the program and then spread to other communities in our nation in an all out effort to win the war against heart attacks at home. The activation of the deputization program thus becomes a movement to counter heart attacks.



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Section 8: EHAC Quiz

- If a friend, co-worker or spouse confides in you that they are experiencing mild symptoms of a heart attack, how would you respond?
 - Tell them it's probably indigestion and advise them to take some Tums.
 - Encourage their denial because you are too busy.
 - Tell them that they are probably suffering from a gall bladder attack or a hiatal hernia.
 - Show concern and ask them if they have experienced these symptoms before.
- What questions should you ask the person experiencing early heart attack symptoms?
 - Is the discomfort, tightness, pressure, or pain located in the center of the chest?
 - Are the symptoms present in the chest, throat, jaw, upper back or inside of the left arm?
 - Did these symptoms come on with exertion and do they go away with rest?
 - All of the above
- If the victim answers "yes" to your questions, how should you respond?
 - Expect denial by the victim if the symptoms are minimal; look for the most critical issue and take charge.
 - Explain to this individual that they may be experiencing the earliest symptoms of a possible heart attack.
 - Encourage this individual to get these symptoms checked out at the nearest Heart Attack Care Center/Emergency Room.
 - Call 911 or assist the individual to the nearest Heart Attack Care Center/Emergency Room.
 - All of the above.
- What are the three presentations of a heart attack?
 - Cardiac Arrest
 - Severe chest pain
 - Central chest pressure, ache or burning sensation
 - All of the above
- Which of these presentations offers the most benefit?
 - CPR for cardiac arrest
 - Emergency care for severe chest pain
 - Early intervention for the chest pressure, ache, or burning sensation
- When can a threatening heart attack be prevented?
 - At the cardiac arrest stage
 - At the crushing severe chest pain
 - At the mild onset of chest discomfort
- Heart attack kills this number of adults in the USA each year?
 - 800,000
 - 60,000
 - 6,000
- Early chest discomfort occurs in what percentage of patients with heart attacks?
 - 50%
 - 20%
 - 5%
- If an early heart attack is detected early and acted upon, how many adults in the US can we save?
 - 400,000
 - 30,000
 - 3,000
- If CPR is cardiopulmonary resuscitation for the dead, then EHAC education and awareness is the program for prevention of death. What does the acronym EHAC stand for?
 - Evolving Heart Attack Care
 - Early Heart Attack Care
 - Emergency Heart Attack Care

Answers:

- | | |
|--------|---------|
| 1. - D | 6. - C |
| 2. - D | 7. - A |
| 3. - D | 8. - A |
| 4. - D | 9. - A |
| 5. - C | 10. - B |



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Section 9: EHAC Pledge

I understand that heart attacks have beginnings that may include chest discomfort, shortness of breath and/or arm pain, and weakness. These may occur hours or weeks before the actual heart attack. I solemnly swear that if it happens to me or anyone I know, I will call 9-1-1 or activate our Emergency Medical Services.

Section 10: Deputy Heart Attack Certificate



Deputy for Early Heart Attack Care (EHAC) Certificate

_____ is hereby recognized for their effort in promoting awareness of chest discomfort / chest pain as a risk factor for heart attack and for seeking to change the behavioral response of others by encouraging early care of chest symptoms.

Heart Attacks Have Beginnings

Help overcome denial and delay when having chest symptoms.
Be an Early Heart Attack Care provider.
Help reduce heart attack as the number one killer of adults in the USA.

Raymond D. Bahr, M.D.

Shahriar Dadkhah, M.D.

Date _____



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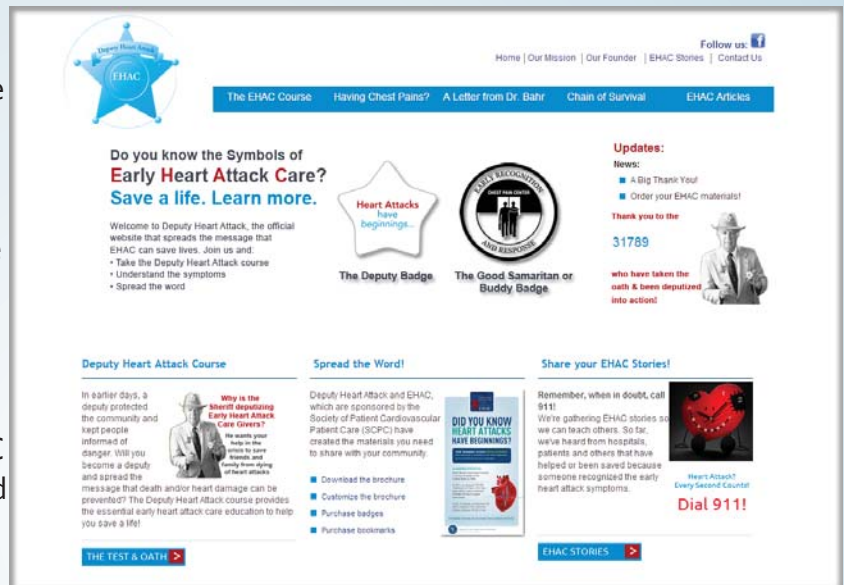
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Links for the Deputy Heart Attack Program & Early Heart Attack Care (EHAC) Education:

Website: <http://www.deputyheartattack.org>

Most of the links discussed in this document can be found on the home page of the website.

1. **Online Training:** Click "The EHAC Course." This link leads you to both the "Standard" and the "Short" Course.
2. **Training Materials:** Click the "Training Your Community" link to download the referenced materials in this syllabus.
3. **Purchase badges:** Click the "Spread the Word" link. In this section you can download the brochure, customize the brochure with your logo and purchase Deputy Heart Attack badges
4. **Share your EHAC Stories:** This area has EHAC stories and news as well as a form where you can submit your EHAC stories. We will contact you if we would like to publish your story.
5. **EHAC Articles:** Dr. Raymond Bahr, the founder of Deputy Heart Attack and Early Heart Attack education has created a library filled with innovative ways you can share EHAC, his EHAC journey and more.



For More Information

If you have questions about the Deputy Heart Attack Program or Early Heart Attack Care (EHAC) education, please contact us via e-mail: community@scpcp.org. You can also follow us on Facebook for all of the latest news! We welcome your feedback!

Society of Cardiovascular Patient Care

The Deputy Heart Attack Program and Early Heart Attack Care (EHAC) Education is a community outreach program sponsored by the Society of Cardiovascular Patient Care.

For more information, visit their website: <http://www.scpcp.org>.