Hackensack Meridian Mountainside Medical Center - Montclair, NJ

INFINITT's NCDR CathPCI Registry Software enables Mountainside Medical Center to Collect and Submit Data Electronically

Hackensack Meridian Mountainside Medical Center offers exceptional cardiac expertise and leading technology to Montclair, New Jersey and surrounding communities. Their



interdisciplinary team of heart specialists has developed a powerful program for diagnosing, treating, and managing cardiovascular disorders.

Cardiac Catheterization and PCI (percutaneous coronary intervention) procedures enable doctors to pinpoint potential heart problems such as coronary artery or valve disease. Catheterization is a minimally-invasive procedure often recommended for patients who suffer from

chest pain, show signs of blocked arteries, or have atypical stress test results.

PCI, also known as coronary angioplasty, is a non-surgical procedure that opens narrowed or blocked coronary arteries with a balloon to relieve symptoms of heart disease or reduce heart damage during or after a heart attack.

The Challenge

Mountainside Medical Center performs approximately 300 Cath lab procedures annually. To be accredited by the American College of Cardiology (ACC), Mountainside Medical Center's Cath Lab is required to participate in the National Cardiovascular Data Registry (NCDR), collecting and submitting data on a quarterly basis to demonstrate adherence to ACC/

AHA clinical practice guidelines, procedure performance standards, and appropriate use criteria (AUC).

Accreditation better positions a facility to decrease their risk for penalties and reduction of reimbursements related to 30-day readmissions, average length of inpatient stay, and inpatient mortality. This recognition by the ACC also demonstrates the hospital's commitment to quality improvement, improved patient satisfaction and outcomes.



In April of 2021, Kathleen Castaldo, RN, BSN, was brought on as nurse supervisor for the Cardiac Cath Lab at Mountainside. She came to Mountainside with 13 years' experience as a cath lab nurse. In addition to running cases and supervisory responsibilities, Castaldo manages data collection and submission to the ACC/NCDR CathPCI Registry.



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To participate in the registry, there are numerous data elements that must be recorded for each patient, including name, demographics, care history, health and risk factors, procedure data (coronary arterial access), dose data, procedure doctor, door to balloon time, and findings, including % of blockage and/or lesion measurements.

Castaldo was expected to collect Q4 2020 data going back to October 1, 2020, and then move into 2021 until she was caught up to the present. She soon realized that the magnitude of the project was staggering. Abstracting the data manually was virtually impossible within her time constraints. So, she went to the Cath Lab director and asked if they could purchase Certified NCDR software from a third-party vendor to help with data collection.

INFINITT NCDR CathPCI software has been certified by the ACC and was a logical solution since Mountainside was already using INFINITT Cardiology Suite in the Cath Lab for image analysis and structured reporting.

The Solution

INFINITT Cardiology Suite is a web-based PACS that integrates all cardiovascular data from Echo, EKG, Cath, Non-invasive Vascular and Nuclear Medicine. The Cath module offers image management and analysis tools and can map data from hemodynamic systems to appropriate fields in the Cath Lab report in a single mouse click.

As an optional module, INFINITT's CathPCI Registry tool offers integration between the registry and INFINITT Cardiology Structured Reporting Templates. The integration allows

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for seamless population of patient and exam data, making submission more efficient and accurate. In addition, INFINITT was able to migrate data from previous studies, going back to Q4 of 2020. This allows access to prior procedure data and patients' recent Cath lab history.

The Result

With the migration now complete, Mountainside Medical Center can submit electronic data to the registry.

"The INFINITT integration does the heavy lifting, making my job more manageable and reducing the time it takes to complete each patient chart by about half," she reported. "With current nursing shortages, staff are overburdened as it is. Anything that improves workflow and makes us more efficient is greatly appreciated."

As they go forward, Mountainside's registry data will facilitate research, and the registry will provide evidence-based data on large numbers of patients undergoing Cath Lab procedures. The CathPCI Registry will provide feedback to the hospital in the form of benchmarked outcome reports that show how their Cath Lab is doing on an array of performance criteria. This feedback will help Castaldo and her staff identify areas for improvement and track their progress. It will also enable physicians to apply patient-based research in their daily practice.

