MedStar Heart & Vascular Institute
Nationally recognized excellence in the Baltimore-Washington region

MedStar Heart & Vascular Institute is a national leader in the research, diagnosis, and treatment of cardiovascular disease, and has been recognized by U.S. News & World Report and The Society of Thoracic Surgeons as one of the top cardiovascular programs in the nation. MedStar Heart & Vascular Institute and the Cleveland Clinic Heart, Vascular & Thoracic Institute, the nation’s #1 heart program, enjoy a robust clinical and research relationship based on shared expertise. Patients benefit from rapid-cycle quality improvements and the latest treatment protocols.

Referring physicians have access to recognized national leaders in multiple cardiac and vascular sub-specialties and local access to MedStar Heart & Vascular Institute cardiac and vascular physicians located throughout Maryland, Northern Virginia, and the Greater Washington, D.C. regions.

For more information or to make an appointment or referral, visit MedStarHealth.org/Services/Cardiac-Surgery.

MedStar Union Memorial Hospital
Cardiac Surgery

At MedStar Union Memorial Hospital, we offer customized therapies for the most complex cases—often patients who have been denied care elsewhere. Using a multidisciplinary team approach, together with our interventional cardiology colleagues, we assess each patient to determine the best technology and access method—open, transcatherter, or hybrid—for their individual needs, priorities, and risk profiles.

Our aim is to provide your patients with the most effective treatment option, a low complication rate, a low readmission rate, and a safe, quick recovery.

Please see a brief snapshot of our FY 2022 key outcomes inside.
At MedStar Union Memorial Hospital, we offer customized therapies for the most complex cases—often patients who have been denied care elsewhere. Using a multidisciplinary team approach, together with our interventional cardiology colleagues, we assess each patient to determine the best technology and access method—open, transcatheter, or hybrid—for their individual needs, priorities, and risk profiles.

Our aim is to provide your patients with the most effective treatment option, a low complication rate, a low readmission rate, and a safe, quick recovery.

Please see a brief snapshot of our FY 2022 key outcomes inside.
Aortic valve replacement

Our team treats complex aortic cases with the full spectrum of available options—including open, minimally invasive, and transcatheter approaches. We are also involved in a variety of studies to expand options to a broader population.

Isolated aortic valve replacement

99.4% Absence of mortality

STS average 96.02 %

91.7% Absence of major mortality

STS average 83.23 %

8.3% Readmitted within 30 days of discharge

STS average 10.9 %

Mitrail valve repair and replacement

98.4% Absence of mortality

STS average 97.54 %

95.1% Absence of major mortality

STS average 89.42 %

4.9% Readmitted within 30 days of discharge

STS average 9.09 %

Coronary artery bypass graft (CABG)

99.4% Absence of mortality

STS average 96.02 %

95.1% Absence of major mortality

STS average 89.42 %

4.9% Readmitted within 30 days of discharge

STS average 9.09 %

The Society of Thoracic Surgeons

Convergent CABG

Coronary artery bypass graft (CABG) surgery remains the most common cardiac surgical procedure, but it has become much more complex as we take into account the patient’s age and comorbidities and the frequency of prior procedures. Our surgeons have specialized training, advanced knowledge, and can offer customized solutions based on the complexity of each case.

Mitrail valve repair and replacement

Drawing from the collective expertise of cardiac surgeons, interventional cardiologists, and advanced cardiac imaging specialists, we continue to expand treatment options for mitral/tricuspid, and aortic valve conditions.

The following studies are ongoing. In many cases, we are the only participating site in Maryland.

Aortic valve regurgitation

TriClip, evaluating transcatheter clip repair for symptomatic patients with severe tricuspid regurgitation who are at higher surgical risk for tricuspid valve surgery.

The Contessa® Cor ECM® Tricuspid Valve replacement, currently in an early feasibility study.

Arrhythmia surgery

Convergent AFib ablation is a minimally invasive, two-part procedure that uses heat to stop the errant electrical signals that cause AFib and restore a normal heart rhythm. A cardiac surgeon performs the first part of the ablation in the atria under the broadsheet, to create access to the heart and then creates lesions on the back walls of the heart. An electrophysiologist then gains access to the inside of the heart and blood vessels through the groin, to deliver therapeutic energy to areas of the heart to destroy the abnormal electrical activity. We are seeing excellent outcomes at this point; more than 70 percent of patients remain free of AFib-related symptoms a year after their procedure.

Convergent ablation procedures

27

Research highlights

Our program serves as a clinical testing site for many major U.S. trials for valve repair and replacement solutions. Drawing from the collective expertise of cardiac surgeons, interventional cardiologists, and advanced cardiac imaging specialists, we continue to expand treatment options for mitral/tricuspid, and aortic valve conditions.

For more information on our program, please feel free to contact:

Brian Bethea, MD, Chief, Cardiac Surgery at 214-244-8787 or brian.t.bethea@medstar.net.

To discuss a case with our physicians, please call 410-554-6550.

Contact us

Highest volume hospitals in Maryland

Mitrail valve

• The Tendyne™ transcatheter mitral valve replacement system as an alternative to open-heart surgery, for which we are one of the highest enrollees in the country for safety and efficacy trial.

• The SAPIEN™ XT System in patients with severe mitral regurgitation for whom open or transcatheter treatment options are not recommended.

Tricuspid valve

• The TriClip, evaluating transcatheter clip repair for symptomatic patients with severe tricuspid regurgitation who are at higher surgical risk for tricuspid valve surgery.

• The Contessa® Cor ECM® Tricuspid Valve replacement, currently in an early feasibility study.

Aortic valve

• The SAPIEN™ XT Transcatheter Heart Valve, being evaluated for safety and efficacy in adults with symptomatic, severe, calcified aortic disease.

In addition to these trials, our ongoing participation in national registries enhances our ability to track quality metrics and stay current with benchmarks established for other high-performing programs. Current registry participation includes those for TAVR, TAVI, PCI, and LAADs.

Financial information and donor recognition that supports our mission can be found by visiting our website.
Aortic valve replacement

Our team treats complex aortic cases with the full spectrum of available options—including open, minimally invasive, and transcatheter approaches. We are also involved in a variety of studies to expand options to a broader population.

Aortic valve replacement

99.4%
Absence of operative mortality
STS average 96.02%

91.7%
Absence of major morbidity
STS average 83.23%

99.4%
Absence of in-hospital mortality
STS average 10.9%

8.3%
Readmitted within 30 days of discharge
STS average 8.31%

Coronary artery bypass graft (CABG)

Coronary artery bypass graft (CABG) surgery remains the most common cardiac surgical intervention, but it has become much more personalized based on the patient’s age and comorbidities and the frequency of prior procedures. Our surgeons have specialized training, advanced knowledge, and can offer customized solutions based on the complexity of each case.

Coronary artery bypass graft (CABG)

98.9%
Absence of operative mortality
STS average 97.54%

95.1%
Absence of major mortality
STS average 89.42%

4.9%
Readmitted within 30 days of discharge
STS average 9.09%

Mitrail valve repair and replacement

Drawing from the collective expertise of cardiac surgeons, interventional cardiologists, and advanced cardiac imaging specialists, we continue to expand treatment options for mitral/tricuspid, and aortic valve conditions.

Mitrail valve repair and replacement

98.9%
Absence of operative mortality
STS average 97.54%

95.1%
Absence of major mortality
STS average 89.42%

4.9%
Readmitted within 30 days of discharge
STS average 9.09%

Arrhythmia surgery

Convergent AFS ablation is a minimally invasive, two-part procedure that uses heat to stop the erratic electrical signals that cause AFib and restore a normal heart rhythm. A cardiac surgeon performs a small incision under the breastbone, to create access to the heart and then creates lesions on the back walls of the heart. An electrophysiologist then gains access to the mitral valve and blood vessels through the groin, to deliver therapeutic energy to areas of the heart to destroy the abnormal electrical activity.

Arrhythmia surgery

99.4%
Absence of operative mortality
STS average 96.02%

100%
Absence of major morbidity
STS average 97.8%

91.7%
Absence of major morbidity
STS average 80.93%

99.4%
Absence of in-hospital mortality
STS average 10.9%

27%
Relative discharge

0%
Readmitted within 30 days of discharge
STS average 8.31%

Research highlights

Our program serves as a clinical testing site for many major U.S. trials for valve repair and replacement solutions. Drawing from the collective expertise of cardiac surgeons, interventional cardiologists, and advanced cardiac imaging specialists, we continue to expand treatment options for mitral/tricuspid, and aortic valve conditions.

The following studies are ongoing. In many cases, we are the only participating site in Maryland.

MITRAL REPAIR AND REPLACEMENT STUDIES

Mitrail valve
• The Tendyne™ transcatheter mitral valve replacement system as an alternative to open-heart surgery, for which we are one of the highest enrollee in the country for safety and efficacy trial.
• The SAPIEN™-MS System in patients with severe mitral regurgitation who are at high surgical risk for mitral valve surgery.
• The Contilum® Cox ECM® Tricuspid Valve replacement, currently in an early feasibility study.

Tricuspid valve
• The TriClip, evaluating transcatheter clip repair for symptomatic patients with severe tricuspid regurgitation who are at higher surgical risk for tricuspid valve surgery.
• The Convergent CorrECt® Tricuspid Valve replacement, currently in a clinical feasibility study.

Aortic valve
• The SAPIEN™-XT Transcatheter Heart Valve, being evaluated for safety and efficacy in adults with symptomatic, severe, calcified aortic disease.
• The Edwards. The SAPIEN™-TAVR System for treatment of severe symptomatic aortic stenosis.
• The Tendyne™ transcatheter mitral valve replacement system in subjects with symptomatic, severe, calcific mitral stenosis.
• The TriClip, evaluating transcatheter clip repair for symptomatic patients with severe tricuspid regurgitation who are at higher surgical risk for tricuspid valve surgery.
• The Contilum® Cox ECM® Tricuspid Valve replacement, currently in an early feasibility study.

Contact us

To discuss a case with our physicians, please call 410-554-6550.
For more information and a list of physicians that are associated with our program, please contact Brian Bethea, MD, Chief, Cardiac Surgery at 214-244-8787 or brian.t.bethea@medstar.net.
Aortic valve replacement

Our team treats complex aortic cases with the full spectrum of available options—including open, minimally invasive, and transcatheter approaches. We are also involved in a variety of studies to expand options to a broader population.

Aortic valve replacement (AVR) surgery remains the most common cardiac surgical intervention, but it becomes much more difficult in the context of advanced age and comorbidities and the frequency of prior procedures. Our surgeons have specialized training, advanced knowledge, and can offer customized solutions based on the complexity of each case.

- Isolated aortic valve replacement
  - 100% Absence of operative mortality
  - STS average 96.02%
  - 91.7% Absence of major mortality
  - STS average 83.23%

- Aortic valve replacement + CABG
  - 99.4% Absence of hospital death mortality
  - STS average 10.9%
  - 8.3% Readmitted within 30 days of discharge
  - STS average 8.31%

Mitral valve repair and replacement

Drawing from the collective expertise of cardiac surgeons, interventional cardiologists, and advanced cardiac imaging specialists, we continue to expand treatment options for mitral, tricuspid, and aortic valve conditions.

- Mitral valve repair and replacement
  - 98.9% Absence of operative mortality
  - STS average 97.54%
  - 95.1% Absence of major mortality
  - STS average 91.42%
  - 4.9% Readmitted within 30 days of discharge
  - STS average 9.09%

Coronary artery bypass graft (CABG)

Conventional CABG surgery remains the most common cardiac surgical intervention, but it becomes much more difficult in the context of advanced age and comorbidities and the frequency of prior procedures. Our surgeons have specialized training, advanced knowledge, and can offer customized solutions based on the complexity of each case.

- Coronary artery bypass graft (CABG)
  - 99.4% Absence of operative mortality
  - STS average 97.0%

Mitral valve repair and replacement

Drawing from the collective expertise of cardiac surgeons, interventional cardiologists, and advanced cardiac imaging specialists, we continue to expand treatment options for mitral, tricuspid, and aortic valve conditions.

- Mitral valve repair and replacement
  - 98.9% Absence of operative mortality
  - STS average 97.54%
  - 95.1% Absence of major mortality
  - STS average 91.42%
  - 4.9% Readmitted within 30 days of discharge
  - STS average 9.09%

Research highlights

Our program serves as a clinical testing site for many major U.S. trials for valve repair and replacement solutions. Drawing from the collective expertise of cardiac surgeons, interventional cardiologists, and advanced cardiac imaging specialists, we continue to expand treatment options for mitral, tricuspid, and aortic valve conditions.

- Coronary Artery Bypass Grafting
  - CABG

The following studies are ongoing. In many cases, we are the only participating site in Maryland.

- The Tendyne™ transcatheter mitral valve replacement system as an alternative to open-heart surgery, for which we are one of the highest enrollees in the country for safety and efficacy trial.
- The SAFER™ XT System in patients with severe mitral regurgitation for whom open or transcatheter treatment options are not recommended.
- The TriClip, evaluating transcatheter clip repair for symptomatic patients with severe tricuspid regurgitation who are at higher surgical risk for transcatheter valve surgery.
- The Convergent® Cor ECM® Tricuspid Valve replacement, currently in a early feasibility study.

Mitral valve

- The Tendyne™ transcatheter mitral valve replacement system as an alternative to open-heart surgery, for which we are one of the highest enrollees in the country for safety and efficacy trial.
- The SAFER™ XT System in patients with severe mitral regurgitation for whom open or transcatheter treatment options are not recommended.
- The TriClip, evaluating transcatheter clip repair for symptomatic patients with severe tricuspid regurgitation who are at higher surgical risk for transcatheter valve surgery.
- The Convergent® Cor ECM® Tricuspid Valve replacement, currently in a early feasibility study.

Research highlights

Our program serves as a clinical testing site for many major U.S. trials for valve repair and replacement solutions. Drawing from the collective expertise of cardiac surgeons, interventional cardiologists, and advanced cardiac imaging specialists, we continue to expand treatment options for mitral, tricuspid, and aortic valve conditions.

- Coronary Artery Bypass Grafting
  - CABG

The following studies are ongoing. In many cases, we are the only participating site in Maryland.

- The Tendyne™ transcatheter mitral valve replacement system as an alternative to open-heart surgery, for which we are one of the highest enrollees in the country for safety and efficacy trial.
  - The SAFER™ XT System in patients with severe mitral regurgitation for whom open or transcatheter treatment options are not recommended.
- The TriClip, evaluating transcatheter clip repair for symptomatic patients with severe tricuspid regurgitation who are at higher surgical risk for transcatheter valve surgery.
- The Convergent® Cor ECM® Tricuspid Valve replacement, currently in a early feasibility study.

Initiate a conversation with a physician.

To discuss a case with our physicians, please call 410-554-4350. For more information and to request a consultation, please contact Brian Bethea, MD, Chief, Cardiac Surgery at 214-244-8787 or brian.t.bethea@medstar.net.
Cardiac Surgery

At MedStar Union Memorial Hospital, we offer customized therapies for the most complex cases—often patients who have been denied care elsewhere. Using a multidisciplinary team approach, together with our interventional cardiology colleagues, we assess each patient to determine the best technology and access method—open, transcatheter, or hybrid—for their individual needs, priorities, and risk profiles.

Our aim is to provide your patients with the most effective treatment option, a low complication rate, a low readmission rate, and a safe, quick recovery. Please see a brief snapshot of our FY 2022 key outcomes inside.