

# ENHANCING TECHNOLOGY AND INFRASTRUCTURE

## *Three Examples of Key Upgrades*

NMC continuously seeks to upgrade our infrastructure and technology to ensure that we keep pace with the latest developments in the care of our patients. Exceptional care starts with empathy, and the delivery of that care is made more efficient when our tools and techniques are industry standard.

Three examples of important advancements in our technology this year include an upgrade of our MRI equipment, implementation of Tele-Stroke programming in partnership with Dartmouth Health and new chemistry analyzers for our lab.



### MRI Upgrade

In 2023, NMC upgraded its Magnetic Resonance Imaging equipment, allowing for a new level of productivity and patient comfort. NMC conducts about 2,500 MRIs each year and the upgrade provides better image quality, improvements in efficiency, workflow, and access times. NMC patients now benefit from quieter scanning noise and continued access to the larger 71-centimeter-wide bore (opening), which help to reduce anxiety and claustrophobia concerns.



## *Launch of New Chemistry Analyzers*

NMC's lab this year upgraded two Vitros 7600 chemistry analyzers, replacing two smaller and older models. These machines run tests on blood or urine to assess liver or kidney function, blood sugar, electrolytes or detect other chemical substances in a patient's specimen.

The upgrade brings improvements including:

- Faster throughput and improved turnaround times.
- Complete test menu on both analyzers, offering a redundant system
- Workload balancing across two identical analyzers for improved efficiency
- Reduction in downtime risk = expecting virtually 100% uninterrupted performance

"Above all, we are striving to improve our services and avoid unnecessary downtime," said Director of Laboratory Services David Blin.

## *Partnering with Dartmouth for Stroke Care*

This year, NMC began working with Dartmouth Health TeleNeurology, enabling faster access for Emergency Department patients having neurological emergencies. The TeleNeurology Program provides round-the-clock consultations by a board-certified neurologist for patients 18 years and older. Patients are evaluated, managed, and treated in real-time collaboration with NMC's ED providers.

"TeleNeurology has been a great addition to

the care we provide at NMC," says Emergency Department Nurse Manager Rachael Sehpardson-Rudden. "It's impressive and reassuring to be able to provide an eyes-on neurologist to patients 24/7 that we otherwise would not have at a small hospital. Keeping our friends and family members closer and being able to treat them locally has been awesome for the community."

In the program's first year, NMC was able to provide 273 consultations for patients.

## *Expanded Emergency Department Set to Open Soon*

NMC's \$11 million project revamping the Emergency Department opens for patient care in early December. The renovation brings a much-needed overhaul of a busy healthcare space with key improvements to patient privacy, increased capacity, and a dedicated suite designed to better meet the needs of patients experiencing mental health issues.

### Key facts:

*Renovates **9,500** square feet and adds **2,400** square feet of space.*

*Increases patient treatment spaces to **21** from **14**.*

*Adds **four dedicated spaces** designed to treat mental health issues*

*Improved **infection control measures** with greater capacity for negative pressure*

### About the project:



#### *Privacy*

The old ED had only a few closed-door rooms, with a set of curtained bays in the center of the department. The new space uses a double hallway design with treatment rooms on the outside of the hallways, each room having a closable sliding glass door.



#### *Efficiency*

The staff "hub" will be in the center of the department, along with a dedicated medication preparation space, and centralized storage. The care team can see and easily access treatment areas making workflows more efficient.

*About the project continued:*



*Safety*

The registration area is part of the renovation, and the new design brings staff inside the secure area of the department, an improvement in staff safety.



*Timing*

The Emergency Department moved operations into a nearby temporary space in April 2023. The ED operated smoothly in the temporary space for the past eight months, and prepares to transition into the new space in December.