■ Service Report

Private Imaging Facilities in Canada: MRI and CT

Context

More than 90% of MRI and CT services are delivered in the publicly funded health care setting.[1] The remaining services are delivered in privately owned imaging clinics.[1] An increase has been observed in recent decades in the number of private facilities across Canada,[2,3] as well as a trend towards chain-ownership.[4] The increase in private imaging may be linked to long wait lists,[5] the aging Canadian demographic,[6] the availability of expensive devices,[6] and the expansion of clinical indications for these imaging modalities.[1]

There is variation between provinces (territories are excluded because there is an absence of private MRI and CT services in these jurisdictions) on rules around payment for private exams. Neither the Quebec or British Columbia health systems provide any funding for private imaging,[2,3] and Saskatchewan requires private facilities to provide one scan of similar complexity to an individual on the public waiting list for every private scan that is performed.[7,8] In Ontario, private MRIs are not permitted except as a third-party service — such as an employer paying through private insurance at a government run facility.[9,10] In Manitoba, Prince Edward Island and Newfoundland and Labrador, private imaging is not available.[10] From a regulatory perspective, some provincial governments are directly involved in the regulation of private clinics; whereas, others delegate regulatory powers to professional bodies.[2,11]

Different policies across provinces have led to a complex landscape around private imaging facilities in Canada.[1,2] Beyond provincial health insurance plans, funders may include patients or private insurance, as well as Workers' Compensation Boards. Overall, there is limited publicly available information regarding the activities of private imaging facilities.[5]

Objective

This report summarizes information captured from an online survey targeted to private imaging facilities with MRI and/or CT services. The objective is to provide information on the number and cost of MRI and CT exams conducted during the 2019-2020 and

2020-2021 fiscal years in private imaging facilities. For the purposes of this report, private imaging facilities refer to sites that bill MRI or CT exam payments to sources other than provincial health insurance plans (such as individuals seeking diagnostic tests).

Methods

There were 56 imaging facilities, operating privately owned MRI and/or CT machines in Canada, identified through the Canadian Medical Imaging Inventory (CMII) and an internet search, in 7 provinces (British Columbia, Alberta, Saskatchewan, Ontario, Quebec, New Brunswick and Nova Scotia). Privately funded imaging is not available in the other provinces or any of the territories. Facilities were invited to participate in a survey that included 4 questions for each imaging modality. Questions focused on the total number of exams performed (both to residents from within and outside of the province), sources of payment for exams, and the average cost of a scan. Both English- and French-language versions of the survey were offered to survey participants. The survey opened on March 22, 2022, and data collection closed on April 22, 2022.

Prices for body areas listed on websites were also collected when available. Websites that did not breakdown prices per body area were not included in the analysis. Average cost of MRI and CT exams, as well as costs per body area for MRI and CT were calculated from website prices. All prices reported are in Canadian dollars.

Results

Survey Results

Six private imaging facilities agreed to participate in the survey. Five of the 6 participants offer MRI scans, and 2 of the 6 offer CT scans. One facility with MRI services only provided data for 2020-2021. Additionally, another facility that offers CT scans did not provide information on prices and sources of funding for both fiscal years.

The response rate to the survey was 10% and may not accurately represent all private facilities providing MRI and CT exams across Canada. It is possible that a higher response rate would alter the overall results. Hence, the reliability and validity of these findings may be low. It is noted that sites that participated in the survey are also regular contributors to the national CMII survey that is conducted approximately once every 2 years.

Factors affecting willingness to participate in the survey, as reported by 1 facility that declined to participate, include that the information being sought is confidential. Participants may be disinclined to disclose exam volumes and pricing due to the proprietary nature of the data, even when they were reassured that the data would be anonymized.

Another facility, which declined to participate in the survey, expressed concerns that the collection of this kind of data can provide information to decision makers that can threaten their business. Private facilities and their place in the health care system in Canada remains a controversial and politicized topic[1,12,13] and this may have contributed to the limited participation in the survey.

Further, information on factors at the facility level that may affect total number of scans performed (e.g., size of facilities, number of employees, imaging equipment available) was not collected. Results are also reported at the national level, therefore differences in provincial regulation of private imaging facilities are not considered.

Based on survey responses, the average number of MRI scans performed at a single private facility was 3,738 (ranging from 667 to 7,621) and 3,188 (ranging from 614 to 6,543) during the fiscal years 2019-2020 and 2020-2021, respectively. The average number of MRI exams performed for patients from out-of-province at a single private facility was 168 (ranging from 52 to 404) in the fiscal year 2019-2020, and 100 (ranging from 62 to 283) in the fiscal year 2020-2021. The average cost per scan is $782 (ranging from $650 to $950) in the fiscal year 2019-2020, and $819 (ranging from $650 to $950) in the fiscal year 2020-2021. Table 1 provides more detailed information for MRI and CT on the average volume of scans conducted, and the average cost of a scan.

Table 1: Average Total Exams, Out-of-Province Scans, and Cost per Scan

MRI and CT scans	Fiscal year 2019–2020	Fiscal year 2020–2021
MRI scans		
Number of scans performed, mean (range)	3,738 (667–7,642)	3,188 (614–6,543)
Number of out-of-province scans, mean (range)	168 (52–404)	100 (62–283)
Average cost per scan, CAD$ (range)	782 (650–950)	819 (650–950)
CT scans		
Number of scans performed, mean (range)	1,650 (904–2,396)	1,581 (1,008–2,155)
Number of out-of-province scans, mean (range)	61 (0–122)	41 (0–82)
Average cost per scan,[a] CAD$	470	470

[a] Data available from 1 facility.

For CT scans, the average number of exams performed at a single private facility was 1,650 (ranging from 904 to 2,396) and 1,581 (ranging from 1,008 to 2,155) in the 2019-2020 and 2020-2021 fiscal years, respectively, among the facilities who completed the survey. The average number of CT exams performed for patients from out-of-province at a single private facility was 61 (ranging from 0 to 122) during the fiscal year 2019-2020, and 41 (ranging from 0 to 82) during the fiscal year 2020-2021. The average cost for a CT scan cannot be calculated because only 1 facility provided this information, reporting an average price of $470.

Overall, the average number of privately funded MRI exams conducted at facilities that completed the survey decreased between the fiscal years 2019-2020 and 2020-2021, while private CT exams remained relatively stable during the same period. Public health guidance introduced during the pandemic to reduce the transmission of COVID-19, as well as strategies implemented in radiology units may have contributed to the decrease in MRI exams. Further, twice as many private MRI exams were conducted at the facility level compared to private CT exams during the same period. Potential factors contributing to the difference in private MRI and CT exam volumes could be that there are more publicly funded CT units (549) than MRI units (388), and the public wait list for CT scans are shorter compared to those for MRI in Canada.[14] However, the survey data on the number of CT exams are based on 2 survey responses, and may not be representative of other private CT facilities. Table 2 shows the average number of scans based on sources of funding.

Table 2: Average Number of Scans Attributed to Sources of Funding

Sources of funding	Number of scans, mean (range)	
	Fiscal year 2019–2020	Fiscal year 2020–2021
MRI		
Workers' Compensation Boards	525 (481–1,474)	415 (0–1,413)
Insurance and out-of-pocket	1,818 (430–6,021)	1,228 (103–5,011)
Provincial health insurance plan	0	31 (0–159)
Other sources	1,387 (33–5,260)	1,509 (36–5,780)
CT		
Workers' Compensation Board[a]	240	189
Insurance and out-of-pocket[a]	2,151	1,961
Provincial health insurance plan[a]	0	0
Other sources[a]	4	43

[a] Data was from 1 facility.

Survey participants were also asked to provide information on the percentage of exams funded by different funding sources. Options included provincial health insurance plans, Workers' Compensation Boards, insurance, and out-of-pocket payments, and "other sources" during the fiscal years 2019-2020 and 2020-2021. The main sources of funding for private MRI exams for both fiscal years were from insurance and out-of-pocket, as

well as from payments categorized as *other sources*. While most survey participants did not provide additional information on sources of funding considered *other*, 1 noted that all publicly funded exams were reported in this category because they are billed to the local health authority rather than to the provincial health care insurance plan. One facility reported billing provincial health care insurance plans for exams performed in the fiscal year 2020-2021, noting that 26% of MRI exams were paid by provincial health care insurance. All sources of funding decreased between the 2 fiscal years, apart from provincial funding that increased in the fiscal year 2020-2021.

The only participant that provided information on CT funding reported the main source of payment for exams at their facility originated from insurance and out-of-pocket sources, followed by Workers' Compensation Boards. Provincial health insurance programs did not reimburse any exams in the period of interest, whereas 'other sources' of funding increased between the 2019-2020 and 2020-2021 fiscal years.

Cost of Exams Published on the Websites of Private Facilities

To provide insight on the average cost of a privately funded exam per body area, prices from 17 MRI[15-31] and 10 CT facility websites[19,23,28-30,32-36] were collected when available. The average cost of an exam published on the websites of private MRI and CT facilities were also compared with results from the survey data.

A single MRI scan can cost anywhere from $595 to $1,300 according to information captured on the websites of private MRI facilities, depending on the body area, if contrast is used, and the private imaging facility. The most expensive areas of the body to scan are organs and glands, which on average costs $907. Scans in this category can range from $650 to $1,900. Specific organs and glands offered on the websites of private facilities for MRI scans include prostate, small bowel, kidneys, the thyroid, and adrenal glands. The most commonly reported exam of this type is for the prostate.

Like MRI scans, CT scans can vary in price depending on the body area, if contrast is required, and the facility type. On average, a CT scan can cost $347, and can range from $250 to $860. The most expensive body areas to scan are also organs and glands, which cost around $460. However, this average was based on only 2 facilities; one offering enterographyenterorrhaphy scans (an imaging test that uses contrast CT to view the small intestine), and the other offering lung scans. Contrast for MRI and CT scans is typically charged separately unless specified. The average contrast price for MRI and CT scans is $179 and $81, respectively. Table 3 shows the average price of different types of MRI and CT scans reported on the websites of private imaging facilities.

Table 3: Average Price of Common Body Area Scans Published on Private Imaging Facility Websites

Body area	Cost of scans CAD$, mean (range)	
	MRI	CT
Abdomen and chest	767(680–1,000)	377 (290–650)
Brain, head, and neck	766 (150–1,350)	313 (245–500)
Breasts	792 (650–1,000)	NA
Joints and bones	748 (595–1,000)	313 (250–400)
Organs and glands	907 (675–1,900)	460 (450–470)
Pelvis	771 (680–1,025)	389 (295–650)
Soft tissue	771 (650–1,000)	371 (290–575)
Spine	833 (595–1,300)	394 (280–860)
Average cost	786 (595–1,300)	347 (245–860)
Contrast	179 (100–300)	81 (50–125)

NA = not available.

Packages are also commonly offered by clinics with some variation on price and the body areas included. Common packages include a combination of brain regions for MRI, and abdomen, thorax, and pelvis for CT. Scans for preventative purposes are also available from a few facilities, such as lung scans and calcium scoring of the heart. Some facilities charge per area scanned, where additional body parts scanned in one session may be discounted. Most facilities using this pricing model on their websites did not define what constitutes a body area.

The average cost of a private MRI exams reported from information published on private imaging facility websites was $786 and is similar to those reported in the survey results; $782 and $819 for the 2 respective fiscal years.

The average price of CT exams from website prices is $347, which was less than the average reported from the survey data of $470, for both fiscal years. The data on CT exam costs was provided by one facility. Websites also state that prices are subject to change depending on the complexity and the duration of the scan. Further, prices on websites may not be an exhaustive list of scans offered by all private imaging facilities across Canada.

Conclusion

The results of the survey indicate that, on average, a private imaging facility that responded to the survey conducted about 3,000 MRI scans and 1,500 CT scans for the 2 fiscal years of interest in this report (2019-2020 and 2020-2021). Private payment through insurance and out-of-pocket and *other sources* were the main sources of funds for MRI scans during this time period. Website prices indicate that an average cost of an MRI scan at a private

facility in Canada is $780, which is similar to the average price calculated from the survey results. Funding for private CT scans appears to be primarily from insurance, out-of-pocket payments, and some from Workers' Compensation Boards payments. Due to the low number of responses from CT facilities, average CT scan prices could not be calculated. Analysis of website prices revealed that the average cost of a CT scan is $347.

A low survey response rate limits the interpretation and generalizability of these findings to all private imaging facilities in Canada. Political sensitivities around for-profit health services and the proprietary nature of the data being collected are potential reasons for the limited survey responses. Analysis of website prices should also be interpreted with caution as costs can change from those advertised. The complexity of a scan, its duration, and whether contrast solution is needed can also affect pricing.

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