



# NORTHUMBERLAND HILLS HOSPITAL

*inspiring strength, dignity and compassion*

## **MRI Fact Sheet**

**December 2006**

### **What is MRI?**

MRI is short for magnetic resonance imaging, a type of imaging that uses magnetic fields rather than radiation.

### **When is MRI used?**

MRI is a critical tool for imaging:

- Strokes
- Breast cancer
- Multiple sclerosis
- Brain tumours
- Cartilage injuries in the knee
- Chronic shoulder pain
- Hip necrosis

### **Why is MRI needed at NHH?**

- Currently, NHH sends its in-patients to adjacent hospitals like Peterborough Regional Health Centre and Lakeridge Oshawa for MRI. Outpatients may travel as far as Kingston, Toronto, or even Buffalo.
- Transferring patients to an off-site MRI scanner makes it difficult to accommodate urgent cases; coordination of physicians, nurses and ambulances is required on a timely basis.
- The current wait time for a patient to receive an MRI exceeds the recommended target times. NHH is seriously under-serviced for MRI; 45 MRI scans per thousand population is an appropriate level of access.
- Some patients better suited to diagnosis on an MRI are referred to CT, increasing CT wait lists. Up to 4,000 CT scans annually would be better suited to diagnosis with an MRI. Freeing up this CT scanner time will allow NHH to shorten the wait for other people that need CT scans.

There are new horizons opening up for CT diagnosis, especially for heart disorders, and the freed up CT time should allow NHH to implement these critical new CT applications.

- The objectives of the MRI scanner service include:
  - Improved patient care, especially for people with diseases of the breast, central nervous system, and joints
  - Reduction of system costs through ambulance transfers and the associated nursing escort costs

- Improve utilization of expensive inpatient resources with immediate access to the MRI diagnostic service
- Improve system integration by transferring MRI images electronically prior to patient transfer or for consultation before initiating the treatment plan
- Provide service closer to home, increasing access for those patients that have difficulty traveling
- Improve wait times in neighbouring facilities

### **What are the advantages of having an MRI sited at NHH?**

An MRI service located at NHH offers significant advantages to patients, in addition to reducing wait times:

- Most inpatients have virtually no access as it is impossible to transfer inpatients on multiple occasions for the necessary follow-up scans. To do so would also increase the length of stay significantly. The MRI needs of the sickest and frailest patients are not addressed.
- NHH has a higher proportion of the population over age 65 (almost 18%); seniors require more health care and a greater need for access to an MRI.
- NHH plans to be part of the ministry's Stroke Strategy and enhance breast cancer diagnosis, both of which would greatly benefit from an MRI service in the hospital.
- With both CT and MRI available locally, it will be possible for our doctors to use the appropriate tool to answer the clinical question at hand, therefore avoiding radiation exposure to some people.

### **How will this affect NHH's operating position?**

NHH has or can obtain the necessary resources:

- The Ministry currently provides an \$800,000 operating grant; the business case is predicated on this practice continuing and is sufficient to provide the service without incurring an operating deficit.
- NHH has or can recruit the necessary resources to operate an MRI.
- A substantial amount of unsolicited capital funds have already been committed to the MRI. The total cost of the MRI is expected to be \$2.5M.

### **Where will the MRI be located? Does the hospital need to build an area or move other services?**

During the planning of this hospital, space was built into the existing diagnostic imaging suite that is suitable for housing an MRI. The space is currently used for film storage. Each hospital is required to keep film records for five years. With the conversion to digital imaging, space for film storage is not needed by 2008.

The service could be operational within six months of receiving ministry approval.

There will be no disruption to other services.