Office of the Auditor General of Ontario
Bureau de la vérificatrice générale de l'Ontario

MRI and CT Scanning Services

2018 Value-for-Money Audit

Why We Did This Audit

- Public concerns have been expressed that MRI and CT wait times are too long.
- The Ministry of Health and Long-Term Care (Ministry) is responsible for overseeing, through the 14 Local Health Integration Networks (LHINs), the funding and performance of MRI and CT services in Ontario.
- MRI scans performed have increased by 17% and CT scans by more than 30% over the five years up to 2017/18, excluding emergency cases.

Why It Matters

- Timely, quality, medically necessary MRI and CT scans can help doctors to accurately diagnose and treat many diseases earlier in their course, positively contributing to patients' health outcomes.
- In contrast, long wait times delay patients' diagnosis and treatment and can affect their quality of life and ability to return to employment, school or everyday life.

What We Found

- Overall, Ontario's wait times for patients requiring MRI and CT scans were the lowest when compared to five provinces where similar wait time data was available. However, many Ontarians who needed scans have had significantly long waits in comparison to Ministry targets.
- MRI Services: In 2017/18, a total of 108 machines in 52 hospitals performed over 835,600 exams.
  - Provincially, for emergency patients, only 5% waited longer than the Ministry's 24-hour target. For urgent patients, 17% waited longer than the two-day target (up to five days); 65% of semi-urgent and non-urgent patients waited longer than the Ministry's target of 10 and 28 days (up to 34 days for semi-urgent patients and up to 106 days for non-urgent patients), respectively. Semi-urgent and non-urgent patients accounted for 91% of total MRI scans in 2017/18.
  - Wait times varied depending on where a patient lives and the demand for MRI services in that LHIN. In 2017/18, 90% of non-urgent patients requiring MRI scans waited up to 203 days in the LHIN with the longest wait times, compared with 63 days in the LHIN with the shortest wait times.
  - On average, all 108 MRI machines were used at only 56% of their maximum capacity (maximum capacity is assuming that MRI machines are run 24 hours a day, seven days a week) in 2017/18; however, the hospitals were financially unable to increase their operating hours for these machines, which would have reduced wait times.
  - Lack of user-friendly communication systems, such as texting and email, at the hospitals contributed to patient no-shows (missed appointments). In 2017/18, hospitals reported a total of 48,320 MRI appointments where patients did not show up, which we estimated cost hospitals about $6.2 million, mainly to pay for staffing.
- CT Services: In 2017/18, a total of 165 CT machines in 78 hospitals performed almost 1.8 million scans.
  - Provincially, for emergency patients, less than 1% waited longer than the 24-hour target. For urgent patients, 4% waited longer than the two-day target (up to four days); 33% of semi-urgent and non-urgent patients waited longer than the Ministry's targets of 10 and 28 days (up to 28 days for semi-urgent patients and up to 64 days for non-urgent patients), respectively. Semi-urgent and non-urgent patients accounted for 49% of the total CT scans in 2017/18.
  - In 2017/18, 90% of non-urgent patients requiring CT scans waited up to 127 days in the LHIN with the longest wait times, compared with 27 days in the LHIN with the shortest wait times.
  - On average, all 165 CT machines were used at approximately 37% of maximum capacity (maximum capacity is assuming that CT machines are run 24 hours a day, seven days a week) in 2017/18. Again, hospitals were financially unable to increase their operating hours, which would have reduced wait times.
- The Ministry has not reviewed its funding method for either MRI or CT services for more than a decade, and it has not incorporated into its funding method the actual cost-per-scan information self-reported by hospitals, individual hospitals' demand and capacity, and the complexity of scans required by patients.

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- Hospitals did not consistently assess or track whether all referrals for MRI and CT scans were clinically necessary. Monitoring the number of unnecessary or inappropriate scans is essential because these scans do not improve a patient's health and utilize resources that can otherwise be used to help patients who need the scans.

Conclusions

- Patients who needed an MRI or CT scan, assessed as semi-urgent and non-urgent, did not receive timely (in comparison to Ministry targets) and equitable service (same wait times irrespective of LHIN) in Ontario.
- MRI and CT services are not being delivered in a cost-effective manner because the Ministry has not reviewed its funding method for these services for over 10 years.
- Hospitals could do more to ensure referrals for scans are clinically necessary, to achieve optimal use of limited resources.

Read the MRI and CT Scanning Services audit report at www.auditor.on.ca