Division of Medicine

Department of Cardiology

Table of Contents:
Staff.............3
Research.........7
Quality.........18
Chairman’s Letter

One of the best ways to determine the quality of medical care is to measure patient outcomes by diagnosis or procedure. The Cleveland Clinic Florida Department of Cardiology is committed to not only providing the best possible outcomes, but also to sharing this information with the medical community and with the public.

We are pleased to present our first ever edition of “Cardiovascular Medicine Outcomes,” an abridged review of the Department’s results, trends, and treatment approaches. This resource underscores the hard work, commitment, and achievement of our many health care professionals.

Now entering my 18th year at Cleveland Clinic Florida, I am more enthusiastic than ever about our department. We bring together a group of dedicated health care professionals committed to world-class care in an environment conducive to research and education. Our multi-specialty group practice allows each of our physicians to focus in on what they do best — the practice of medicine. With talented colleagues and advanced diagnostic testing all available under one roof, this is a very efficient model for patient care.

Our relationship with Cleveland is special. For the past 12 consecutive years, U.S. News and World Report has selected Cleveland Clinic Foundation as the number 1 program in cardiovascular care. By adhering to the same Mission Statement and by following similar protocols, we are able to deliver world-class care here in Florida. For the occasional patient who presents with a problem best treated in Cleveland, there is a seamless transfer of information, which allows our patients to benefit from “cutting edge” technology.

In closing, I am very proud of what we have accomplished here in Florida. Our programs continue to grow. We provide high quality and complex medical care for both patients in our local community and for our many patients who have sought us out for tertiary care. In today’s information age, the Internet has allowed patients to carefully evaluate and compare services prior to making an educated choice about where they would like to be treated. We are proud to provide this information to the public and to our colleagues in the medical community.

Howard S. Bush, M.D. F.A.C.C.
Chairman, Department of Cardiovascular Medicine
Cleveland Clinic, Weston, Florida
Staff

Howard S. Bush, M.D., Chairman

Section of Echocardiography
- Gian Novaro M.D., Director
- Marianela Areces M.D.
- Craig Asher M.D.
- Cristiana Scridon M.D.

Section of Cardiac Pacing & Electrophysiology
- Sergio Pinski M.D., Director
- Marcelo Helguera M.D.

Section of Invasive and Interventional Cardiology
- Kenneth Fromkin M.D., Director
- Howard Bush M.D., Chairman, Department of Cardiovascular Medicine

Section of Cardiac Imaging, Nuclear Cardiology, CT Angiography
- Michael Shen M.D., Director

Section of Vascular Medicine
- Bernardo Fernandez M.D., Director (and CEO, Cleveland Clinic Florida)

Cardiovascular Surgery
- Douglas Boyd M.D., Section Head
- Mercedes Dullum M.D.

Cardiology Fellows (in training)
- Cyrus Kavasmaneck M.D. (PGY-6)
- Tudor Scridon M.D. (PGY-6)
- E. Viviana Navas M.D. (PGY-5)
- Neil Saxena M.D. (PGY-5)
- Fabian Arnaldo M.D. (PGY-4)
- Deepa Sangani M.D. (PGY-4)
The ICAEL was established with the support of the American Society of Echocardiography (ASE), the American College of Cardiology (ACC) and the Society of Pediatric Echocardiography (SOPE) to provide a peer review mechanism to encourage and recognize the provision of quality echocardiographic diagnostic evaluations by a process of voluntary accreditation. A non-profit organization, the ICAEL is dedicated to ensuring high quality patient care and promoting health care.

We are most proud of the fact that our echocardiographic laboratories here at Cleveland Clinic Florida were among the first in South Florida to receive accreditation by ICAEL. This not only ensures that our studies and results are of the highest quality, it has become a benchmark that many insurance companies are using prior to reimbursement.

Below are several graphs that depict the type, the number, and the continued growth of the non-invasive section here at Cleveland Clinic Florida:

**TREADMILL EXERCISE**

**STRESS TESTING**

Growth of stress testing at CCF Weston over the past 5 years. This remains a valuable non-invasive tool in the diagnosis and management of patients with either suspected or documented coronary artery disease.
EXERCISE STRESS ECHOCARDIOGRAMS

STRESS ECHO volume at CCF. All studies are interpreted by cardiologists with advanced training in imaging in our ICAEL accredited labs.

DOBUTAMINE STRESS ECHOCARDIOGRAMS

Pharmacologic stress testing remains a useful non invasive tool in patients unable to exercise on a treadmill.
TRANSTHORACIC ECHOCARDIOGRAMS

Echocardiograms performed in the ICAEL accredited labs and interpreted by cardiologists with training in advanced imaging.

TRANSESOPHAGEAL ECHOCARDIOGRAMS

TEE: continued growth of this important technology.
Research

Abdominal aortic aneurysm screening during transthoracic echocardiography: diagnostic accuracy of a cardiologist interpreter.

Cleveland Clinic Florida researchers were able to demonstrate the accuracy of a cardiologist in the screening of abdominal aortic aneurysms compared to a vascular medicine specialist. The study was presented at the American Society of Echocardiography meeting in Seattle, WA.

Blacks are less susceptible to atrial fibrillation despite an adverse risk profile: a meta-analysis.

In a large patient population of over 90,000 patients, researchers showed that the risk of atrial fibrillation in patients of black race is lower than that of Caucasians after an acute coronary event. The study was presented at the American College of Cardiology meeting in Atlanta, GA.

Cardiovascular emergencies in cruise ship passengers: clinical presentations and outcomes.

Cleveland Clinic Florida cardiologists reported on the outcomes of 100 patients who suffered a cardiac emergency while on a cruise ship. The analysis included the initial treatment strategies used, the overall patient outcomes, and suggested where cardiac therapies could be improved upon in the care of the cruise ship passenger. The study was presented at the American College of Cardiology meeting in New Orleans, LA.

Reclassification of patients for aggressive cholesterol treatment: additive value of CT angiography on NCEP guidelines in patients with hypercholesterolemia.

With the use of coronary CT angiography, researchers studied which patients referred to a cardiology practice might be reclassified based on their traditional risk factors to a higher risk group based on the results of the CT angiograms. The study was presented at the SCVCT meeting in Washington, DC.
Cardiac Rehabilitation Patients

Participants in our Cardiac Rehabilitation Program demonstrate improvements in body weight, percent body fat, blood pressure, and heart rate. The table shows the average entry and exit vital sign parameters of the 2006 program participants.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Entry</th>
<th>Exit</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systolic blood pressure (mmHg)</td>
<td>122</td>
<td>116</td>
<td>-5</td>
</tr>
<tr>
<td>Heart rate (beats per minute)</td>
<td>79</td>
<td>75</td>
<td>-5</td>
</tr>
</tbody>
</table>

OUTPATIENT CARDIAC REHABILITATION AT CCF

Section of Cardiac Pacing & Electrophysiology:

Sergio Pinski MD (Director)

Cardiac Arrhythmias

Device Implants
The Electrophysiology Lab utilizes the latest technology in devices including pacemakers (PM), implantable cardiac defibrillators (ICD), biventricular pacemakers (BIV PM) and biventricular ICDs (BIV ICD).

Device Lead Extractions
The most common indications for pacemaker and defibrillator lead extraction are: an infection which can not be cured without removal of the device and the leads, a blockage of the blood vessel the lead goes through, or an electrical malfunction of the lead wire or insulation.

To minimize trauma and damage to heart tissue, Cleveland Clinic electrophysiologists use an excimer laser to melt away the scar tissue encasing and trapping the leads inside the vein and heart. The laser is a less invasive approach to removing the leads and replaces heart surgery in most cases.

Although the lead extraction procedure is technically difficult and is associated with a risk of major complications, our data demonstrate that with the
appropriate training, tools and experience, the procedure can be performed with an excellent success rate. Our success rate is defined as removal of all of the required leads without causing bleeding from the veins or heart.

**Arrhythmia Monitoring Laboratory**
The Arrhythmia Monitoring Laboratory provides patients with all forms of heart monitoring recorders and transmitters. The Laboratory receives the monitor transmissions from patients around the world and provides the recorded data to the electrophysiology team. Information from the arrhythmia monitors is linked to the patient’s electronic medical record.

**Remote Pacemaker and ICD Follow-Up**
Traditional care of ICD and pacemaker patients required frequent in-person device follow-up visits. However, the ability to remotely evaluate ICD and pacemaker patient populations was added in 2006. This increased availability for remote follow-up transmissions positively impacts patients’ access to care.

**ELECTROCARDIOGRAMS AT CCF**

EKG’S: all are interpreted by our EP trained cardiologists, ensuring the most accurate reading.

Transtelephonic monitoring enables patients to transmit heart rhythm information to the electrophysiology team from home.
HOLTER MONITORS AT CCF

Ambulatory EKG monitoring: large volume of studies in the diagnosis and management of rhythm disorders

PACEMAKER CLINIC FOLLOW UP
The latest technology in the follow up of patients with pacemakers and defibrillators
Section of Vascular Medicine:

Bernardo Fernandez, MD (Director)

We are proud of the fact that our vascular medicine lab is accredited by the ICAVL. The ICAVL is dedicated to promoting high quality noninvasive vascular diagnostic testing in the delivery of health care by providing a peer review process of laboratory accreditation.

Committed to balancing the changing needs of both the vascular community and the general public, the ICAVL was created in 1990 by uniting physicians, technologists and sonographers from the sponsoring organizations. Collaborating together, those physicians, technologists and sonographers composed the body of work known as The Standards, an extensive document defining the minimal requirements for vascular laboratories to provide high quality care. Laboratories use The Standards as both a guideline and the foundation to create and achieve realistic quality care goals.

ICAVL Accreditation is offered in the following testing areas:

- Extracranial Cerebrovascular
- Intracranial Cerebrovascular
- Peripheral Arterial
- Peripheral Venous
- Visceral Vascular
- Screening

Non-Invasive Vascular Laboratory

The Non-invasive Vascular Laboratory provides services to inpatient and outpatient areas, and the testing includes:

- Arterial duplex ultrasound (carotid, renal, mesenteric, peripheral and graft surveillance)
- Venous duplex ultrasound of the upper and lower extremities
- Venous reflux testing
- Intra-operative duplex
- Non-invasive arterial physiologic testing (segmental pressures and pulse volume recordings)
• Measurement of carotid intimal-medial thickness (CIMT) – for clinical and research applications
The high quality of our laboratory has been recognized repeatedly with accreditation by the Intersocietal Commission for the Accreditation of Vascular Laboratories (ICAVL).

Outpatient Anticoagulation Program
Vascular Medicine specialists evaluate and manage hundreds of patients with complicated venous and arterial thrombotic disorders. These patients require strict monitoring through our Coumadin Clinic. A retrospective review was recently conducted to assess outcomes for compliance with instructions and complications from anticoagulation including recurrent thrombosis and bleeding events. Our bleeding complications and recurrent thrombosis rates are better than the national standards.

Specialties
Vascular Medicine specialists manage patients with the following conditions:
• Diffuse and premature atherosclerosis
• Peripheral arterial disease (PAD)
• Carotid artery disease
• Visceral ischemic syndromes
• Renovascular disease
• Arterial aneurysms
• Dissection of the aorta and other peripheral arteries
• Atheromatous embolization
• Deep venous thrombosis

• Pulmonary embolism
• Post thrombotic syndrome
• Chronic venous insufficiency
• Varicose and spider veins
• Hypercoagulable (thrombophilia) conditions
• Anticoagulants
• Lymphedema
• Vasculitis
• Thromboangiitis obliterans (Buerger's disease)
• Vasospastic diseases including Raynaud’s phenomenon
• Vascular diseases related to extremes in environmental temperature
• Leg ulcers
• Diabetic foot lesions
• Digital ulceration secondary to connective tissue disorders
• The swollen limb
• Pseudoaneurysms

Vascular Medicine Outpatient Clinic
Vascular Medicine provides consultative services for patients with a wide range of arterial, venous and lymphatic disorders. Our clinic also provides same day access for urgent evaluations and treatment of patients with all types of vascular problems, including acute venous thrombosis diagnosed in the outpatient Non-invasive Vascular Laboratory.
ACCURACY

CORRELATION OF VASC LAB WITH MRA OR ANGIO

<table>
<thead>
<tr>
<th>VASCULAR LOCATION</th>
<th>MRA</th>
<th>ANGIOS</th>
<th>MRA</th>
<th>ANGIOS</th>
<th>MRA</th>
<th>ANGIOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAROTIDS</td>
<td>100</td>
<td>94</td>
<td>97</td>
<td>80</td>
<td>100</td>
<td>94</td>
</tr>
<tr>
<td>RENALS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOWER EXTREMITIES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This ICAVL accredited laboratory continues to demonstrate excellent accuracy in the non invasive evaluation of patients with peripheral vascular disease.

VASCULAR LABORATORY OUTPATIENT VOLUME

The volume of outpatient procedures is constantly growing, a testimony of the trust of patients and physicians in the lab.
Section of Cardiac Imaging (Nuclear Cardiology & Cardiac CTA):

Michael Shen, MD FACC (section chief)

NUCLEAR STRESS TESTING AT CCF
We are proud that our Nuclear Cardiology Laboratory is among the 1st in Florida accredited by the ICNAL. Our dedicated cardiac nuclear camera is the 1st in Florida using state-of-art attenuation correction technology with great imaging quality. As one of the forefront imaging group in the US, our nuclear lab has been involving numerous clinical trials to improve accuracy to diagnose coronary disease early using new imaging protocols.

Our services include:
- Gated SPECT imaging using Tc99m-Sestamibi or Tc99m-Tetrofosmin
- Resting, redistribution, reinjection and delayed TI-201 SPECT imaging
- Equilibrium Radionuclide Angiography (MUGA)
- Exercise, Adenosine or Persantine stress testing

The 2nd generation of nuclear camera, dedicated for cardiac imaging with attenuation correction.
Attenuation correction make the images much more homogeneous and clear, which significantly increase accuracy for diagnosing coronary heart disease.

**CARDIAC CT ANGIOGRAPHY AT CCF**

Our Cardiac CTA laboratory is one of the first cardiac CTA programs in Florida and among the forefront of cardiac imaging centers in the US. We are very proud that we are not only use the cutting edge technology but also hold the 1st training program sponsored by ASNC in the US to educate physicians to learn the new technology. Our dedicated cardiac CTA team, Level III trained cardiologist, radiologists and technologists using state-of-art 64 slice multi-detector CT have been investigating new protocols and studies to improve patient care and quality. And we have diagnosed many rare diseases, refereed by other physicians or hospitals for second opinions. We are very proud to be the core lab of the nuclear imaging for the new multi-center trial, CT-STAT. This is the 1st one to study patients presented with chest pain in the emergency department randomized to either CTA or SPECT imaging. The trial will potentially revolutionize the speed, accuracy and practice triaging patients for acute cardiovascular disease with better outcomes and faster service.

A 29 years old female comes to us with chest pain, who evaluated by a cardiologist in the community without any definitive diagnosis. CT angiography demonstrated the most malignant type of coronary anomaly, which often causes sudden cardiac death.
The patient was referred to Cleveland Clinic Ohio to have a rare open-heart surgery, called unroofing. She is doing well after surgery.

**Section of Invasive and Interventional Cardiology:**

*Kenneth R. Fromkin, MD, FACC, FSCAI (Director)*

The section of Invasive and Interventional Cardiology consists of two full time triple board certified and fellowship trained interventional cardiologists who each perform over 250 interventions and over 400 diagnostic procedures annually. Additionally, 6 other community based affiliate physicians have privileges to perform procedures at our lab.

Our range of procedures includes diagnostic cardiac catheterizations, intravascular ultrasonography, intra-aortic balloon pumping, and all forms of percutaneous coronary artery intervention including balloon angioplasty, stents, cutting balloon angioplasty, rotational atherectomy, and Angiojet thrombectomy. We also perform peripheral arterial angiography and intervention. Our lab is active in teaching and in research and participates in IRB approved protocols.

In addition to a busy volume of traditional cath lab based procedures, we specialize in complex, difficult, and higher than usual risk percutaneous coronary interventions reflecting today’s growing population of sicker, older cardiac patients who have already had many prior cardiac procedures and surgeries and who require innovative approaches and treatment for their problems. Our lab is a referral center for such complex procedures, with patients coming from around the region, the state, and the Caribbean.

Working together with our cardiac surgeons, we have helped to pioneer hybrid coronary artery revascularization strategies, which often allow us to more completely revascularize high-risk patients with reduced procedural morbidity and mortality. These procedures combine minimally invasive, often robotically assisted, single vessel left internal mammary artery bypass grafting procedures with percutaneous coronary intervention of additional vessels. This has allowed for reduced peri-procedural risk and reduced recovery periods in selected higher risk surgical patients. We have reported on our results in peer reviewed literature and have had featured presentations on this topic at national cardiology meetings.

In accordance with best practice guidelines, we treat all of our patients presenting with acute ST segment elevation MI by performing emergent cardiac catheterization and primary percutaneous coronary intervention as indicated, regardless of the time of day or the day of the year, and unlike many hospitals, we do so in a cardiac catheterization laboratory which is fully equipped and staffed for interventions and which has full CT surgery backup. Our door to balloon times are some of the shortest in the country and reflect the commitment of our combined cardiac, ER, and cath lab team and of our interventional cardiologists who both live within 7
minutes of the hospital. These times have been further reduced by our routine use of pre-hospital EKG transmission, which often allows activation of our team before the patient has even arrived at our center.

We are also very aggressive in the treatment of patients with acute coronary syndromes and non ST segment elevation MIs and follow the best practice model of ‘early aggressive’ use of the cath lab for these patients, with prompt catheterization and revascularization as may be indicated.

We were an early participant in the CRUSADE registry, which measured participating centers’ adherence to the practice of evidence based and guidelines based medicine. We are proud to have achieved top scores in this registry, and were number 1 in the country out of 431 participating centers for two quarters in a row.

Our success in the area of Invasive and Interventional Cardiology comes from our commitment to quality, adherence to evidence based guidelines, commitment to education, teaching, research, and innovation in our field, and in our team approach to solving complex problems.

Cardiology Fellowship Program:

Craig Asher, MD FACC (Program Director)

The training of a physician is a long process that takes many years of commitment. Today, a cardiologist has attended undergraduate school for 4 years, medical school for 4 years, an internal medicine residency for 3 years, and then 3 years of advanced training in a cardiology fellowship program. Our program is now entering its 4th year, and we currently have 6 physicians in the program. Each year, we receive hundreds of applications from around the world, and we feel fortunate that we are able to attract such intelligent and hard working candidates.

Medicine is a wonderful career, and to be able to share one’s knowledge and experience with the next generation of physicians is truly a privilege. Training programs provide staff physician’s added excitement and challenges each day, and it ensures the patient will receive the most comprehensive care possible. As part of their training, they are encouraged to pursue academic areas of interest, and this has resulted in numerous publications in peer reviewed journals and presentations at national society meetings.
• ACGME approved: Initiated 7/04

• Fellowship Director: Craig Asher MD FACC

• 3 yr program:

Current fellows (prior residency)

1st yr: Fabian Arnaldo (Univ. of FL)
   Deepa Sangani (Case Western)

2nd yr: Viviana Navas (Cleveland Clinic FL)
   Neil Saxena (Univ. of Pittsburg)

3rd yr: Tudor Scridon (Cleveland Clinic FL)
   Cyrus Kavasmaneck (Univ. of FL)

Recent Graduates (2007):

- Vinod Miryala – Private practice (Ocala, FL)
- Aparna Cherla – EP fellowship (Univ. of VA)
- Soufian Almahameed – EP fellowship (Brown Univ.)


- Book chapters - 4
- Manuscripts - 7
- Abstracts – 8

Accomplishments: Awards

- American College of Cardiology / FLA Chapter Young Investigator Research Competition 2006 - Tudor Scridon MD:

ACCOMPLISHMENTS: PRESENTATIONS

• Aparna Cherla: *Heart Rhythm Society 2006, Boston, MA. Oral presentation*

• Tudor Scridon: *Heart Rhythm Society 2007, Denver CO. Poster Presentation.*

• Soufian Almahameed: *American College of Cardiology 2007, New Orleans, LA. Poster presentation.*


Working rounds in the SICU.
The department of Health and Human Services (HHS) has started to keep track of the performance of all the hospitals in the country. Naturally, the care of the cardiac patient is an important aspect of this data collection. Below you will find a description of Hospital Compare and the complete report of the HSS on the Cardiological Care Cleveland Clinic Florida.

Hospital Compare: A quality tool for adults, including people with Medicare

Hospital Compare: this tool provides you with information on how well the hospitals in your area care for all their adult patients with certain medical conditions. Hospital Compare was created through the efforts of the Centers for Medicare and Medicaid Services (CMS), the Department of Health and Human Services, and other members of the Hospital Quality Alliance: Improving Care Through Information (HQA). The information on this website (medicare.gov) has been provided primarily by hospitals that have agreed to submit quality information for Hospital Compare to make public.

This information will help you compare the quality of care hospitals provide. Talk to your doctor about this information to help you, your family and your friends make your best hospital care decisions. The information below is available from medicare.gov, and this allows the general public to evaluate carefully the care they are receiving from a particular hospital, and compare this with hospitals both locally and nationally. The original report deals with 4 disease states: heart attacks (MI), congestive heart failure (CHF), pneumonia, and surgical complications. We are particularly proud of our results, and we feel confident that this translates into the improved outcomes that people have come to expect from The Cleveland Clinic.

Percent of Heart Attack Patients Given ACE Inhibitor or ARB for Left Ventricular Systolic Dysfunction (LVSD)

The rates displayed in this graph are from data reported for discharges October 2005 through September 2006.
ACE (angiotensin converting enzyme) inhibitors and ARBs (angiotensin receptor blockers) are medicines used to treat patients with heart failure and are particularly beneficial in those patients with heart failure and decreased function of the left side of the heart. Early treatment with ACE inhibitors and ARBs in patients who have heart failure symptoms or decreased heart function after a heart attack can also reduce their risk of death from future heart attacks. ACE inhibitors and ARBs work by limiting the effects of a hormone that narrows blood vessels, and may thus lower blood pressure and reduce the work the heart has to perform. Since the ways in which these two kinds of drugs work are different, your doctor will decide which drug is most appropriate for you. If you have a heart attack and/or heart failure, you should get a prescription for ACE inhibitors or ARBs if you have decreased heart function before you leave the hospital.

Percent of Heart Attack Patients Given Aspirin at Arrival

The rates displayed in this graph are from data reported for discharges October 2005 through September 2006.
Why is this Important?

The heart is a muscle that gets oxygen through blood vessels. Sometimes blood clots can block these blood vessels, and the heart can’t get enough oxygen. This can cause a heart attack. Chewing an aspirin as soon as symptoms of a heart attack begin may help reduce the severity of the attack. This chart shows the percent of heart attack patients who were given (or took) aspirin within 24 hours of arrival at the hospital.

Higher percentages are better.

Percent of Heart Attack Patients Given Aspirin at Discharge

The rates displayed in this graph are from data reported for discharges October 2005 through September 2006.

Why is this Important?

Blood clots can block blood vessels. Aspirin can help prevent blood clots from forming or help dissolve blood clots that have formed. Following a heart attack, continued use of aspirin may help reduce the risk of another heart attack. Aspirin can have side effects like stomach inflammation, bleeding, or allergic reactions. Talk to your health care provider before using aspirin on a regular basis to make sure it’s safe for you.

Higher percentages are better.

Percent of Heart Attack Patients Given Beta Blocker at Arrival

The rates displayed in this graph are from data reported for discharges October 2005 through September 2006.
Beta-blockers are a type of medicine that is used to lower blood pressure, treat chest pain (angina) and heart failure, and to help prevent a heart attack. Beta-blockers relieve the stress on the heart by slowing the heart rate and reducing the force with which the heart muscle contracts (to pump blood). Most heart attack patients should be given a beta-blocker within 24 hours of arriving at the hospital.

Higher percentages are better.

**Percent of Heart Attack Patients Given Beta Blocker at Discharge**

The rates displayed in this graph are from data reported for discharges October 2005 through September 2006.

Beta-blockers are a type of medicine that is used to lower blood pressure, treat chest pain (angina) and heart failure, and to help prevent a heart attack. Beta-blockers relieve the stress on your heart by slowing the heart rate and reducing the force with which your heart muscles contract to pump blood. They also help keep blood vessels from constricting in your heart, brain, and body. If you have a heart attack, you should get a prescription for a beta-blocker before you leave the hospital.

Higher percentages are better.

**Percent of Heart Attack Patients Given Smoking Cessation Advice/Counseling**

The rates displayed in this graph are from data reported for discharges October 2005 through September 2006.
Why is this Important?

Smoking increases your risk for developing blood clots and heart disease that can result in a heart attack, heart failure or stroke. Smoking causes your arteries to thicken and your blood vessels to narrow. Fat and plaque stick to the walls of your arteries, which makes it harder for blood to flow. Reduced blood flow to your heart may result in chest pain, high blood pressure, and an increased heart rate. Smoking is also linked to lung disease and cancer, and can cause premature death. It is important that you get information to help you quit smoking before you leave the hospital. Quitting may help prevent another heart attack.

Higher percentages are better.

Percent of Heart Failure Patients Given ACE Inhibitor or ARB for Left Ventricular Systolic Dysfunction (LVSD)

The rates displayed in this graph are from data reported for discharges October 2005 through September 2006.

Why is this Important?

ACE (angiotensin converting enzyme) inhibitors and ARBs (angiotensin receptor blockers) are medicines used to treat patients with heart failure and are particularly beneficial in those patients with heart failure and decreased function of the left side of the heart. Early treatment with ACE inhibitors and ARBs in patients who have heart failure symptoms or decreased heart function after a heart attack can also reduce their risk of death from future heart attacks. ACE inhibitors and ARBs work by limiting the effects of a hormone that narrows blood vessels, and may thus lower blood pressure and reduce the work the heart has to perform. Since the ways in which these two kinds of drugs work are different, your doctor will
decide which drug is most appropriate for you. If you have a heart attack and/or heart failure, you should get a prescription for ACE inhibitors or ARBs if you have decreased heart function before you leave the hospital.

**Percent of Heart Failure Patients Given an Evaluation of Left Ventricular Systolic (LVS) Function**

The rates displayed in this graph are from data reported for discharges October 2005 through September 2006.

**Why is this important?**

- The proper treatment for heart failure depends on what area of your heart is affected. An important test is to check how your heart is pumping, called an “evaluation of the left ventricular systolic function.” It can tell your health care provider whether the left side of your heart is pumping properly. Other ways to check on how your heart is pumping include: your medical history
  - a physical examination
  - listening to your heart sounds
  - other tests as ordered by a physician (like an ECG (electrocardiogram), chest x-ray, blood work, and an echocardiogram)

Higher percentages are better.

**Percent of Heart Failure Patients Given Discharge Instructions**

The rates displayed in this graph are from data reported for discharges October 2005 through September 2006.
Why is this Important?

Heart failure is a chronic condition. It results in symptoms such as shortness of breath, dizziness, and fatigue. Before you leave the hospital, the staff at the hospital should provide you with information to help you manage the symptoms after you get home.

The information should include:

- your activity level (what you can and can’t do)
- diet (what you should, and shouldn’t eat or drink)
- medications
- follow-up appointment
- watching your daily weight
- what to do if your symptoms get worse

Higher percentages are better.

Patient Feedback

We are committed to providing the best care, not only in terms of quality, but also in terms of professionalism, timeliness, and compassion. Below are the results of the feedback that our patients have given to the physicians in the department of cardiology. We are very sensitive to these areas, and this type of information allows us to stay in touch with the needs and the perceptions of our patients.
Rating Quality of Care (by Department) Boolean Search (N=363)

Frequency (%)

- Poor: 1%
- Good/Fair: 5%
- Excellent/Very Good: 94%