

# the cardiovascular news beat

*A Strategic Vision in  
Cardiovascular Medicine*

## WELCOME

It is with great excitement that the Saint Barnabas Heart Centers share the first issue of *The Cardiovascular News Beat* with you. This new monthly newsletter will be distributed to cardiologists, cardiothoracic surgeons and cardiovascular staff as we change the way our cardiac teams work. **In the coming months, we will be transitioning to new, state-of-the-art, integrated imaging and information systems which will improve quality and efficiency while enhancing physician and patient satisfaction.**

The technology initiative began as a vision to achieve programmatic integration across all six of our Heart Centers. Partnering with Philips Medical Systems, Lumedx, General Electric and others, we are launching one of the most ambitious projects to implement new imaging, data, and management technologies across multiple cardiac facilities located throughout New Jersey. With a financial commitment of more than \$10 million over the next five years, this undertaking will involve extensive collaboration among all of our cardiologists and cardiothoracic surgeons.

## SHAPING THE FUTURE OF CARDIAC CARE

Integration is one of the biggest challenges in health care today. At Saint Barnabas Health Care System, we are positioned to apply new technology to bridge physician communication and collaboration that will reduce redundancy and delays. **Beginning in the next few months, cath labs throughout our System will become standardized, making cardiac care more flexible and efficient. Data processing equipment will generate more comprehensive and standardized reporting.** New technologies will allow us to become more tightly integrated for the full spectrum of diagnostic testing.

### INDUSTRY LEADERS

Our Cardiac Steering Committee has been working closely with three industry leaders to put these new solutions into place. After an extensive vendor analysis, the Committee selected Philips Healthcare, Lumedx, and General Electric, each of whom will play vital roles in system integration.

Philips will standardize our imaging system, providing a single platform for cath and echo images. This will make them retrievable from anywhere within our System, and ultimately from physician offices. In addition, **this system will also provide a standardized structured reporting format to improve physician efficiency and use standardized templates within ICAEL standards.** Lumedx will provide a database for all cath, angioplasty, peripheral vascular and EP cases, and will also provide a structured report mechanism. This report will allow for simultaneous report generation and importing known data from hemodynamic systems. It will also allow physicians to complete their records on the spot – eliminating dictation and automatically sending reports to referring physicians.

“At Philips, we strive to bring groundbreaking technologies to market that will change how physicians, clinicians and administrators work,” said Brent Shafer,

Executive Vice President and CEO, North America, for Philips Healthcare. “They need the right tools at the right time to improve efficiency, effectiveness and patient comfort.”

In a parallel project focusing on EKGs, we will upgrade the current GE MUSE system to allow for web-based access, and standardization so that EKGs can be attained from across the system and physicians will be able to review and authenticate them from multiple locations. This combination of new technologies and systems will help our cardiologists act earlier, react faster and make the most accurate treatment decisions for patients.

### THE TECHNOLOGY

Currently throughout the System, physicians are faced with different modalities, different information systems and different hospital tracking systems. **Within the next two years, the Saint Barnabas Heart Centers plan to have a single cath system and a single echo system in place, as well as a new EKG solution.** Additionally, as cath labs need upgrading, they will be replaced with a new infrastructure to handle multidisciplinary interventions including peripheral/vascular, coronary and intra-cardiac (EP) signals.

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■ ■ SAINT BARNABAS  
■ ■ HEART CENTERS

## SHARING INFORMATION

There are many advantages to an integrated approach across the cardiovascular service line.

- ❖ Electronically generated and signed reports
- ❖ Elimination of transcription costs, delays and errors
- ❖ Automatic report distribution available to all facilities
- ❖ Physician reports which include registry items
- ❖ Centralized data collection at the point of care
- ❖ Remote access to images and information

“Our ability to completely integrate technology across the System’s cardiovascular services further enhances our goal of being the finest and most comprehensive cardiac program in New Jersey,” notes John A. Brennan, MD, Executive Director of Newark Beth Israel Medical Center and Children’s Hospital of New Jersey. “It brings the highest level of quality and efficient care.”

“Information sharing is just the beginning,” added Gary J. Rogal, MD, Chief of Cardiology for the Saint

Barnabas Health Care System. SBHCS is encouraging communication and collaboration throughout the process by providing several opportunities for physicians and clinicians to get involved. Recently, SBHCS hosted a dinner meeting with medical and clinical directors to develop best practice standards for the echocardiography laboratories. Future discussions will provide a forum for physicians to collaborate on creating a structured echocardiography reporting template which will standardize the questions, language and format of the data.

“With these integrated solutions for imaging and data in place, our cardiologists will be able to optimize the system to fit their practice,” said Dr. Rogal. “This will allow them greater flexibility and give them the ability to adapt to new ways of providing care. It is truly a patient-focused solution.”

Once the new technologies are in place, doctors and staff will be educated on all facets of the new system at each of the facilities.

## OVERALL BENEFITS OF AN INTEGRATED SYSTEM

“The enterprise merges strategic clinical planning with state-of-the-art technology. New infrastructure at each hospital will increase both quality and efficiency across all our cardiovascular services,” said John F. Bonamo, MD, Executive Director of Saint Barnabas Medical Center.

- ❖ delivers more efficient patient care
- ❖ improves effectiveness, outcomes and patient comfort
- ❖ simplifies the cardiology workflow
- ❖ allows for better management of complex procedures
- ❖ reduces duplication of work and the risk for errors
- ❖ improves economies of scale
- ❖ better utilizes physician time
- ❖ supports and encourages in-system referrals
- ❖ adds clinical value

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*Team Forums. The medical directors of Echocardiography and the clinical directors of the Non-Invasive Cardiovascular Labs from throughout the Saint Barnabas Health Care System met at Monmouth Medical Center for the first in a series of forums that will focus on best practice standards, laboratory policies, procedures, protocols and accreditation. The team will meet again on October 23rd at Monmouth Medical Center.*

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A revised Philips software product – Xcelera – will provide one access point for all relevant images for the full spectrum of cardiac modalities including cardiac cath, echocardiography, 64-slice CT, and MRI. All of this information can be accessed on-site for documentation, viewing, quantification, reporting, and archiving data, as well as remotely for viewing.

“There are many advantages to bringing the Xcelera management solution to SBHCS,” said Allen

Boxbaum, System Vice President of Cardiovascular Services. “It will give immediate access to images and reports wherever and whenever they are needed – around the clock in an exam room, an office, or even from a home computer – and it will be fast, cost-effective, and secure.”

The new solution will also provide integrated information flow at the various points of care, such as exam ordering, pre- and post-procedure, diagnosis, reporting and distribution of results.

“Integration will simplify workflow and transform data into accurate, useful and accessible information so physicians and clinicians can focus on patients,” said Gary J. Rogal, MD, Chief of Cardiology for the Saint Barnabas Health Care System.

“It will give surgeons the tools to assess patients more accurately, share findings, and illustrate our superior outcomes,” said Craig R. Saunders, MD, Chairman of Cardiothoracic Surgery, Saint Barnabas Health Care System.