

Nationally recognized heart attack care.

Inside St. Francis Heart Center



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Heart attack experts worldwide take notice



“Widespread adoption of our EHART protocol could dramatically improve the quality of care of heart attack patients nationally and abroad, as well as reduce health care costs.”

—Umesh N. Khot, M.D.

lab activated,” said Umesh N. Khot, M.D., lead author of the study featured in *Circulation* and cardiologist at both St. Francis Heart Center and Indiana Heart Physicians. “Waiting for the cardiologist before activating the cath lab delays care without any clear benefit.”

The second difference of the EHART protocol is a specialized team of nurses that rushes to the emergency room once the emergency department physician activates the cath lab.

“In most hospitals, patients have to wait in the emergency department for the catheterization team members to prepare the cath lab or arrive from home during nights and weekends. We have nurses who are already in the hospital immediately move the patient to the cath lab and start setting up for the emergency procedure,” Khot said.

Faster care = Smaller heart attacks and lower health care costs

In the published study of 86 consecutive heart attack patients, the EHART protocol at St. Francis improved time-to-treatment—also known as door-to-balloon (catheterization) time—from 113 minutes to 75 minutes. The study also revealed that the severity of a heart attack suffered by patients decreased by 40 percent, a direct link to a better quality of life following a heart attack. In addition, the study also showed that the EHART protocol resulted in shorter hospital stays and lower hospital costs.

Please visit www.heartattackcare.net for more information about the study and the St. Francis EHART protocol.

EHART protocol receives multiple honors

- ✓ Hulman Health Achievement Award, Indiana Public Health Foundation
- ✓ 2007 Patient Safety Hero Award, Indianapolis Coalition for Patient Safety
- ✓ Published in *Circulation*—world’s leading heart journal
- ✓ Invited to prestigious medical conferences nationwide

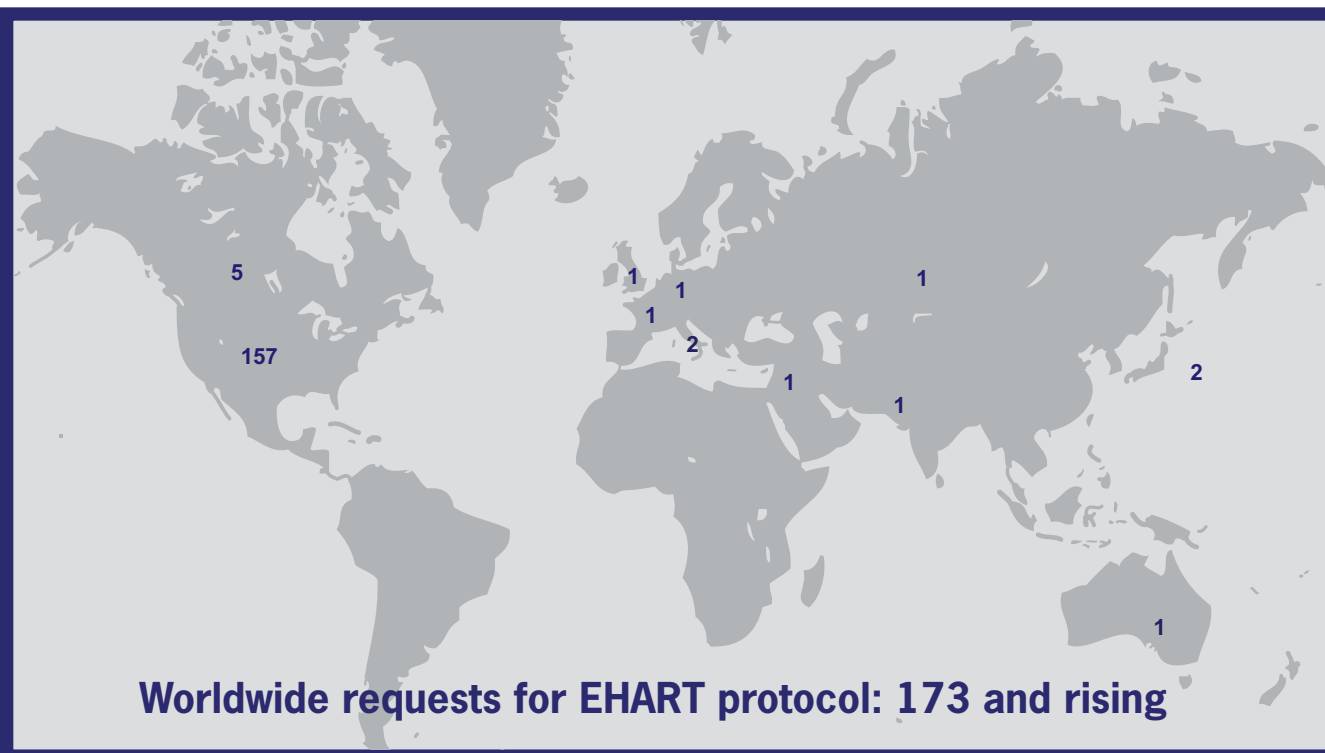
EHART protocol nurses spring into action after the emergency department physician determined that the patient may be experiencing a heart attack.

A revolutionary approach to traditional heart attack care

The Emergency Heart Attack Response Team (EHART) protocol began when a group of cardiologists questioned the traditional process of treating heart attacks. Eventually, St. Francis physicians and staff overcame the status quo and changed the “rules” for treating heart attacks. As a result, they eliminated barriers and constraints and restructured the standard protocol for treating heart attack victims.

Today, the EHART approach is a well-oiled lifesaving process with two fundamental differences from the former model. First, the emergency department physician who initially sees the patient activates the cardiac catheterization (cath) lab.

“Traditionally, most hospitals require the emergency department physician to contact a cardiologist who comes to see the patient. Only after the cardiologist sees the patient is the cath



Worldwide requests for EHART protocol: 173 and rising

During a heart attack, time saved is muscle saved

“Time is muscle” is a phrase familiar to doctors and nurses who work in the St. Francis Emergency Department. To them, it’s an acknowledgement that every minute lost during a heart attack means more heart muscle will be permanently damaged.

Exactly what happens during a heart attack?

The heart muscle needs a constant supply of oxygen-rich blood in order to survive. The coronary

arteries provide the heart with this critical blood supply. Over time, those arteries can become narrowed by a buildup of fat, calcium, proteins, cholesterol and other substances, resulting in reduced blood flow to the heart.

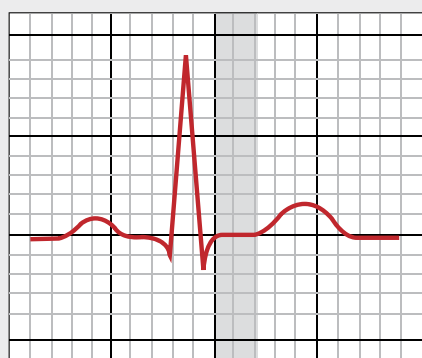
If the blood flow is cut off by a complete buildup or a blood clot that blocks a main coronary artery, doctors refer to it as a heart attack. When a heart attack occurs, the heart muscle loses the blood and oxygen it needs to survive and begins to die.

from the patient’s arrival in the emergency department to the artery being re-opened by treatment.

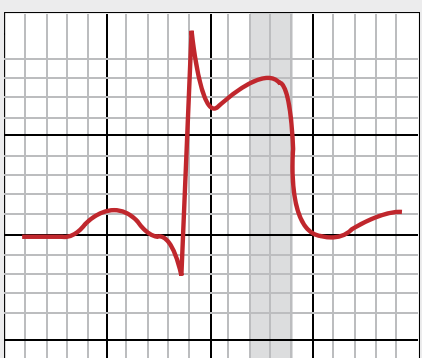
Unfortunately, most patients nationwide do not receive treatment within the recommended 90 minutes. In an effort to improve upon that fact, St. Francis developed the Emergency Heart Attack Response Team (EHART) protocol in 2005, a new system for treating heart attack patients that improved the hospital’s treatment time from 113 minutes to 75 minutes. Not only has this revolutionary new approach to heart attack care dramatically improved the treatment that Indianapolis residents receive, but St. Francis hopes that widespread adoption of the EHART protocol will significantly improve the quality of care for patients nationwide.

*ACC/AHA Guidelines for the Management of Patients with ST-Elevation Myocardial Infarction—Executive Summary. *Circulation*. 110: 588–636. Article source: American Heart Association, www.americanheart.org

Before myocardial infarction Normal electrocardiogram



During myocardial infarction Elevation of ST segment



Fast treatment is the key to saving muscle

Unlike other muscle tissue in the body, adult cardiac muscle damaged by deficient blood flow lacks the ability to regenerate, resulting in irreversible heart tissue death. The amount of muscle damage depends on the size of the areas supplied by the blocked artery and the time between the onset of the heart attack and successful treatment.

The key to saving heart muscle during a heart attack is to restore blood flow as fast as possible. Quickly doing so either prevents or limits damage to the heart muscle.

The treatment goal is 90 minutes or less

The ideal time to treat a heart attack is within one to two hours of the first onset of symptoms. Because waiting longer increases damage to the heart and reduces the patient’s chance of survival, the American College of Cardiology and the American Heart Association practice guidelines suggest a 90-minute treatment goal*

EHART protocol's lifesaving benefits to heart attack patients:

- ✓ Dramatically faster treatment time
- ✓ Substantial decrease in average heart attack size
- ✓ Shorter hospital stays
- ✓ Lower overall treatment costs
- ✓ Better quality of life

What is an ST-Elevation Myocardial Infarction?

In two words: HEART ATTACK

An ST-Elevation Myocardial Infarction, also called a STEMI, is a type of heart attack. It occurs when one of the main coronary arteries is blocked by a blood clot or plaque, preventing oxygen-rich blood from getting to the heart muscle. When this happens, heart muscle begins to starve and die. Effective treatment is needed quickly.

Determining where the blockage has occurred with an EKG, also known as an electrocardiogram, is crucial. An EKG breaks down each heartbeat into a series of electrical waves, providing important information about the heart to physicians in the emergency department.

The first two letters of STEMI represent the ST segment of the EKG. When there is a distinct elevation in the ST segment (see figure),

physicians use this information to determine that a heart attack is occurring.

After diagnosis, the physician will choose the most appropriate emergency treatment, which may include the use of clot-dissolving drugs, balloon angioplasty or surgery. The sooner treatment begins, the sooner blood flow can be restored to the heart muscle.

Choose St. Francis—the hospital that revolutionized heart attack care



When it comes to heart health, you can't afford to settle for anything less than the best. Choose St. Francis—the only hospital that's been nationally recognized for revolutionizing heart attack care.

In fact, 173 hospitals and health care experts from 38 states and 10 countries have requested our EHART protocol—and that's just the beginning. HealthGrades, the leading health care ratings company, has given us five stars for both the treatment of heart attacks and coronary interventional procedures for 2008.

HealthGrades also awarded us the following honors:

- Ranked in the Top 10% in the nation for Coronary Interventional Procedures
- Ranked in the Top 5 in Indiana for Coronary Interventional Procedures
- Ranked in the Top 10 in Indiana for Cardiology Services

So, whether you need a simple heart screening or open-heart surgery, trust the skilled staff of cardiologists, surgeons and specialists at St. Francis Heart Center to care for your heart.



The cardiologists of Indiana Heart Physicians (IHP) offer a variety of services to expertly diagnose and treat a wide array of patients with heart disease. This group of 22 talented cardiologists offers non-invasive testing, education, prevention, electrophysiology, intervention and catheterization.

What's more, patients who trust IHP for their heart care can be confident that they are being treated by the same minds that helped create the revolutionary Emergency Heart Attack Response Team (EHART) protocol that delivers faster heart attack treatment at St. Francis and across the country.

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Nationally renowned surgeons call St. Francis home

Six of the region's top surgeons inhabit the operating suites of St. Francis Heart Center. Applying talents they honed at medical schools such as Johns Hopkins, Harvard, Loyola and Georgetown, these heart and vascular surgeons are caring for a rapidly growing patient base.

For heart surgery, St. Francis partners with Chicago-based Cardiac Surgery Associates (CSA), the highest volume cardiac surgery group in the United States, bringing the talents of three

renowned heart surgeons to Indianapolis:

Dr. Nicola Francalancia, Dr. Marc Gerdisch and **Dr. Manesh Parikshak**. These skilled cardiothoracic surgeons expertly perform every type of procedure, from minimally invasive heart surgery to valve repair and replacement, to complex ventricular remodeling.

For vascular surgery, which treats diseases of the arteries and veins, St. Francis works with Indiana Vascular Institute (IVI), a practice operated by well-

known local surgeons **Dr. Michael Landis** and **Dr. Dawn Salvatore**. Together, this physician team has treated nearly 3,000 area patients through a wide range of vascular procedures, including diagnostic and surgical treatments for carotid artery and peripheral vascular disease, as well as the newest treatments for varicose veins. The Institute recently welcomed **Dr. Donald Patterson** as the newest member of the IVI team.



Visit www.heartattackcare.net to learn more about our revolutionary heart attack program. Then call 1-877-888-1777 to receive your FREE Healthy Heart Kit.