



**Dominican Hospital
Foundation.**
A Dignity Health Member

CT Precision Imaging Campaign

Enhancing Patient Care at Dominican Hospital



CT Precision Imaging Campaign

Dominican Hospital Foundation is excited to enhance patient care with the launch of our **CT Precision Imaging Campaign** to acquire two new CT (computerized tomography) scanners for Dominican Hospital. This fundraising campaign will bring the most advanced CT scanner technology to Dominican Hospital.

The hospital's comprehensive imaging services encompass breast imaging, ultrasounds, MRI (magnetic resource imaging), PET (positron emission tomography), x-ray and fluoroscopy, nuclear medicine, and interventional radiology. And, soon, outstanding leading-edge CT scanners.



Essential to Patient Care

Diagnostic imaging can be crucial to a patient's care plan as it helps determine the type of trauma and the precise location in a noninvasive and timely manner. New CT scanners will advance the hospital's capability to diagnose disease and injury, plan medical treatment and provide improved image quality with lower doses of radiation more quickly. This will enable clinicians to continue to expand clinical capabilities for cardiology and vascular disease, improve emergency medicine through process optimization, and advance treatment of cancer with greater access to precise imaging.

Whether diagnosing abnormalities, such as tumors or blood vessels, giving a clear picture of an area before surgery, or guiding doctors on where to take biopsy tissue samples, access to modern CT imagery is a critically important technology for patient care. Diagnostic imaging with CT has become a crucial part of the care plan for many patients, particularly in the specialties of emergency, surgical, and cancer medicine.

Advances in CT Scanning Technology

With innovative technology, the level of scan detail will significantly improve, allowing care providers to make life-saving decisions more quickly. The speed of this technology offers significant benefits to patients, especially trauma, pediatric, and critically ill patients. CT scans enable physicians to visualize internal injuries and diseases in less time. Physicians rely on the most advanced imaging for fast, clinically accurate information. It allows physicians to scan patients around the clock, use less radiation per exam and shorten the imaging time for pediatric patients with no need for anesthesia. The scanners will allow for efficient communication between departments and care providers due to the proximity of the new CT center to the emergency department.

The Need for Innovative Technology

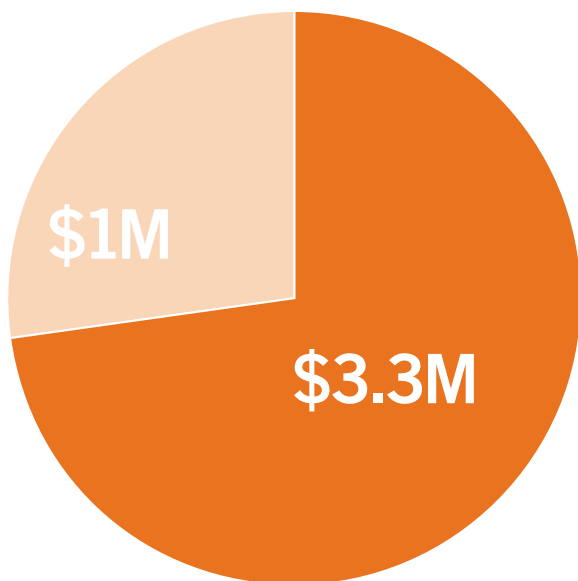
CT scanning technology has improved dramatically in recent years. The latest 128-slice scanners provide sharper images more rapidly, and more accurately diagnose conditions and monitor disease, all with lower doses of radiation. CT ranks among the top five medical developments in the last 50 years as the number of uses for this vital imaging modality has dramatically increased over the previous decade.

This highly sophisticated new imaging is critical for saving lives and improving patient care and outcomes. New CT scanners will strengthen the hospital's capability to diagnose disease and injury, plan medical treatment and provide improved image quality with lower doses of radiation more quickly.

The scanner will aid our medical staff in accelerating clinical decisions, while further improving patient quality of care. CT is critical in treating pediatric patients allowing physicians the ability to scan patients around the clock, use less radiation per exam and shorten the imaging time for pediatric patients with no need for anesthesia. The scanner will aid our medical staff in accelerating clinical decisions, while further improving patient quality of care.

The CT Precision Imaging Campaign will help fund two Siemens Somatom Definition Edge 128-slice computerized tomography (CT) scanners. Two new machines will support patient care daily through multi-purpose utilization across the hospital departments.



"As the most heavily used imaging technology in community hospital settings, and the case here at Dominican, CT scans are a fundamental tool in patients care plan," explains Dr. Nanette Mickiewicz, MD, President/CEO. "As the need increases within our services, we request the support of our generous benefactors and donor community."



\$4.3M Investment

To make this vision a reality, \$4.3 million in funding is necessary. To date, \$3.3 million is secured through a \$1.5 million investment from CommonSpirit Health and \$1.8 million allocated funds from Dominican Hospital Foundation.

The balance of the project of \$1 million will be realized through this *CT Precision Imaging Campaign*, shaping the quality of health care that benefits residents in Santa Cruz County.

-  \$3.3M funds secured through CommonSpirit Health and Dominican Hospital Foundation
-  \$1M to be raised through *CT Precision Imaging Campaign*

Imaging Facts at Dominican

23,000 CT scans per year

16,000 in-patients and 7,000 out-patients served per year

Current State

- GE Light-speed (16-slice) CT installed in 2004 (recently decommissioned 8/2022)
- Siemens Somatom (64-slice) CT installed in 2008
- GE Bright-speed (16-slice) mobile CT (trailer) added in 2020 due to repeated failures

Service Lines and Providers

- Cardiology
- Oncology
- Neurology
- Emergency Medicine
- Pulmonary / Critical Care
- Infectious Disease / Internal Medicine
- 9 on-staff radiology physicians
- 13 credentialed CT technologists
- 17 CT staff support

Technology Impacts on Current Initiatives

Improvement of image clarity in 64 to 128 slice CT scans

- The untrained eye may not notice too much of a difference among the new technologies. Improvements in spatial resolution and software enhancements reducing artifacts allow your radiologist to pick up on more subtle lesions or issues resulting in faster, more accurate diagnoses.

Dose of radiation in 64 vs 128 slice CT scan

- Significant software and CT hardware enhancements have led to the development of CARE kV-a feature that automatically sets the right kV (radiation energy) for reproducible image quality and contrast enhancement at the lowest possible radiation dose.
- Providing the best imaging at the lowest possible radiation dose is of critical importance—the effects of radiation over a lifetime are cumulative and often irreversible.
- Improved technology improves both staff and patient safety.

Expansion of Comprehensive Services

- Larger bore and table weight limit (676 pounds) improves imaging capabilities and care for bariatric patients avoiding unnecessary inter-facility transfers.
- Cardiac Tech package, assisting in specialty procedures such as transcatheter aortic valve replacement (TAVR)
- Real-time visualization during procedures
- Increased speed of imaging process for timely analysis



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