



# 2010 OVERVIEW AND OUTCOMES REPORT

Minneapolis Heart Institute®  
at Abbott Northwestern Hospital







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# 2010 OVERVIEW AND OUTCOMES REPORT

Minneapolis Heart Institute®  
at Abbott Northwestern Hospital

## INTEGRATED CARDIOVASCULAR CARE: A MODEL FOR EXCEPTIONAL PATIENT CARE

A letter from Kevin Graham, MD, and David Hurrell, MD



Minneapolis Heart Institute®'s Level One Heart Attack Program resulted in a 50 percent decrease in acute myocardial infarction mortality and has changed how cardiovascular emergencies are treated in the United States.

Colleagues—

We are now facing the greatest changes in the delivery of cardiovascular care we have ever witnessed. The challenge of providing exceptional patient care under these conditions requires new approaches that address the breadth of these changes. Integrated cardiovascular care, the approach taken by the Minneapolis Heart Institute® at Abbott Northwestern Hospital, serves as a model to improve care and better serve our communities.

Over the years, many have asked how the Minneapolis Heart Institute® at Abbott Northwestern Hospital has integrated its cardiovascular specialists, dedicated staff, primary care partners, emergency medical personnel and, ultimately, its patients into a unique cardiovascular health care delivery system.

These themes are core to our mission:

### **QUALITY CARE DELIVERED AT THE RIGHT TIME, IN THE RIGHT SETTING**

Our collaboration with 33 regional partner clinics and hospitals reflects the importance of delivering great patient care at the most appropriate point in our Cardiovascular System of Care. While our tertiary and quaternary services are strategically concentrated at Abbott Northwestern in Minneapolis, physicians from across the state partner with us to provide state-of-the-art cardiovascular care to patients in their home communities.

### **SYSTEMS OF CARE**

Physicians, hospital staff, emergency teams and patients make this an exceptionally effective system of care, based on their mutual respect and a desire for great outcomes. In 2003, we embarked on the novel Level One Heart Attack Program, armed with promising European

outcomes data and the trust of our more-than-30 regional community partners. The result was an astounding 50 percent decrease in acute myocardial infarction (MI) mortality. This program has forever changed how cardiovascular emergencies are treated in the United States.

### **INCLUSION, INNOVATION AND AN ENTREPRENEURIAL SPIRIT**

*Everyone's* opinion is heard. Important changes are implemented quickly through our integrated clinical and business network, under the direction of our cardiovascular specialists.

### **UNCOMPROMISING QUALITY**

Providing quality care to patients depends on continual, meaningful quality measures. Our fully integrated electronic medical record, patient data and procedural statistics are maintained within an expansive data warehouse. Detailed reports are routinely tracked and shared with all partners to review key quality measures and identify process improvements.

### **DEDICATION TO RESEARCH AND EDUCATION**

Through our partnership with the Minneapolis Heart Institute Foundation, cutting-edge clinical research and education blur the line between today's advanced clinical practice and tomorrow's possibilities. This combination dynamically energizes our program.

With this report, we are pleased to share our 30-year journey toward truly integrated cardiovascular care. We are proud of our contribution to decreased cardiovascular mortality and morbidity and improved cardiovascular care worldwide. The collaborative partnerships and outstanding quality built into our integrated care model were developed by physicians and other providers—not mandated by the government or insurance companies. This is our model for great cardiovascular care. We welcome your comments and collaboration.

Warmest personal regards,

#### **Kevin J. Graham, MD, FACC**

Director, Preventive Cardiology Clinic  
President, Minneapolis Heart Institute®  
Abbott Northwestern Hospital  
kgraham@mplsheart.com  
612-863-3796

#### **David G. Hurrell, MD, FACC**

Medical Director, Quality  
Minneapolis Heart Institute®  
Abbott Northwestern Hospital  
dhurrell@mplsheart.com  
612-863-3900



Kevin J. Graham, MD, FACC



David G. Hurrell, MD, FACC

The collaborative partnerships and outstanding quality built into our integrated care model were developed by physicians and other providers—not mandated by the government or insurance companies.

## COMMUNITY PARTNERSHIP AND CARDIOVASCULAR EDUCATION



The Minneapolis Heart Institute® offers continuing medical education on the most current topics in cardiovascular care. Staff members also participate in a wide range of community education events.



physician in their hometown clinic, or to one of the highly specialized quaternary programs concentrated at Abbott Northwestern in Minneapolis, primary and referring physicians are kept closely apprised of their patients' progress throughout the continuum of care.

### SHARING KNOWLEDGE, REINFORCING RELATIONSHIPS

Programs like Evening of Cardiology, Meet and Greet Lunches and other physician events allow provider partners and Minneapolis Heart Institute® physicians the chance to share knowledge and reinforce their strong relationships. Popular community education events and exhibits feature medical staff from partner communities and the Minneapolis Heart Institute®.

### PARTNERS IN EXCELLENCE – OFFERING WORLD CLASS CARE IN A COMMUNITY SETTING

When the Minneapolis Heart Institute® at Abbott Northwestern was established more than 30 years ago, the founding physicians believed that the best place for patients to be treated was in their own communities. Today, that is still true. Minneapolis Heart Institute® physicians, advanced cardiovascular imaging staff and care team members travel to more than 33 communities throughout Minnesota and western Wisconsin, partnering with local physicians and bringing top-rated cardiovascular support, services and resources close to home.

Strong relationships and thorough communication with partnering physicians are paramount. Whether patients are referred to a Minneapolis Heart Institute®

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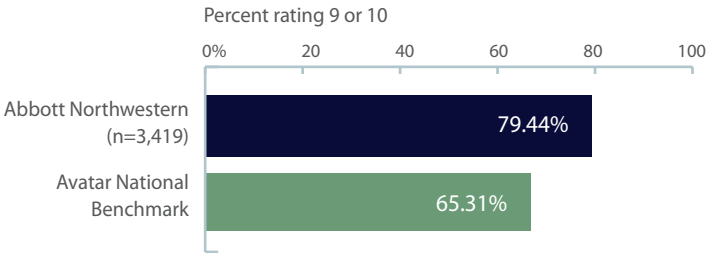
**Educating the Community About Heart Health**  
In 2009, Minneapolis Heart Institute® staff participated in 114 community education events around the state.



# PATIENT SATISFACTION

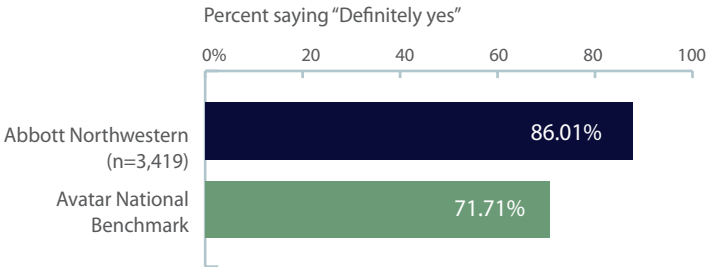
## 2009 CARDIOVASCULAR INPATIENT SATISFACTION SURVEY

Using any number from 0 to 10 where 10 is the best hospital possible, what number would you use to rate this hospital during your stay?



## 2009 CARDIOVASCULAR INPATIENT SATISFACTION SURVEY

Would you recommend this hospital to your friends and family?



### 2009 CARDIOVASCULAR OUTPATIENT SATISFACTION SURVEY:

**90 percent** of patients rated their clinic visits as Excellent or Very Good. **90 percent** of patients indicated that they are Extremely Likely or Very Likely to recommend the clinic to family or friends.

### Inpatient Satisfaction Survey

The Minneapolis Heart Institute® at Abbott Northwestern Hospital uses the Healthcare Consumer Assessment of Hospital and Provider Services (HCAHPS) survey to monitor inpatient satisfaction. The HCAHPS survey, required by the Centers for Medicare and Medicaid Services, allows direct comparison of the cardiovascular inpatients' experience with results from other institutions. The Avatar benchmarks shown here reflect HCAHPS results from approximately 400 hospitals nationwide.

Although patients indicate that the cardiovascular hospital care is excellent, physicians and staff are committed to continuous quality improvement and use the survey results to work toward this goal.



The Level One Heart Attack Program is the cornerstone of the Minneapolis Heart Institute®'s Cardiovascular Emergency Services.

## CENTERS OF EXCELLENCE

### The First Comprehensive Level One Cardiovascular Emergency Center

#### **Level One Heart Attack Program— One Network, 33 Partnerships, Thousands of Lives**

In 2003, 30 community hospitals throughout Minnesota partnered with the Minneapolis Heart Institute® to change how heart attacks would be treated. Today, this network plays a critical role in the program's success—now the gold standard for how MI should be diagnosed and quickly treated across the country. The Level One Heart Attack Program is the cornerstone of the Minneapolis Heart Institute®'s Cardiovascular Emergency Services.

#### **TRACKING OUTCOMES, SHARING SUCCESS**

Tracking quality metrics is an integral part of the comprehensive Level One Heart Attack Program. The data collected on cardiovascular emergency services provides feedback to physicians and care team members on patient outcomes and helps identify areas of process improvement. Minneapolis Heart Institute® staff have facilitated Level One methodology training sessions for more than 200 centers nationally and have published Level One outcomes extensively in peer-reviewed journals.

## FULL SPECTRUM OF EMERGENCY CARE

Rapid response, coordinated care and round-the-clock specialist availability are leveraged in the Level One Heart Attack Program and replicated to care for patients with other cardiovascular emergencies.

### LEVEL ONE HEART ATTACK PROGRAM

The goal is 90 minutes or less from a local emergency department to the start of life-saving angioplasty at Abbott Northwestern. This is achieved through a standardized process with statewide emergency care providers who stabilize the patient and establish a treatment plan even before the patient arrives in Minneapolis. When a Level One emergency is declared, all systems and personnel are set in motion, communication is frequent and thorough, and the patient is transported directly from the helipad to a waiting, expert angioplasty team – anytime day or night.

### THERAPEUTIC HYPOTHERMIA FOR CARDIAC ARREST

Minneapolis Heart Institute® pioneered the collaborative Cool It protocol and was the first to simultaneously combine transport, emergency angioplasty and cooling.

The core body temperature of a patient resuscitated after cardiac arrest is cooled to 33°C to reduce the risk of permanent neurological damage.

### AORTIC DISSECTION

Because aortic dissection is relatively rare, education among Minneapolis Heart Institute® regional network partners about how to distinguish aortic dissection from MI is critical. Protocols for prompt diagnosis and interpretation, then rapid transport of patients with aortic dissection to a waiting team of cardiovascular surgeons, cardiologists and intensivists, have dramatically decreased treatment times and reduced mortality by 50 percent.

### CRITICAL LIMB ISCHEMIA

Treatment algorithms are available at [mplsheart.com](http://mplsheart.com) for all cardiovascular emergencies. The critical limb ischemia algorithm is designed to help referring physicians promptly establish ischemic etiology. If the patient is at risk for impending limb loss, the protocol directs transfer for emergent therapy provided by the Minneapolis Heart Institute® vascular surgery team.

### ABDOMINAL AORTIC ANEURYSM (AAA)

Following the lead established by the Level One Heart Attack Program, Minneapolis Heart Institute® established a protocol for emergency AAA repair. The result? The average time required to diagnose AAA was reduced by more than 30 minutes, and the average time from diagnosis to surgical incision or stenting was reduced by more than an hour.

### NON-STEMI AND UNSTABLE ANGINA

Abbott Northwestern's Chest Pain Program applies protocol-based care to reduce variations in treatment and create a more efficient way to treat Minneapolis Heart Institute® patients with acute coronary syndrome. One of the first multi-hospital initiatives for this condition nationwide, the program clearly identifies which patients need to be transferred to Abbott Northwestern and which can remain in their community for testing and follow-up.

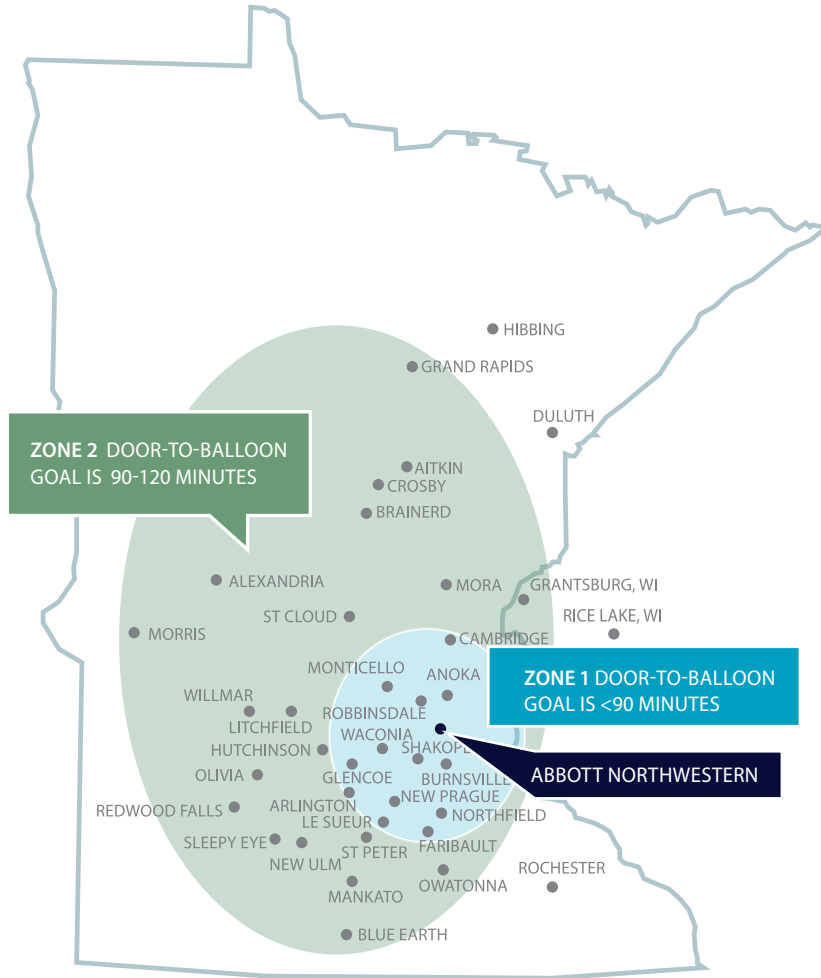


Working as partners, outstate emergency physicians and staff, air and ground emergency medicine crews, physicians and Abbott Northwestern staff collaborate to examine details, eliminate obstacles and educate each other. The result is a streamlined process of accessing and delivering emergency care with excellent patient outcomes.

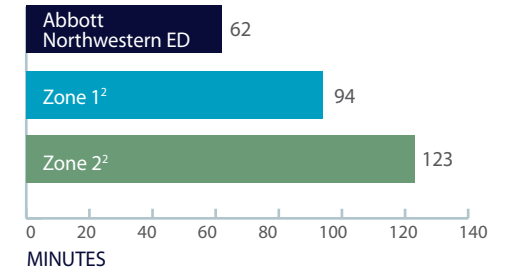


### CARDIOVASCULAR EMERGENCY PROTOCOLS AT MPLSHEART.COM

A link to download and print Cardiovascular Emergency Protocols is available on the home page at [mplsheart.com](http://mplsheart.com). The protocols for abdominal aortic aneurysm, acute coronary syndrome, critical limb ischemia, aortic dissection, Level One heart attack and therapeutic hypothermia for cardiac arrest include algorithms, order sets, fax cover sheets, transfer instructions and other information necessary for treatment and transport.

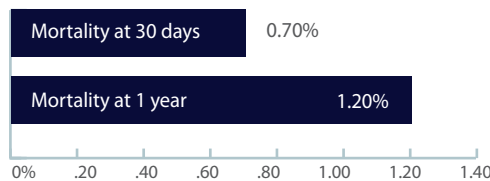


**LEVEL ONE DOOR-TO-BALLOON MEDIAN TIME (MINUTES)<sup>1</sup>**  
**MARCH 1, 2003 – DEC 31, 2009**  
 (n=2,639)



1. Minutes from patient presentation at the ED to balloon inflation.
2. Zone 1 Hospitals: 22-60 miles from Abbott Northwestern;  
Zone 2 Hospitals: 61-90 miles from Abbott Northwestern.

**LEVEL ONE MORTALITY**  
**MARCH 1, 2003 – DEC 31, 2009 (n=2,639)**



1. No significant difference between any given group (ANW ED, Zone 1, Zone 2).
2. Excludes patients with cardiac arrest, cardiogenic shock, age ≥ 80 or cause of death that is non-cardiac related.

Acute myocardial infarction mortality decreased by 50 percent—not because of new technology but because people are working together for the patient.



## Center for Coronary Therapeutics

### WRITING THE NATIONAL STANDARDS

Since 2003, the Minneapolis Heart Institute®'s interventional cardiologists have played a life-saving role in the largest Level One heart attack network in the United States. By air or ground transport, day or night, weekday or holiday, patients are brought directly to the Catheterization Lab where a full interventional team is waiting—ready to save minutes and lives. Working with its regional partners, the Minneapolis Heart Institute® has rewritten the rules for treatment of heart attack.

### 2009 CATHETERIZATION LAB VOLUME

Diagnostic procedures	4,231
Interventional procedures	1,994
• Angioplasties, atherectomies, stents	1,901
• Percutaneous valvuloplasties	67
• Percutaneous atrial septal defect repairs and patent foramen ovale closures	26
<b>Total procedures</b>	<b>6,225</b>

### 2009 PROCEDURES WITH STENTS

Interventional procedures with stents	1,901
• Percentage with drug-eluting stents (1,525)	80%
• Percentage with bare metal stents (374)	20%

Other leading interventional treatments include:

- therapeutic hypothermia administered in the Catheterization Lab
- acute primary coronary intervention in high risk myocardial infarction
- novel treatment for chronic total occlusion
- percutaneous atrial septal defect/patent foramen ovale closure
- stem cell infusion for myocardial regeneration
- coronary and intramyocardial gene therapy delivery.

### QUALITY, COORDINATED CARE

Patients can expect high quality, well-coordinated care, whether that care starts in the Twin Cities or in another Minnesota or Wisconsin community. The high volume of percutaneous interventions (more than 2,000 per year) performed by Minneapolis Heart Institute® cardiologists is a measure of superior outcomes. Adept communication with partnering physicians, patients and families enhances long-term treatment success.



Open-heart surgery is the most prescribed and most effective treatment for valvular disease, with a long record of success.

## Center for Structural and Valvular Heart Disease

### **COMPLEX VALVE DISORDER PROGRAM** Full Spectrum of Options—Including Investigational Approaches

The Minneapolis Heart Institute® Complex Valve Disorder Program staff comprises subspecialty interventional cardiologists, cardiothoracic surgeons and cardiovascular imaging experts who focus on caring for patients with valve disease. Working in concert, they deliver the full spectrum of medical, interventional and surgical options including investigational approaches that are provided at only a few centers in the country.

### **TRANSCATHETER TREATMENT OF VALVULAR AND OTHER STRUCTURAL HEART DISEASE**

As advanced treatments for multiple diseases allow people to live longer, degenerative valvular heart disease has become a major source of morbidity and mortality in otherwise healthy octogenarians and nonagenarians. This expanding population of patients, who face higher risks from open-heart surgery, has led to significant innovation in less invasive valve

procedures. Minneapolis Heart Institute® cardiologists are national leaders in the new field of transcatheter valve treatments. Percutaneous treatment provides alternatives for many elderly patients with severe, symptomatic aortic stenosis that currently goes untreated.

Originally, balloon aortic valvuloplasty relieved symptoms, improved function and involved minimal recovery post-procedure. Now, the Minneapolis Heart Institute® is one of a few sites nationwide to investigate percutaneous aortic valve implantation through a catheter.

In addition, percutaneous mitral repair devices are emerging as a novel method for treating patients with severe mitral regurgitation. For more than two years, interventional cardiologists have been repairing mitral valves using an investigational transcatheter approach. Patients come from a five-state area to be evaluated for treatment with this innovative approach.

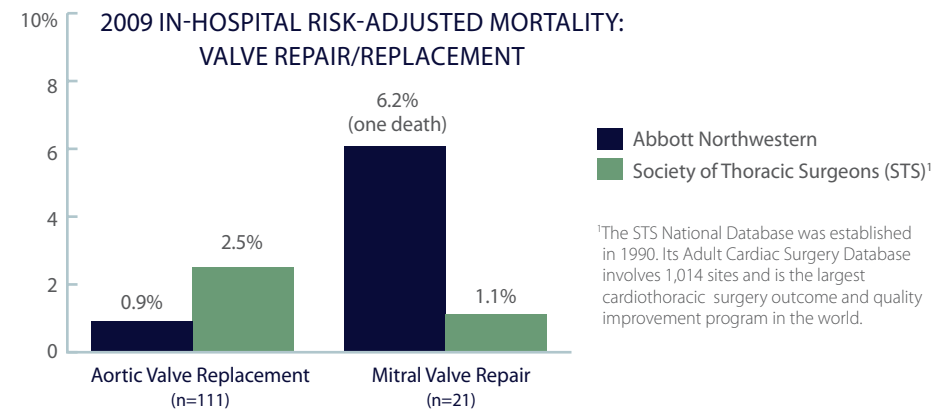
## SURGICAL TREATMENT OF VALVULAR HEART DISEASE

Open-heart surgery is the most prescribed and most effective treatment for valvular disease, with a long record of success. Cardiothoracic surgeons at the Minneapolis Heart Institute® offer patients leading-edge surgical techniques like complex mitral valve repair. For patients who need valve replacement, newer prosthetic valve choices—including investigational devices—are offered. Surgeons also perform minimally invasive valve procedures such as “keyhole” and port access procedures.

No matter the complexity or risk encountered by patients with valvular disease, the expert cardiologists, cardiothoracic surgeons and cardiovascular imaging specialists of the Complex Valve Disorder Program offer patients an integrated approach to care and research. A valve nurse coordinator and subspecialty physicians are available around the clock to answer referring physicians’ questions, help determine if a patient is a candidate for a trial or schedule a clinic appointment.



Cardiothoracic surgeons at the Minneapolis Heart Institute® can provide the latest generation of mechanical and tissue valves and work closely with cardiologists and cardiovascular imaging specialists to treat complex valvular disease.



## 65 Adult Valvuloplasty cases in 2009

From 2007 to 2010, 19 patients were enrolled in Everest II randomized clinical trials;  
12 patients received E-Clips.



## Cardiothoracic Surgical Services

### SUPERIOR OUTCOMES

Equipped with the latest in surgical techniques, advanced clinical research and collaborative relationships with a range of cardiovascular specialists, the cardiothoracic surgeons at Minneapolis Heart Institute® provide patients with current, comprehensive therapies that lead to superior outcomes. The hospital and patient care areas are specifically designed to serve the needs of cardiovascular patients and are staffed by highly skilled intensive care teams. This model offers the careful attention that patients with complex medical conditions need.

### DEPTH OF EXPERTISE

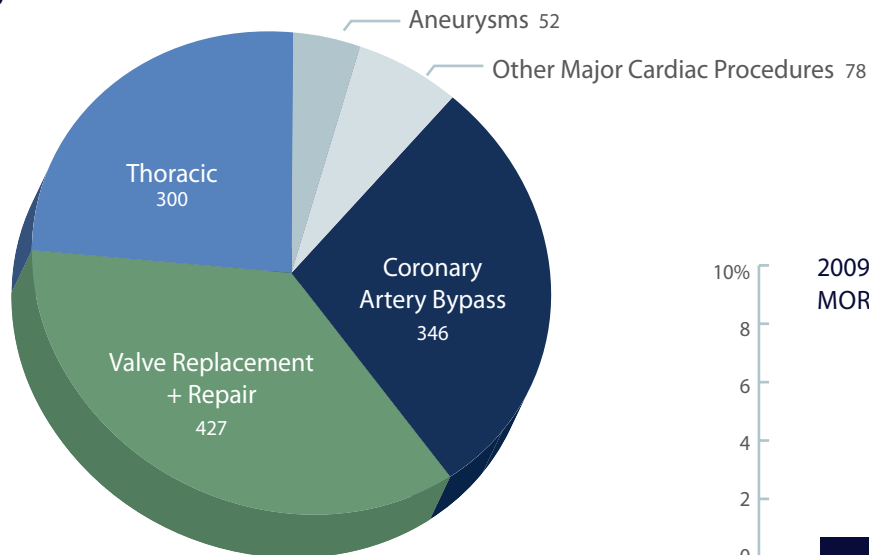
With nearly 100 years of combined experience, Minneapolis Heart Institute® cardiothoracic surgeons offer expertise and options that surgeons at few other hospitals in the region can offer. Minneapolis Heart Institute® cardiothoracic surgeons perform complex surgical interventions including:

- complex valve repair and replacement
- atrial fibrillation surgery
- aortic aneurysm and dissection surgery
- high risk coronary artery bypass
- less invasive approaches to conventional surgery
- heart transplantation
- ventricular assist devices for end-stage heart failure
- hybrid procedures in partnership with interventional cardiologists
- adult congenital heart surgery
- thoracic surgery including lung cancer and video-assisted procedures.

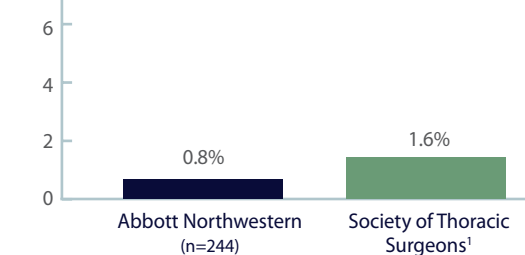
Throughout a patient's care, from initial consult to follow-up, Minneapolis Heart Institute® surgeons are committed to maintaining close and thorough communication with patients, families and referring physicians.

### 2009 Surgical Procedures

Total: 1,203



### 2009 IN-HOSPITAL RISK-ADJUSTED MORTALITY: ISOLATED CORONARY ARTERY BYPASS GRAFT



<sup>1</sup>The STS National Database was established in 1990. Its Adult Cardiac Surgery Database involves 1,014 sites and is the largest cardiothoracic surgery outcome and quality improvement program in the world.

## Center for Advanced Heart Failure Treatment

### HEART FAILURE TREATMENT AND MANAGEMENT – A TEAM APPROACH

For the growing number of patients with advanced heart failure, successful outcomes depend on consistent, evidence-based clinical management and expert heart failure practitioners. The highly skilled multidisciplinary team at the Center for Advanced Heart Failure Treatment delivers comprehensive care for the most complex, end-stage heart failure patients. The team includes:

- specialized cardiologists who are board certified in Advanced Heart Failure Therapies and Transplant
- cardiothoracic surgeons
- doctors of pharmacy
- certified nurse practitioners and physician assistants
- nurses, including specialized care coordinators
- dietitians
- social workers
- exercise physiologists
- support staff.



Physicians from the Advanced Heart Failure Treatment team with three patients who recently received ventricular assist devices (VADs) as destination therapy.

### FULL RANGE OF THERAPEUTIC OPTIONS

The Minneapolis Heart Institute®'s advanced heart failure specialists provide patients with the full spectrum of therapeutic options, from traditional treatment to breakthrough approaches on the forefront of technology.

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**Minneapolis Heart Institute® physicians are in close communication with partnering physicians throughout the patient's care—from diagnosis of early heart failure through advanced treatment. They are available 24/7 to discuss any heart failure concerns.**

### ADVANCED HEART FAILURE THERAPIES

#### Immediate Transfer of Patients in Cardiogenic Shock

Patients in cardiogenic shock who require advanced mechanical support benefit from the rapid response and transfer protocols that are supported by the Minneapolis Heart Institute®'s established network of partner community hospitals and its highly skilled and experienced clinical team.

#### Heart Transplantation

When tailored medical therapy is not enough, heart transplantation may offer a life-saving treatment option for patients with end-stage heart failure. More than 300 transplant procedures have been performed at the Minneapolis Heart Institute® at Abbott Northwestern Hospital.

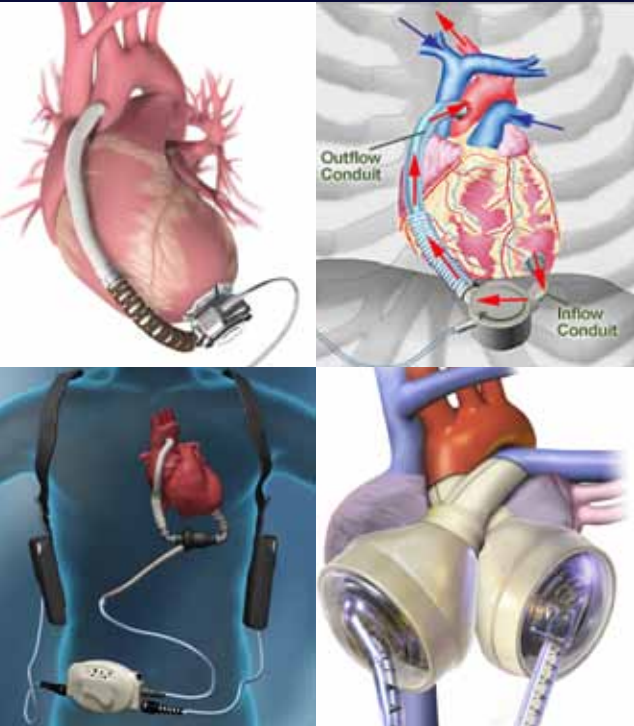
#### Ventricular Assist Devices (VADs)

A variety of temporary and long-term mechanical circulatory support devices are available, specific to each patient's need. These devices are an important option as a bridge to cardiovascular recovery, a bridge to transplantation or as a destination therapy for permanent support.

#### Pioneering Research

With the support of the Minneapolis Heart Institute Foundation, advanced heart failure specialists are involved in FDA-approved and NIH-sponsored trials for:

- novel heart failure therapies
- new generation VADs
- adult stem cell angiogenesis
- transplantation.

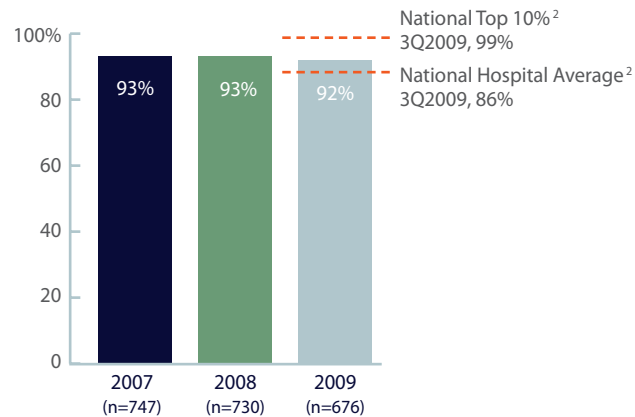


Design improvements in the latest generation of left ventricular assist devices have made them smaller and more durable, leading to new treatment options for heart failure patients. The variety of circulatory support systems available at the Minneapolis Heart Institute® allows tailoring of therapy to individual needs.

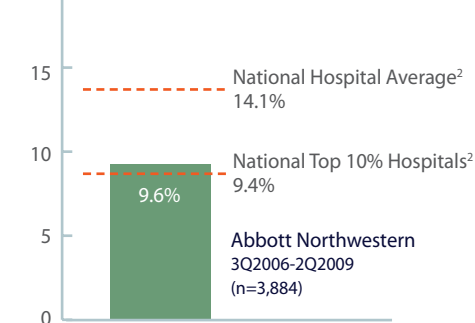
## HOSPITAL READMISSION RATES REFLECT QUALITY AND EFFICIENCY OF CARE

A follow-up clinic visit within three to five days of patient discharge is an effective way to prevent heart failure readmissions. From April 19 to Dec. 31, 2009, 69 percent (n=1,393) of heart failure patients discharged from Abbott Northwestern were seen in follow-up clinic

### 2009 HEART FAILURE OPTIMAL CARE<sup>1</sup>



### HEART FAILURE 30-DAY MORTALITY



<sup>1</sup>Optimal care is a "pass/fail" measure at the individual patient level that asks whether patients received ALL of the appropriate care for their condition.

<sup>2</sup>National Top 10% data were obtained from [whynotthebest.org](http://whynotthebest.org). The National Hospital Average was obtained from the Hospital Quality Alliance Project.



## Pulmonary Hypertension Program

A specialized, multidisciplinary team provides:

- comprehensive assessment including vasoreactivity testing for all clinical classifications of pulmonary hypertension
- 24/7 access for outpatient and inpatient support
- diverse treatment modalities including oral, inhalational, subcutaneous and intravenous therapies
- FDA-approved research on novel treatment approaches for additional patient options.



### LINKING QUALITY, VOLUME AND OUTSTANDING OUTCOMES

The Minneapolis Heart Institute® at Abbott Northwestern has one of the largest and most comprehensive arrhythmia programs in the United States. With state-of-the-art facilities and the support of skilled technicians, advanced practitioners and nurses, Minneapolis Heart Institute® electrophysiologists conduct a high volume of procedures and treat patients with complicated conditions. For example, the team has doubled the number of complex atrial fibrillation ablations performed in the past five years with success and safety rates that lead the nation.

### EXCEPTIONAL TECHNOLOGY AND TECHNICAL EXPERTISE

In addition to the latest 3D mapping systems, Minneapolis Heart Institute® electrophysiologists use advanced Stereotaxis technology, a magnetic-guided navigation system. A remote control system directs micro-catheter movements precisely through the heart, providing successful ablation where other tools have failed. The accurate maneuverability reduces average X-ray exposure time to less than 10 minutes.

## Center for Complex Electrophysiology and Heart Rhythm Management

### TRANSLATING NEW TECHNOLOGIES AND RESULTS

Complex treatment plans demand strong communication among referring physicians, patients and families. Minneapolis Heart Institute® electrophysiologists are renowned not only for trail-blazing electrophysiology procedures, but for sharing their expertise with referring physicians, patients and citizen groups to advance the understanding of life-threatening arrhythmias.

### FROM COMPLEX LEAD EXTRACTION TO LOCAL FOLLOW-UP

With one of the largest heart rhythm device programs in the country, the Minneapolis Heart Institute® offers a full range of services including an active lead extraction program. Outpatient device clinics for new and follow-up patients are staffed with certified cardiac device specialist registered nurses who see more than 16,000 patients a year. More than half of the patients are seen in 24 outreach partner sites, which allows them to be followed conveniently in their own communities. Started in 1998, the Heart Rhythm Management Program is another Minneapolis Heart Institute® first that benefits patients directly by delivering care in their communities whenever possible.

### ELECTROPHYSIOLOGY (EP) LAB VOLUME

Diagnostic procedures	690
Pacemakers	743
<ul style="list-style-type: none"> <li>Implants, upgrades, generator changes, lead/pocket revisions and explants</li> </ul>	
Implantable cardiac defibrillators (ICD)	573
<ul style="list-style-type: none"> <li>Implants, upgrades, generator changes, lead/pocket revisions and explants</li> </ul>	
Percutaneous ablations	886
<ul style="list-style-type: none"> <li>Atrial ablations (atrial fibrillation, atrial flutter, atrioventricular nodal re-entry tachycardia and atrial tachycardia) (93%) 826</li> <li>Ventricular ablations (junctional tachycardia, ventricular tachycardia and premature ventricular contractions) (7%) 60</li> </ul>	
<b>Total EP Lab interventions</b>	<b>2,142</b>
<i>Sum of pacemakers, ICDs and ablations</i>	
<b>Total EP procedures</b>	<b>2,832</b>
<i>Sum of diagnostic procedures and interventions</i>	



### Rare? We've Treated It Before

When the rarest of heart arrhythmias require treatment, chances are the heart rhythm specialists at the Minneapolis Heart Institute® at Abbott Northwestern have seen it before. With one of the largest comprehensive electrophysiology programs in the nation, this team has experience treating the most difficult arrhythmias.

A complete spectrum of diagnostic and treatment options is available for congenital and acquired arrhythmias. The dedicated electrophysiology team approach ensures quick and easy access for patients and referring physicians, from initial consultation through follow-up.

## Center for Comprehensive Vascular Care

### NATIONALLY RECOGNIZED REFERRAL CENTER

Few vascular centers in the country offer clinicians and patients access to the best vascular care and the best research. Minneapolis Heart Institute® is a nationally recognized referral center with specialists in endovascular surgery, vascular surgery, cardiology, non-invasive and interventional radiology and vascular nursing, with physicians and staff whose expert clinical strengths support the provision of exceptional vascular care.

### VASCULAR AND ENDOVASCULAR SURGERY

Surgeries include innovative, complex open and endovascular techniques—supported by a Level One statewide emergency system of care—that are designed to treat:

- aortic diseases including abdominal aortic aneurysm, thoracic aneurysm and aortic dissection
- carotid and vertebral artery disease
- renal artery and mesenteric arterial disease
- peripheral artery disease (PAD) including claudication and critical limb ischemia
- venous disease.

### ADVANCED ENDOVASCULAR PROCEDURES

Patients have access to the most advanced, minimally invasive treatments. Complex procedures, performed in a state-of-the-art suite equipped with the latest imaging technology, include:

- abdominal aortic aneurysm (AAA) repair
- thoracic aneurysm repair
- percutaneous revascularization of lower extremity PAD
- renal/mesenteric and carotid stenting
- leading-edge stent graft therapies for complex aortic pathology.

### NONINVASIVE VASCULAR DIAGNOSTIC LABORATORY

The Vascular Laboratory at the Minneapolis Heart Institute® is one of the largest in the country. Accredited by the Intersocietal Commission for the Accreditation of Vascular Laboratories, the lab offers sophisticated non-invasive imaging to patients both at Abbott Northwestern and throughout Minnesota with its Mobile Vascular Service.



### WOUND CARE INCLUDING HYPERBARIC OXYGEN THERAPY

At Abbott Northwestern's Wound Clinic, multidisciplinary specialists are available to evaluate patients' needs and make the best care decisions as a team. Special attention is taken to coordinate diagnosis, treatment and follow-up care with the patient's primary physician. Patients have an array of options to promote wound healing. For example, hyperbaric oxygen therapy stimulates angiogenesis by delivering 100 percent oxygen at elevated barometric pressure.



### 2009 VOLUME AND OUTCOME MEASURES

Elective endovascular AAA repairs	74
Elective open AAA repairs	27
Elective infrarenal AAA repair mortality	0%
Carotid endarterectomy cases	137
Carotid endarterectomy cases with stroke	2
Carotid endarterectomy mortality	0%
Peripheral diagnostic cases	62
Peripheral intervention cases	196
Total peripheral vascular cases	258

### Vascular Clinical Research

The Minneapolis Heart Institute Foundation provides valuable infrastructure for the investigation of innovative vascular disease treatments performed at the Minneapolis Heart Institute®. Current FDA-approved research involves angiogenesis with adult stem cell or gene transfer, novel devices and techniques, and new medications.

## Comprehensive, State-of-the-Art Cardiovascular Imaging

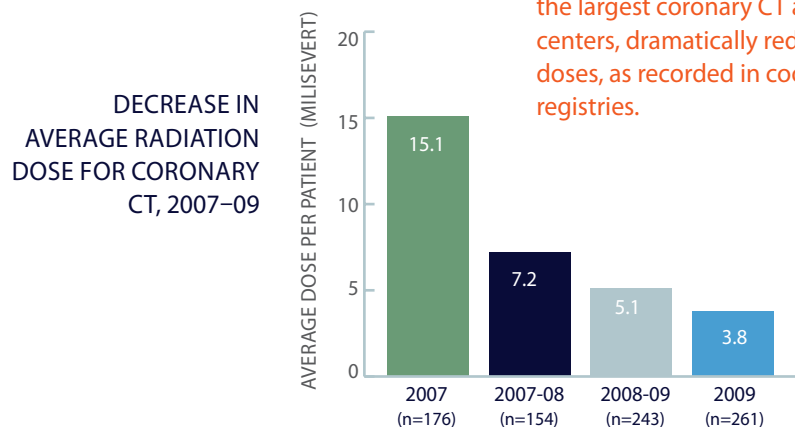
### REVOLUTION, NOT EVOLUTION – CARDIOVASCULAR CT, MRI AND PET

Over the last decade, the Minneapolis Heart Institute® at Abbott Northwestern has redefined advanced cardiovascular imaging. Nationally, few centers offer the dedicated, comprehensive cardiovascular imaging services performed at Minneapolis Heart Institute®, which include dedicated adult and pediatric cardiovascular CT, MRI and PET.

The integrated approach combining high level cardiovascular imaging with expertise in advanced subspecialties at the Minneapolis Heart Institute® has led to unique treatment approaches for vascular disease, genetic arrhythmias and heart failure. Each scan is individualized to help triage a patient to the best treatment option. State-of-the-art coronary CT equipment, coupled with the experience of one of the largest coronary CT angiography centers, dramatically reduces radiation doses, as recorded in cooperative study registries. Cardiologists and radiologists from around the world come for specialized training through a case-based, mentored approach.

#### Long-term Patient Safety

State-of-the-art coronary CT equipment, coupled with the experience of one of the largest coronary CT angiography centers, dramatically reduces radiation doses, as recorded in cooperative study registries.



**SEAMLESS ACCESS TO TESTS AND TREATMENT**

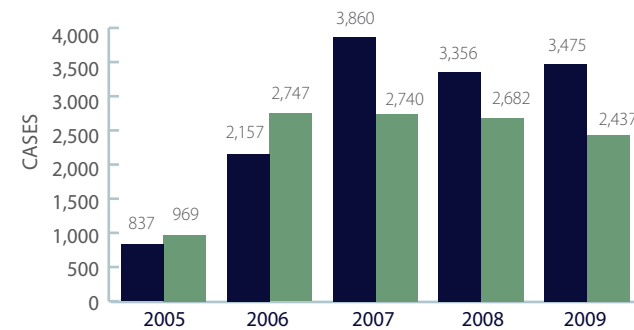
With a full complement of cardiovascular diagnostic imaging available in the same location as comprehensive cardiovascular care, patients visiting the Minneapolis Heart Institute® at Abbott Northwestern experience seamless attention from initial testing through their procedure – or involving multiple diagnostic modalities if necessary – often in one day, in one location. A patient can be in a Cath Lab within minutes of a revealing diagnostic test. And since more than 40 percent of patients receiving cardiovascular diagnostic imaging at the Abbott Northwestern campus travel from outside the Twin Cities area, this can save hundreds of driving miles and potential hotel stays.

**NO MATTER WHERE THE PATIENT IS**

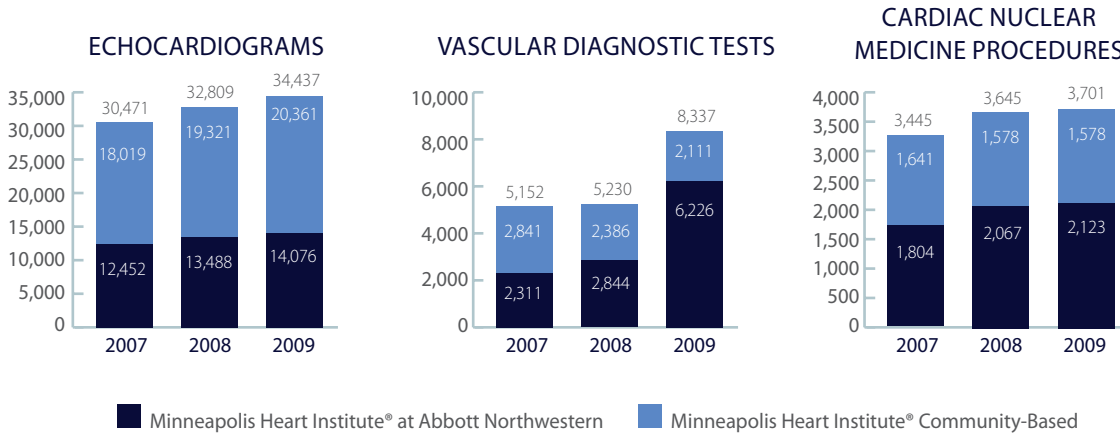
The Minneapolis Heart Institute® has the largest echocardiography and nuclear cardiology program in the region, which serves as another example of how its integrated network serves communities. Patients in more than 50 sites throughout Minnesota and western Wisconsin benefit from the Minneapolis Heart Institute® mobile programs. Fully accredited technicians travel to clinics, supporting cardiologists and allowing patients to receive advanced cardiovascular diagnostics in their own communities.



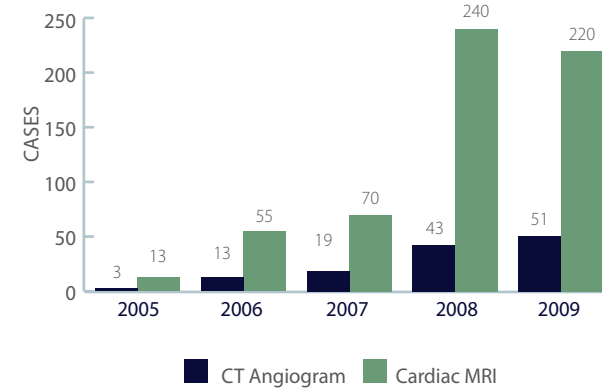
**ADVANCED CARDIOVASCULAR IMAGING— ADULT PATIENTS**



The Minneapolis Heart Institute® has one of the largest adult and pediatric cardiovascular imaging centers in the country.



**ADVANCED CARDIOVASCULAR IMAGING— PEDIATRIC PATIENTS**



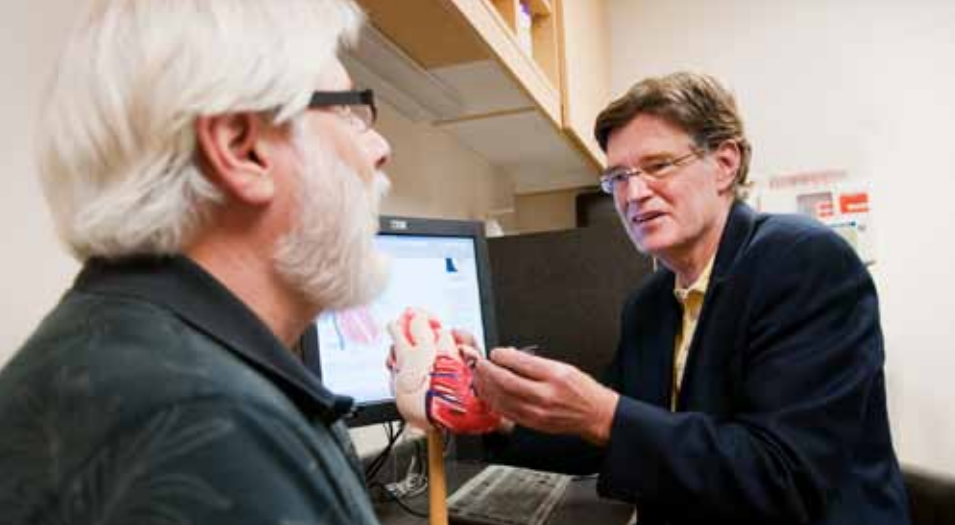
## EXCELLENCE IN CLINICAL CARE

Delivering excellent cardiovascular care throughout the region requires broad resources that are made available in a variety of settings. The Minneapolis Heart Institute® has structured its services to:

- help people throughout the region stay healthy
- allow those who need cardiovascular care to receive it close to home whenever possible
- provide a seamless transition to the highly specialized services of Abbott Northwestern Hospital when needed.

The Minneapolis Heart Institute® at Abbott Northwestern Hospital is committed to providing excellence in clinical care no matter where patients live and what level of care they need.





## Prevention and Early Recognition of Heart Disease

### PREVENTIVE CARDIOLOGY CLINIC

The physicians at the Minneapolis Heart Institute® believe it is critical to not only treat heart disease where it exists but prevent heart disease before it begins. The Preventive Cardiology Clinic provides risk assessment, screening and preventive strategies based on the latest research. Clinic staff work with individuals who already have or who are at risk of heart disease, helping them reduce risks and maintain health through a variety of innovative programs.

### HEARTSCAN MINNESOTA®

The coronary calcium CT scan is the single most effective test to detect heart disease

in its earliest stage. It is especially helpful for patients who have several risk factors but no symptoms of heart disease. Coronary artery calcium scoring is expressed as score adjusted for age and gender. All HeartScan Minnesota scores are compared to a database of more than 19,000 asymptomatic people of the same age and gender. Each scan is reviewed by a cardiologist and radiologist, and patients receive a comprehensive, personalized information packet to help them understand the results. The test is available at a price that ensures patients can consider having it, regardless of insurance coverage.

### Changing Atherosclerosis to a Medically Treated Disease

The goals of the Preventive Cardiology Clinic are to identify and treat high-risk patients before myocardial infarction occurs and to keep patients with the disease from requiring hospital care. Located in Abbott Northwestern's Heart Hospital, the Preventive Cardiology Clinic is staffed by a multidisciplinary team that performs a risk factor analysis including coronary CT calcium scans through HeartScan Minnesota, and makes individualized recommendations to decrease patients' risk of coronary artery disease and stroke.

## WOMEN'S HEART HEALTH PROGRAM



### Actively Addressing the Disparities

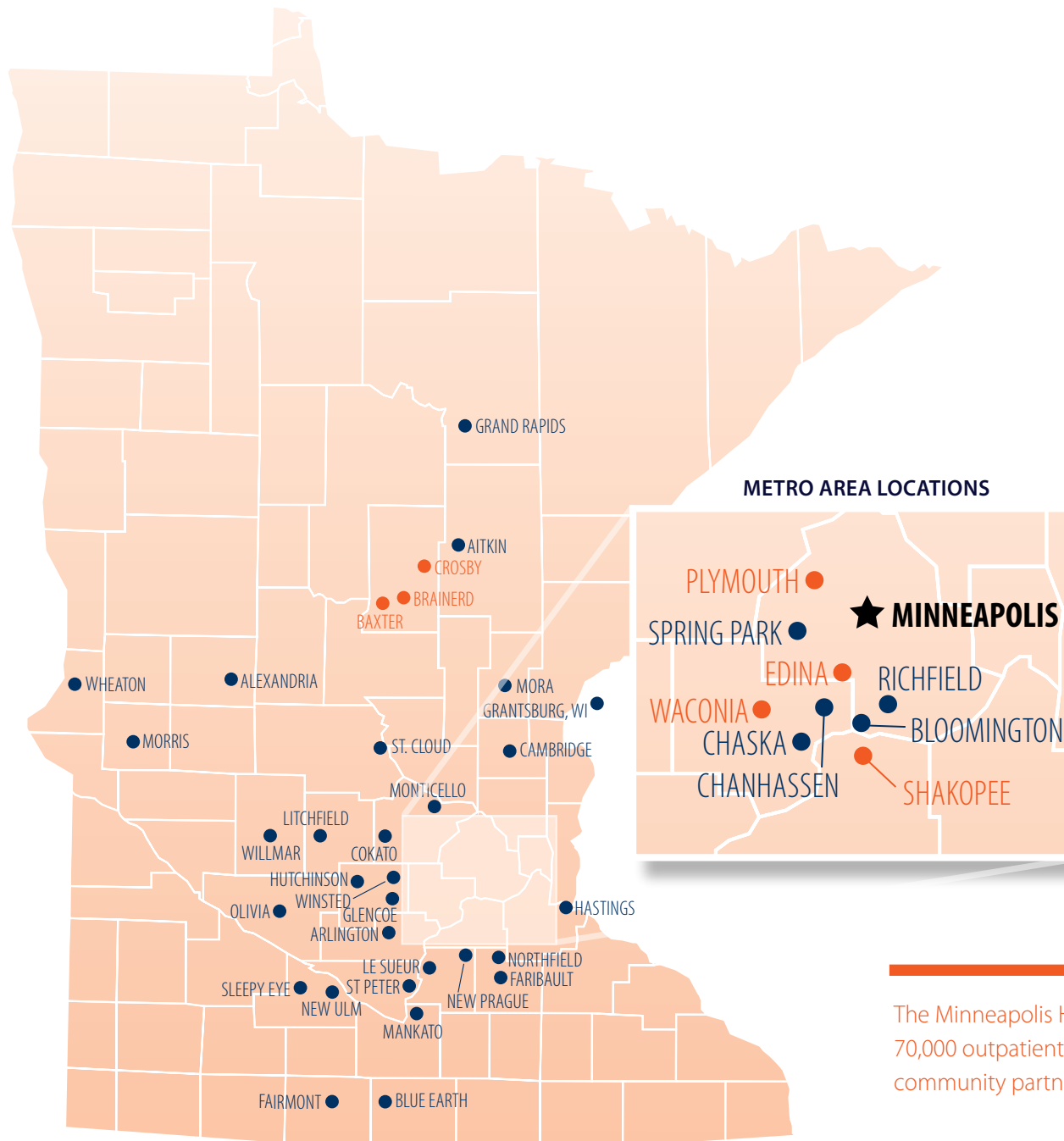
Disparities remain in recognizing and treating cardiovascular disease in women. Women are also traditionally under-represented in clinical research. The Women's Heart Health Program at the Minneapolis Heart

Institute® tackles these issues by focusing on clinical care, education and research related to cardiovascular disease in women.

The Women's Heart Health Program supports both professional and community education. A women-only support group offers members ongoing education and weekly support. The Women's Advisory Board helps focus the program's vision and support its major initiatives.

Women have the benefit of excellent, comprehensive clinical care from a multidisciplinary team of experts. The Women's Heart Health Program's collaboration with the Minneapolis Heart Institute Foundation helps to close the cardiovascular research gender gap through the Foundation's initiation of and participation in several national and local research protocols, including pioneering research in gender-specific stress cardiomyopathy.





## Regional Approach to Care

### CARDIOVASCULAR OUTPATIENT CARE Top-Rated Cardiovascular Care – Close to Home

Patients from Grand Rapids in northern Minnesota to Blue Earth in the south experience the same world class Minneapolis Heart Institute® expertise and quality in their hometowns as those patients who live closer to Minneapolis Heart Institute® at Abbott Northwestern in Minneapolis. It is this continuity of excellence, in 33 communities across the region, that makes the Minneapolis Heart Institute® Cardiovascular System of Care model unique.

- Offers services five days a week.
- Offers cardiovascular services and/or mobile diagnostic services.

The Minneapolis Heart Institute® schedules more than 70,000 outpatient visits a year at its full-time clinic sites and community partner locations around the state.



Cooking classes hosted by Hearts Beat Back: The Heart of New Ulm Project teach participants how to make their favorite recipes heart-healthy and how to create many new heart-healthy dishes.

## HEARTS BEAT BACK – THE NEW ULM PROJECT

Led by Minneapolis Heart Institute® physicians in conjunction with the Minneapolis Heart Institute Foundation and the physicians of the New Ulm Medical Center, the revolutionary Hearts Beat Back project's goal is to reduce and eventually eliminate myocardial infarction in the south central Minnesota town of New Ulm over a 10-year period. Nearly two-thirds of the adult population has been screened. Ongoing health education programs help residents implement preventive medical therapy and healthy lifestyle approaches.

## THE RIGHT CARE IN THE RIGHT SETTING

Patients who can be diagnosed and treated in their own communities are best served there. Regional offices throughout Minnesota now offer the services of Minneapolis Heart Institute® cardiologists who live in those areas.

In addition, Minneapolis Heart Institute® is a national leader in providing regionally based mobile diagnostic services. This unique balance of regional diagnostic and consultative services, in collaboration with community physicians, has made Minneapolis Heart Institute® a respected partner in the delivery of cardiovascular services.

When patients need tertiary or quaternary cardiovascular services, the Minneapolis Heart Institute® has a world-class referral center at Abbott Northwestern in Minneapolis where it offers comprehensive, subspecialty services that are second to none. By concentrating these highly specialized services in one exceptional, service-oriented center, the Minneapolis Heart Institute® can offer patients an intense, concentrated evaluation. For many patients, their care involves a single visit to the Twin Cities, with their initial diagnostics, consultation and follow-up care delivered in their own communities.

Whether they are cared for in the Twin Cities or beyond, patients can be assured of receiving world-class care from cardiovascular specialists who are dedicated to working collaboratively on their behalf.



Participants at the first Hearts Beat Back: The Heart of New Ulm Project Jingle Bell Jam in 2009 ran four miles in the cold and snow, all for better heart health.

## Partnering in Prevention at Community Partner Sites – Predict One™

To enhance the prevention services for patients throughout the region, the Minneapolis Heart Institute® offers the Predict One™ program, a complete package of comprehensive calcium scoring, risk stratification and treatment algorithms, to partners within the Minneapolis Heart Institute® integrated cardiovascular network.

## OUTPATIENT VISITS<sup>1</sup>

	2009	2010
Minneapolis (Abbott Northwestern)	44,752	53,010
Baxter	3,685	3,566
Edina	3,355	4,002
Plymouth	1,983	2,278
Shakopee	1,652	1,971
Waconia	3,993	4,279

<sup>1</sup>At clinics staffed by the Minneapolis Heart Institute®.



## Cardiovascular Hospital Care

### Care That Heals

Abbott Northwestern's 128-bed Heart Hospital supports the Minneapolis Heart Institute's comprehensive programs and includes:

- 32 cardiovascular critical care beds
- 96 telemetry beds
- remote cardiac monitoring systems for patients throughout the hospital with primary conditions beyond cardiology.

The Heart Hospital was designed with healing and the needs of patients and families in mind. Spaces are aesthetically pleasing with ample daylight and open views to promote a sense of well-being. Patient rooms promote privacy, quiet surroundings and family involvement. Family lounges provide a place to step away and feel refreshed.

In addition to advanced technology, specialized procedure areas, innovative research and demonstrable outcomes, the Minneapolis Heart Institute® at Abbott Northwestern excels because of exceptional care provided by a multidisciplinary team. The American Nurses Credentialing Center (ANCC) granted Magnet Recognition Program® status to Abbott Northwestern in 2009. In addition, many caregivers in nursing and other disciplines have specialized training and experience working with cardiovascular patients who have complex needs.



The American Nurses Credentialing Center granted Magnet Recognition Program® status to Abbott Northwestern in 2009.



### America's Best Hospitals

Often cited as one of "America's Best Hospitals" in heart-related services and heart surgery in *U.S. News & World Report*, including the latest edition, the Minneapolis Heart Institute® at Abbott Northwestern Hospital is the top choice of Minnesota families and referring physicians.

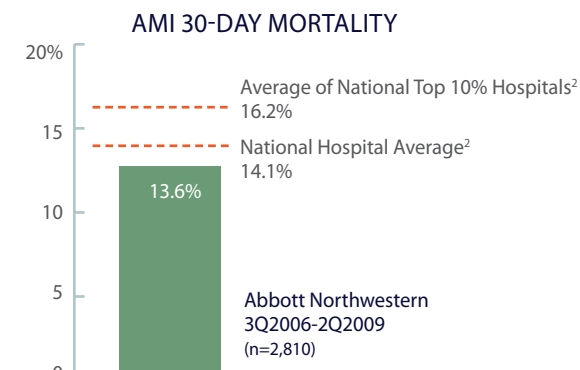
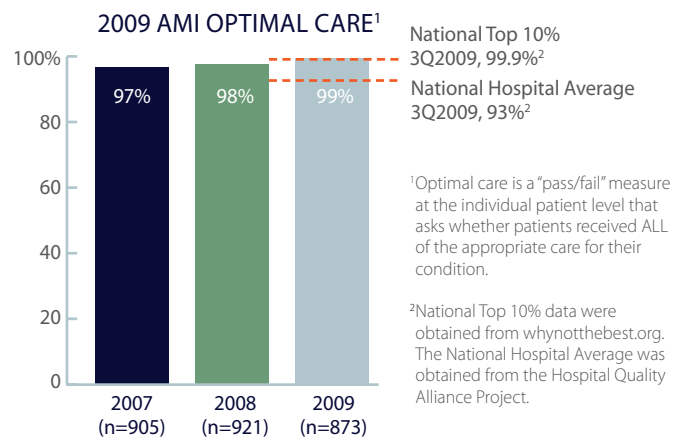
## STAYING CONNECTED

With one of the most integrated electronic medical record (EMR) systems in the nation, Allina Hospital & Clinics—the parent company for Abbott Northwestern Hospital—received the Davies Award for health information technology in 2007, when other hospitals were just beginning their efforts. The system currently spans 11 hospitals and 86 clinics, integrating departments, specialties, home care, clinics, inpatient care and outreach centers. Throughout the entire continuum of patient care, physicians and care team members have immediate access to EMR information, enabling them to deliver safe, high-quality care.



The dedication that Abbott Northwestern employees show their patients is evident in recent employee surveys. In 2009, Abbott Northwestern earned an Employee Engagement Survey score of 85 percent—a high rating compared to the national benchmark of 76 percent.

Patients also endorse the quality of care given at the hospital. In a recent Healthcare Consumer Assessment of Hospital and Provider Services (HCAHPS) survey (see page 5), cardiovascular patients ranked Abbott Northwestern at the 95th percentile in rating “Responsiveness of Hospital Staff” and at the 96th percentile in “Overall Rating” of the hospital.



### The Cardiovascular Care Team:

- cardiac rehabilitation specialists
- chaplains
- dietitians
- integrative health practitioners
- nurse practitioners
- nurses
- palliative care staff
- pharmacists
- physician assistants
- physicians
- respiratory therapists
- social workers



## Abbott Northwestern's Penny George™ Institute for Health and Healing

Abbott Northwestern's Penny George Institute for Health and Healing is the nation's largest hospital-based integrative health program. Through its range of inpatient services, Outpatient Clinic, LiveWell Fitness Center, Integrative Health Research Center, and community and professional educational programs, the Penny George Institute has created a model of patient care built on optimizing the health of the whole person—mind, body and spirit.

Integrative health focuses on prevention and wellness, activation of the body's natural healing capacity and the development of self-care skills. Inpatient therapies at Abbott Northwestern are provided at no charge to the patient and include acupuncture, integrative nursing consultations, mind/body therapies, music therapy, therapeutic massage and more. The Penny George Institute's Outpatient Clinic offers patients integrative services and programs designed to help them

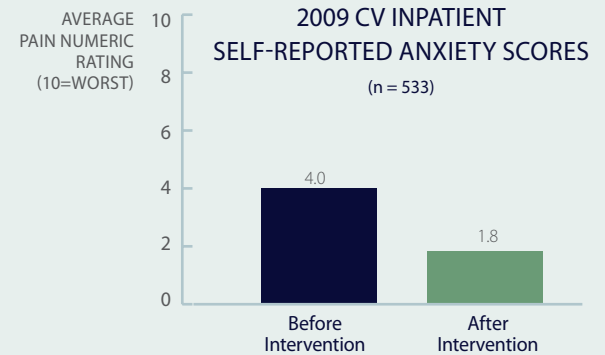
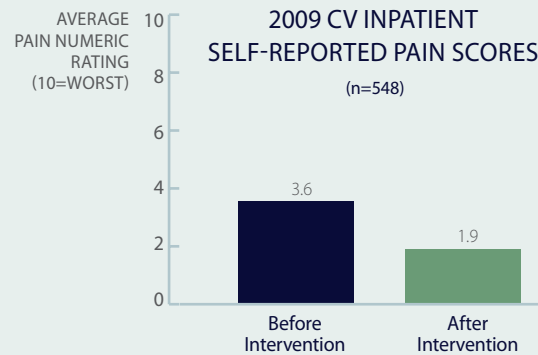
optimize their mental and physical health following a cardiovascular diagnosis.

Minneapolis Heart Institute® physicians have been at the forefront of integrative care. In addition to developing innovative inpatient and outpatient programs, they participate in research on various aspects of the feasibility, safety and impact of complementary and alternative medical therapies for patients with cardiovascular disease. The recent MANTRA II trial, published in Lancet, examined music, imagery, touch and prayer as adjuncts to interventional cardiac care.

More than 1,200 cardiovascular inpatients received integrative health services in 2009.



Penny George Institute practitioners ask the patient to rate his or her pain and anxiety on a 0-10 scale before and immediately after receiving the treatments. The lower the number the better.





Since its inception in 1983, the Minneapolis Heart Institute Foundation has established itself as a national and international leader in cardiovascular clinical research and education.

## MINNEAPOLIS HEART INSTITUTE FOUNDATION™

### Creating a World Without Heart Disease™

Physicians who come to the Minneapolis Heart Institute® at Abbott Northwestern understand that they are coming to a different kind of place. Beyond exceptional clinical medicine, there is a dedication to leading clinical research and education through the Minneapolis Heart Institute Foundation. Since its inception in 1983, the Minneapolis Heart Institute Foundation has established itself as a national and international leader in cardiovascular clinical research and education.



The Minneapolis Heart Institute Foundation is participating in more than 150 approved clinical research trials, and its members published more than 100 articles in

peer-reviewed journals in 2009. It is one of only five National Institutes of Health (NIH) Cardiovascular Stem Cell Therapy sites in the United States and is the national leader in cardiovascular stem cell therapies. Groundbreaking research in multiple areas, performed by visionary physicians and funded by philanthropy through the Minneapolis Heart Institute Foundation, gives patients hope and options when there were none.

### **BROAD EDUCATIONAL INFLUENCE**

The education arm of the Foundation encompasses professional development, outreach initiatives and community health education. In 2009, the Minneapolis Heart Institute Foundation sponsored more than 114 education programs, including international and national symposia:

- Diagnosis and Management of Hypertrophic Cardiomyopathy and Prevention of Sudden Death: The Next 50 Years. International Summit IV
- The Miracle on Ice: Therapeutic Hypothermia for Cardiac Arrest Patients
- Women and Heart Disease: A Summit to Eliminate Untimely Deaths in Women
- AHA Satellite Symposium: Can We Really Grow New Blood Vessels?
- VIVA Satellite Symposium: Carotid Artery Disease.

## RESEARCH AND INNOVATION

### New Approaches to Genetic Cardiovascular Disease

#### HYPERTROPHIC CARDIOMYOPATHY CENTER AND PROGRAM

##### International Leaders in Hypertrophic Cardiomyopathy

The most common of the genetic heart diseases, hypertrophic cardiomyopathy (HCM) is the leading cause of sudden death in young people, including competitive athletes, and can be responsible for heart failure at any age. The purpose of the Hypertrophic Cardiomyopathy Center at the Minneapolis Heart Institute Foundation is to provide focused, state-of-the-art care, which ultimately results in better outcomes for patients.

Staffed by internationally recognized cardiologists and led by Barry Maron, MD, the dedicated HCM Center offers a patient-specific therapeutic approach to this complex and often misunderstood disease. As the data repository for the National Registry of Sudden Death in Young Athletes, the Minneapolis Heart Institute Foundation has registered more than 2,350 patients.

#### GENETIC ARRHYTHMIA CENTER

Modeled after the world-renowned Hypertrophic Cardiomyopathy Center, the Genetic Arrhythmia Center focuses on the diagnosis, treatment and research of five additional life-threatening arrhythmic conditions:

- long QT syndrome
- arrhythmogenic right ventricular dysplasia
- Brugada's syndrome
- left ventricular noncompaction
- catecholamine-induced, polymorphic, ventricular tachycardia.

Genetic Arrhythmia Center staff can screen, diagnose and care for entire families who have been affected by one of these conditions. Ongoing research—including a comprehensive registry of the family medical history—examines protocols and evaluates treatment plans, giving hope to subsequent generations.

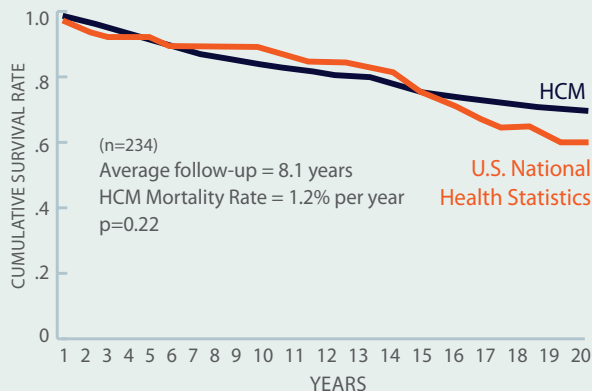
The Center has experts in advanced cardiovascular imaging, electrophysiology, cardiology, genetic counseling and clinical nursing. Team members obtain exhaustive assessments, chart the natural history of these conditions and determine how to most efficiently and effectively care for patients and their families.



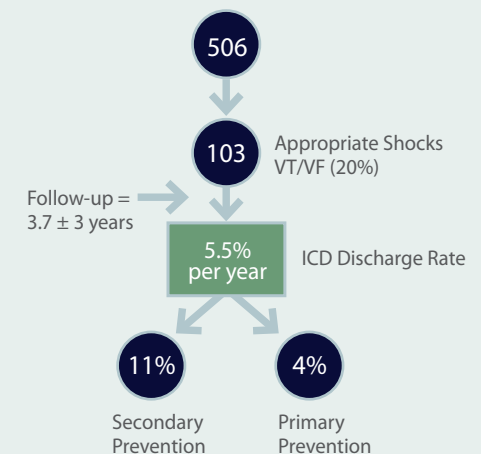
Since the HCM Center began its work in 1993, it has raised awareness that hypertrophic cardiomyopathy is a treatable disease. The Hypertrophic Cardiomyopathy Center and Program offer patients advanced cardiovascular imaging and treatments designed to provide normal or near-normal life expectancy (including prevention of sudden death with implantable defibrillators).

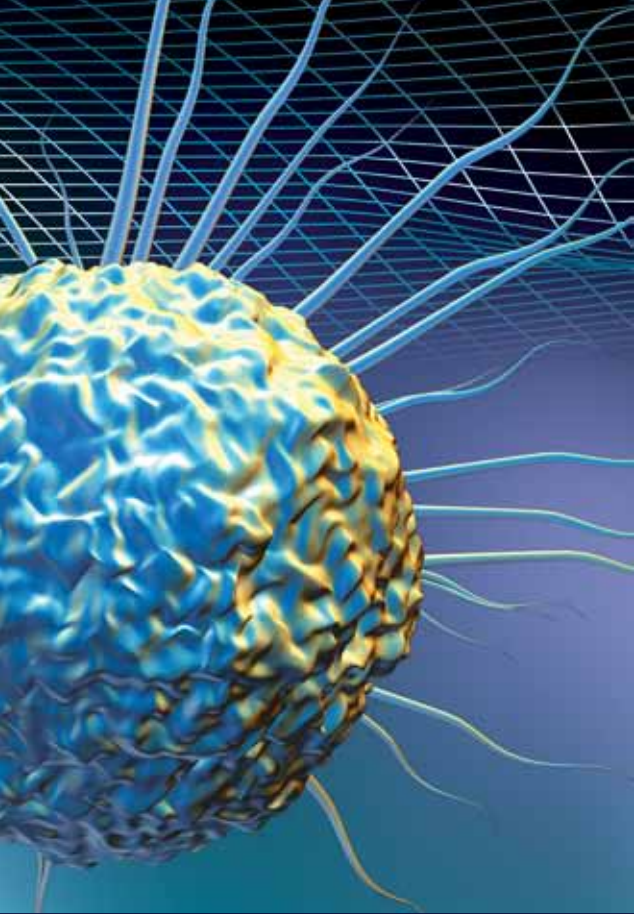
HCM SURVIVAL COMPARED TO U.S. POPULATION

With appropriate treatment, survival with hypertrophic cardiomyopathy (HCM) is similar to the general U.S. population.



Of 506 patients with hypertrophic cardiomyopathy and implantable defibrillators, 20 percent had life-saving defibrillator interventions over an average of only 3.7 years. These events occurred at a higher rate in secondary prevention patients (11 percent/year; implants after cardiac arrest), but were also considerable in primary prevention (4 percent/year; implants for risk factors only in mostly asymptomatic patients).





## Novel Treatment of Advanced Cardiovascular Disease

### STEM CELL THERAPY PROGRAM

#### A National Resource for Pioneering Therapy

Selected by the National Institutes of Health as one of only five Cardiovascular Cell Therapy Research Network sites, the Minneapolis Heart Institute® has treated more cardiovascular patients using adult stem cell therapy than any other center in the nation. Stem cell research is supported through the Minneapolis Heart Institute Foundation. The Stem Cell Therapy Program is involved in 15 clinical stem cell trials in addition to its own FDA-approved trials. Protocols are currently open for four types of cardiovascular disease:

- acute MI
- heart failure
- refractory angina
- critical limb ischemia.

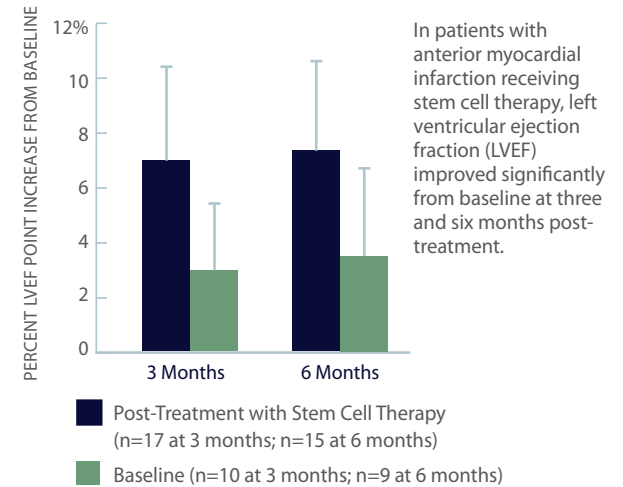
The Stem Cell Therapy Program's goal is to answer important questions about safety, efficacy, optimal methods of delivery and long-term outcomes. Encouraging data suggest that adult stem cell therapy offers benefits for selected patients with diagnoses that are not amenable to traditional treatment.

The Minneapolis Heart Institute® is uniquely suited to provide national and international leadership in cardiovascular stem cell therapy, based on the success of programs such as:

- OPTIMIST for patients with refractory angina
- Level One Heart Attack
- Advanced Heart Failure Treatment
- Critical Limb Ischemia.

The Minneapolis Heart Institute® has treated more cardiovascular patients using adult stem cell therapy than any other center in the nation.

### LEFT VENTRICULAR EJECTION FRACTION (LVEF) IMPROVEMENT WITH STEM CELL THERAPY IN PATIENTS WITH ANTERIOR MI



Hare JM, Traverse JH, Henry TD et al. A randomized, double-blind, placebo-controlled, dose-escalation study of intravenous adult human mesenchymal stem cells (prochymal) after acute myocardial infarction. *JACC* 2009;54(24): 2277-2286.

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The OPTIMIST Program—a collaboration of the Minneapolis Heart Institute® and the Minneapolis Heart Institute Foundation—was designed to address the needs of patients with refractory angina and advanced coronary disease, and has provided options to more than 1,400 patients from across the country since its inception in 2001.



## THE OPTIMIST PROGRAM

### OPTIMIST = OPTions In Myocardial Ischemia Syndrome Therapy

As mortality from coronary artery disease declines, an increasing number of patients have myocardial ischemia, despite having undergone optimal medical therapy. These patients are often not candidates for further surgical or percutaneous revascularization. The OPTIMIST Program—a collaboration of the Minneapolis Heart Institute® and the Minneapolis Heart Institute Foundation—was designed to address the needs of patients with refractory angina and advanced coronary disease, and has provided options to more than 1,400 patients from across the country since its inception in 2001.

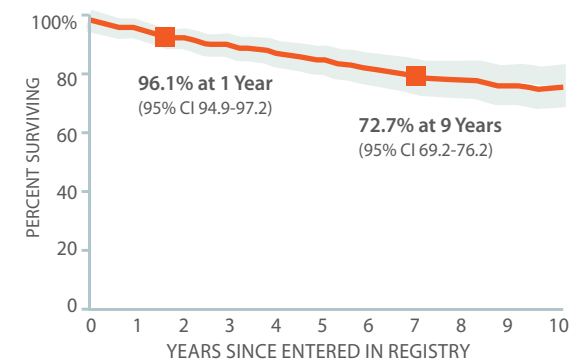
The goals of the program are to:

- improve the quality of care for this unique and growing subset of patients
- define long-term outcomes, natural history and predictors of adverse outcomes
- provide unique treatment options including current clinical and novel research approaches.

Clinical research and treatment options include:

- angiogenesis (gene and adult stem cell therapy)
- Enhanced External Counterpulsation (EECP)
- interventional procedures (advanced chronic total occlusion/coronary sinus occluder)
- innovative pharmacologic agents
- spinal cord stimulation
- transmyocardial laser revascularization (robotic)

### LONG-TERM SURVIVAL OF PATIENTS IN THE OPTIMIST PROGRAM





A patient who received a left ventricular assist device at the Minneapolis Heart Institute® was able to enjoy daily walks in his neighborhood within a few months of his surgery.

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Each year, the hospital provides comprehensive health care for more than 200,000 patients and their families from the Twin Cities area and throughout the Upper Midwest.

## ABOUT ABBOTT NORTHWESTERN HOSPITAL

Abbott Northwestern Hospital is the largest not-for-profit hospital in the Twin Cities area, with 633 available beds and 65 bassinets. Each year, the hospital provides comprehensive health care for more than 200,000 patients and their families from the Twin Cities area and throughout the Upper Midwest. More than 5,000 employees, 1,600 physicians and 550 volunteers work as a team for the benefit of each patient served.

Abbott Northwestern Hospital is a part of Allina Hospitals & Clinics, a family of hospitals, clinics and care services in Minnesota and Western Wisconsin.

For more than 125 years, Abbott Northwestern has had a reputation for quality services. The hospital is well known for its centers of excellence:

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- medical/surgical services
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- Spine Institute
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Abbott Northwestern and its Medical Staff are dedicated to providing outstanding care and service to patients and their families. It offers the community exceptional physicians, nurses and support staff; a commitment to research, education and outcomes; a foundation of clinical partnerships that span the region; and a cultural enthusiasm for growth and improvement. Brought together in one institution, these factors create an energetic and sophisticated environment that inspires caregivers to collaborate in new ways for the benefit of patients.

Abbott Northwestern's passion for finding new and better approaches to care drives extensive research efforts in clinical areas across the hospital. This ensures that new treatment advances benefit patients as quickly as possible, supports a dynamic environment for medical and nursing education, and is the catalyst for its outcomes measurement program.



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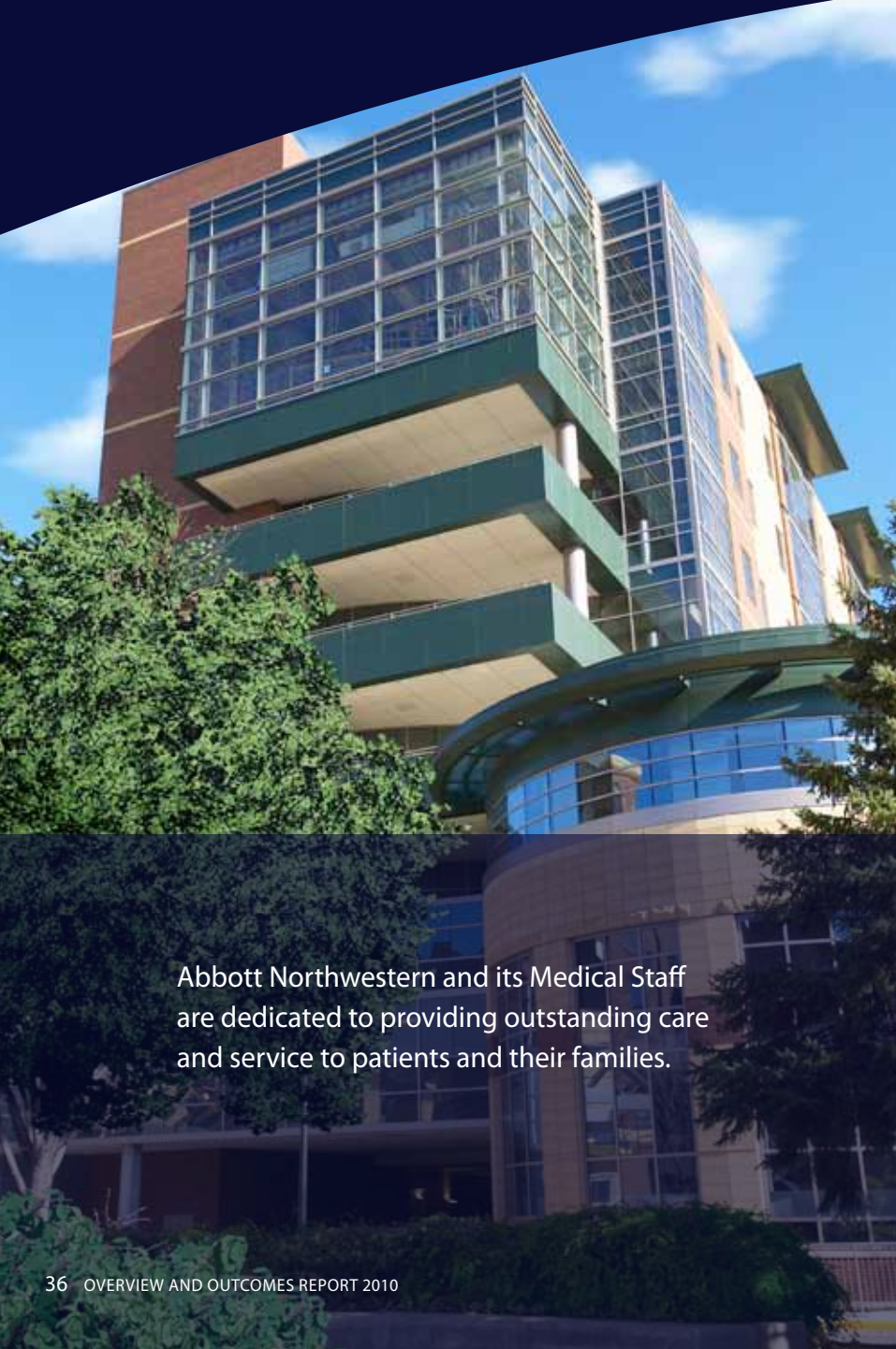
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Mail Route 33500  
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