



Kennedy Health System (KHS) has undertaken a phased renovation and new construction program at each of its three hospitals to ensure that they can continue to be competitive in the central New Jersey market. There are several hospitals within 30 miles, many of which were offering more services and state-of-the-art treatments. KHS and Array have been working together for the past five years to renovate and refurbish each hospital to offer a wider array of service lines and add new equipment and treatment options.



The new 25,348 SF, 40-bed Telemetry Unit was designed with both semi-private and private rooms. The unit also includes four isolation rooms, a bariatric room, and five ventilator rooms. Natural light was brought into the unit through the use of a light court in the center of the building.

#### **Additional Projects**

- **NICU Renovation:** The renovation of the existing 10,800 SF NICU was needed to provide the highest level of care for newborns and their families. The updated unit features a family waiting area with internet access and education and consultation rooms. The 15-bassinet NICU includes a family overnight room, isolation room, and nurses stations located strategically between each area.
- **Interventional Radiology Suite:** The 1,000 SF procedure room for Interventional Radiology was updated to provide a new control room, work room, consultation room, changing rooms, and a staff lounge.
- **Clinical Laboratory Renovation:** 6,856 SF Renovation and addition to an existing laboratory including new file storage.





The existing Cardiac Catheterization suite was expanded into the Pain Management area to form one larger suite. The newly expanded Catheterization suite now contains two additional Procedure rooms with associated Control and equipment support spaces, eight prep/recovery positions, and added storage.

The project was constructed in one phase, and required temporary prep/recovery bays located in the adjacent surgical recovery room. The decision to construct the Suite in one phase allowed the facility to occupy the enlarged space more quickly.



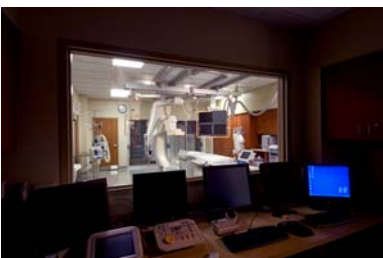
### Project Information

- 3,100 SF
- Spacious, well-appointed private prep/recovery bays
- Full visibility from nurse station to prep/recovery bays
- Full service Catheterization Lab including:
  - Right and left heart catheterization
  - Coronary and aortic angiograms
  - Intra-aortic balloon pump insertions
  - Pericardiocentesis
  - Thrombolytic therapy



### Fast Facts

- Construction cost: \$600,000
- Construction Completion: April 2007





## RICHMOND MEDICAL CENTER Catheterization Laboratory and Ambulatory Prep and Recovery Suite Richmond Heights, OH



This vertical building addition encompasses a new Catheterization Suite and new Ambulatory Surgery Unit prep and recovery area. Additionally, an existing building on the site was demolished for an expansion of the parking area, improvements to the traffic flow on site and enhancement of the site landscaping. This is a 10,600 SF addition which also included renovations to the lobby waiting area.

### Project Information

- 10,600 SF
- 19 of prep/recovery rooms serving both surgery and the Catheterization Lab
- One infectious isolation prep and recovery room capable of Phase 1 Recovery
- One Catheterization Lab with shelved space for an additional Lab
- Administrative and staff support functions
- Interior improvements to existing connecting spaces

### Fast Facts

- Construction cost: \$3,600,000
- All masonry, brick and concrete block exterior walls.
- Addition designed for future vertical expansion.
- Design Start: April 2005
- Construction Completion: August 2006



Christiana Care Health System needed to extract outpatient surgical volume from their Wilmington, DE hospital campus in order to expand their inpatient surgical service line. This 13,000 SF project was for a Patient Services Center complex. Array was engaged to streamline Intensive Care services, expand and contemporize inpatient surgical services and develop a Heart Center. Project design included a 'signature' front door for high volume use (1,700 daily visits); 200 lineal feet of canopy; and a central atrium providing clear wayfinding to all destinations.

#### Project Information

- Centralization of six remote ICU/CCU locations to two, 24-bed ICCUs
- New 6-room 'pod' with prototype major Ors
- Heart Center includes:
  - 3 Open Heart ORs
  - 1 Vascular OR
  - 5 Catheterization Labs
  - 1 Shock Trauma OR
  - Family Hospitality Center
  - Visitor access from atrium
- Family hospitality accommodations for growing tertiary / quaternary services
- Vertical connection of the 1st floor trauma OR and Heart Center

#### Fast Facts

- Construction cost: \$11,000,000
- Construction Completion: August 2000



## SAINT BARNABAS MEDICAL CENTER

### Cardiac Intensive Care Unit

Livingston, New Jersey



In order to offer a full spectrum of cardiology services, Saint Barnabas commissioned Array to design a Heart Center that would utilize both existing and new space.

Key project components include: A new eight-bed Cardiovascular Intensive Care Unit to support the open heart program; Specialty elevator; "Patient Focused Care" sub-stations; State-of-the-art Epicare Care" headwall units.

This Unit is new construction built on top of an existing first floor roof which houses the surgical suite. Each room is glass-enclosed (with an 8' wide trackless sliding / breakaway door) and equipped with a power column to allow staff access to all sides of the patient. Two-person charting /nursing substations are located between each pair of patient rooms.

#### Project Highlights

- 16,175 SF
- 4 Catheterization Labs
- Prep and Recovery Center
- 65-bed Telemetry Unit
- Respiratory Therapy
- Family Hospitality Center

#### Fast Facts

- Construction Cost: \$10 M
- Design Start: 1999
- Completion Date: 2001



9,500 SF conversion of an abandoned OB suite to a cardio vascular center including adding a cardiac catheterization suite to provide a higher level of service. Areas include patient intake, non-invasive cardiology, catheterization prep/recovery, sterile procedure suite, nuclear medicine, vascular labs and administrative support.

#### **Project Information**

- 9,500 SF
- One Cath Lab
- 5 prep/recovery bays
- 2 Nuclear Medicine Cameras
- Stress, Echo and Vascular Labs

#### **Fast Facts**

- Construction cost: \$1,800,000
- Design Start: April 2005
- Construction Completion: January 2006





## SAINT BARNABAS MEDICAL CENTER Telemetry Unit Livingston, New Jersey



This project involved the renovation and consolidation of two existing nursing units into a 65-bed Telemetry Unit. The project scope of this renovation project included the addition of a three-stop elevator which services the CSR, ORs and CVICU to allow for minimum patient transport time and direct distribution of OR materials.

The two units were designed to link at the far end of the wing in order to form a 'continuous loop' which functions as a rehabilitative patient-walking track. Rich wood textures, soft lighting and residential-quality window treatments create a restful environment for recovery.

### Project Information

- 10,000 SF renovation
- 65-bed unit
- Rehabilitation walking track incorporated in design
- Reception desk for Unit also facilities entrance to other Heart Center units

### Fast Facts

- Construction cost: \$1,000,000
- Construction Completion: June 2000

# UNIVERSITY HOSPITALS CASE MEDICAL CENTER

## Heart & Vascular Center Cleveland, OH



As part of the University Hospitals' ten-year strategic capital investment program, improving the cardiology program throughout the network was identified as a top priority. In addition to two catheterization labs in suburban facilities, Array completed a 14,400 SF fit-out of existing shell space to accommodate an expansion of the adjacent Heart and Vascular Department (HAV) and to create space for the New Transplant Department. The two groups share the new public waiting area with reception desks for each and share clinical exam spaces. The public waiting area gives HAV a formal entry point they never had before. The design helped to open up a public access point from an adjacent bridge that was previous cut off from the public.

### Project Information

- 14,400 SF
- Renovated Heart and Vascular Department and Transplant Department includes:
  - Inpatient holding
  - Stress and vascular labs
  - General exam rooms
  - Coumadin clinic
  - Business offices
- High-tech conference room for discussing procedures, performing distance education and training as well as counseling when needed.

### Fast Facts

- Construction Cost: \$1,200,000
- Design Start: June 2005
- Construction Completion: January 2007