

North Bay and District Hospital

An inside look - Diagnostic Imaging

Napoleon Bonaparte once said, "A picture is worth a thousand words."

Nowhere is that more true than in modern medicine. A patient can describe symptoms, a doctor can ask searching questions and do an external exam, and a lab technologist can analyze blood and tissue samples, but a precise, clear image from inside the body is often the best basis for accurate diagnosis.

That's why the North Bay and District Hospital wants to add several key pieces of equipment—advanced technologies that allow doctors to see clearly and make fast and accurate diagnoses.

Our beautiful new hospital will soon be ready. Now we are turning to our community to ensure that it will be equipped with state-of-the-art diagnostic imaging equipment including an MRI. Our physicians need your support to see more clearly.



Diagnostic Imaging at NBDH Today

North Bay and District Hospital is equipped with many tools for diagnostic imaging, including a high-resolution Computed Tomography (CT) scanner, ultrasound, nuclear medicine, X-ray and mammography. Each year our dedicated radiology staff members perform more than 100,000 tests, providing skilful and compassionate care and fast and accurate assessments to referring physicians.

Thanks to special provincial funding in 2003, the hospital has a high-end CT scanner, capable of doing a routine head scan in 12 seconds. This important equipment is in use 12-hours a day during the week, and eight hours a day on weekends, performing more than 19,000 exams each year. Our wait time for CT scans is 15 days. That's half the provincial target, and 31 days shorter than the provincial average.

Our state-of-the-art ultrasound equipment provides highly detailed images. In 2005 equipment in our four X-ray rooms was replaced, increasing efficiency, output, image quality and patient comfort, while reducing radiation dose.

As the demand for diagnostic imaging continues to grow and technologies improve, North Bay and District Hospital must keep pace and ensure our patients have access to the same new technologies available in larger centres.



Photo: Ed Eng

"The community purchased our first CT scanner. This civic generosity has resulted in local access to a vital diagnostic tool, resulting in earlier therapy and saved lives."

Dr. Cameron Hunter, Radiologist



"Now is the time for us to work towards getting an MRI and other new diagnostic technologies so that our patients receive the best possible care close to home."

Mark Hurst, President, CEO



Picturing the Future

Diagnostic Imaging at the new NBDH

Until 100 years ago, physicians couldn't see inside the human body without cutting it open. The invention of the X-ray changed all that. Ultrasound followed 50 years later. In the past 30 years, many new technologies for diagnostic imaging have been developed and its uses have grown exponentially. Today it's actually possible to "see" thought!

The total cost of this equipment is more than \$10 million. We are turning to the community of North Bay and district to raise between \$3.8 and \$6 million. The hospital must pay for 100% of the cost of all medical equipment as part of its annual budget. This community has come through for our hospital many times before. We're counting on you again.

Keeping up with advancing technology is a challenge for any hospital. North Bay has done well, but now it's time to take a leap forward. In our new hospital, we propose to add:

Magnetic Resonance Imaging (MRI) machine

\$3 million

Other Community Diagnostic needs include:

 Digital Mammography Equip 	ment

SPECT/CT machine

Digital Angiography and Fluoroscopy
Equipment

 4 Digital Radiography Suites, including one dedicated for Trauma

 Digital Radiography Equipment for Urology Operating Suite

\$1.4 million

\$1.4 million \$1.3 million

\$1.8 million

\$3.65 million

Equipment for \$.6 million



Magnetic Attraction Why MRI Matters

Only a few years ago, Magnetic Resonance Imaging was a modern marvel – a technology so new doctors weren't sure how best to use it. Now it's used on a routine basis to diagnose, stage and monitor a wide variety of conditions, including:

- Strokes and mini-strokes
- Breast cancer
- Cervical and uterine cancer
- Prostate and rectal cancer
- Osteoarthritis
- Sports injuries
- Vertebral fractures
- Brain tumours
- Multiple Sclerosis
- Pancreatic and gall bladder disease
- Kidney disease

With an MRI machine in North Bay, the picture will be completely different!

RI

- Uses a giant magnet, radio frequency pulses, and a computer to produce detailed pictures of organs, tissues, bone and virtually all body structures
- Can produce clear, precise images of almost any part of the body from any angle
- Is a safe, painless exam for patients, with no radiation, and it gives them answers sooner
- Helps doctors catch disease early
- Helps surgeons pinpoint and accurately plan surgical procedures
- Ensures the right treatment for the right ailment, improving outcomes and reducing costs to the system
- Reduces pressure on CT scanner, potentially reducing CT wait times

Right now, more than 2700 MRI scans a year are completed elsewhere for our patients. That number is likely to increase. With no MRI in North Bay, people wait weeks or even months for their scans. They must travel to Timmins, Sudbury, even Toronto, incurring costs for accommodation, travel and missed work.



Ed Eng

"An MRI will enable us to offer the

standard of care for a variety of diagnoses. This equipment is essential for our hospital to fulfill its district role."

Dr. W.R. Hodge, Radiologist



Digital Imaging

Just as we now take snapshots of family and friends digitally, rather than on film, diagnostic imaging has changed dramatically.

Digital diagnostic imaging allows us to do more, faster, and more accurately. Technologists can magnify, re-orient, brighten and add contrast to an image, helping the radiologist make more accurate assessments. Digital images are less expensive to store, manage and transmit. With digital images, physicians can consult with experts over long distances.

In addition to producing more accurate results, digital X-ray machines expose patients to less radiation.



Digital Mammography: Fighting Breast Cancer

On average, more than 400 Canadian women are diagnosed with breast cancer each week. The good news is that breast cancer is causing fewer deaths, in part because of early diagnosis and treatment. In addition to the common digital advantages, this procedure is shorter and more comfortable for patients.

SPECT/CT: Beyond Structure

A SPECT/CT machine combines nuclear medicine (the use of radioactive isotopes to target specific organs and cells) and Computed Tomography technology (the computer generation of three-dimensional images of the inside of the body). This new hybrid technology allows doctors to visualize the chemical changes that occur in the body. It is a powerful tool in early diagnosis of cardiac conditions, infection, and diseases such as cancer. Alzheimer's and Parkinson's.

Digital Fluoroscopy and Angiography: Moving Pictures

Digital fluoroscopy and angiography uses X-ray technology, an injected contrast dye and a digital detector to produce real-time moving images of the internal structures of a patient's body. This technique is used in guiding needle biopsies of tumours and finding foreign bodies. The advanced angiography technology is used when investigating the gastrointestinal tract, the pancreas or inserting a PICC line – a long term venous access.

Seeing More Clearly

What Advanced Diagnostic Imaging Means to North Bay and District

Why is Diagnostic Imaging important to the people of our community?

Just ask Kalvin Young.

Kalvin has Multiple Sclerosis and has undergone several MRI scans. Once he had an appointment in Timmins at 4 a.m.! Another time he drove to Toronto for a scan, arriving home after midnight. That's hard enough for a healthy person, let alone someone living with a chronic disease.

Kalvin will need more scans as his disease progresses. He looks forward to having them close to home.

Claude Fortier also wants to see more and better diagnostic imaging in North Bay.

Claude was suffering from severe shoulder pain but X-rays revealed nothing. He waited over five months for an MRI scan in Timmins. Meanwhile, he was off work and taking pain medications everyday. Eventually, he went to a private clinic in Quebec and was diagnosed with a torn tendon. The scan cost him \$700, plus the cost of his travel and accommodation.

In modern medicine, diagnostic imaging is a critical tool. Having advanced imaging equipment at NBDH will:

- Ensure timely access to earlier, faster and more accurate diagnosis for the people of this district
- Support more effective and targeted medical and surgical treatments
- Help our patients get the care they need close to home, avoiding the stress and expense of travel
- Attract and retain high quality health professionals who have trained on, or are used to working with, advanced diagnostic tools
- Support the training of doctors attending the Northern Ontario School of Medicine, who may ultimately decide to stay in our under-serviced area

Picture this: A beautiful new district hospital with dedicated physicians and staff, and state-of-the-art diagnostic imaging technologies. Patients with easy access to the scans they need, right here at home. Families spared the extra stress and expense of travel. Shorter wait times. Faster diagnoses. More accurate treatments. Better outcomes.

Now help us develop that picture!

"With the ability to have MRIs completed locally, the investigative process can be shortened substantially for a patient who is suffering. I have seen too many of my patients have to endure long travel in fragile health in order for proper treatment to begin."

Dr. Ken Runciman, Family Physician

Patient Care at the Centre of Amalgamation Plans



The North Bay and District Hospital (NBDH) and Northeast Mental Health Centre (NEMHC) Boards announced the intent to amalgamate by 2012. This new organization will provide acute health services to North Bay and surrounding area and specialized mental health services to the region of northeast Ontario.

The quality of care for the patient is at the centre of amalgamation as they move forward together in the creation of a new organization. Coming together as one organization creates a host of opportunities to build the best possible service for our patients and their families.

The Boards will work closely with the North East LHIN and the Ministry of Health and Long Term Care to make this amalgamation successful.

The North Bay and District Hospital and the Northeast Mental Health Centre have been working as partners to build the new North Bay Regional Health Centre for the past 10 years. Over that time they have created efficiencies and improved services through joint management of support services.

Your gifts will ensure that the people of North Bay and area receive accurate diagnoses and the right treatment, faster, so that they can return to their lives and families sooner.

PLEASE MAKE A DONATION TO:

The North Bay and District Hospital Foundation Campaign for Diagnostic Imaging

BY MAIL: North Bay and District Hospital Foundation

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BY PHONE: 705.495.8125
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Visit our office open from 8:30 am to 4:30 pm Monday to Friday, and located at 205 Main St. East. The Foundation accepts
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