

The effect of for-profit laboratories on the accountability, integration, and cost of Canadian health care services

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Competing interests: None declared.

Funding: None.

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➤ **IN 2012, CANADIAN GOVERNMENTS WILL PAY** for-profit corporations over a billion dollars (a conservative extrapolation from recent spending in Ontario, Manitoba, Alberta, British Columbia, and Saskatchewan) for medical laboratory services, making them among the most privatized of Canada's essential medical services.¹⁻³ This estimate does not include payments to private laboratories from the federal government, territorial governments, public health departments, and public hospitals. Three multinational companies—Life-Labs, Gamma-Dynacare and CML HealthCare—will receive over 80% of this money. Canada's 40-year history of using the private sector to deliver this core medical service in 5 provinces provides a useful window on the effects of using for-profit corporations to provide publicly funded medical laboratory services.

Consideration of this matter is particularly relevant because the question of whether health care services should be provided by public, non-profit providers or by the private, for-profit sector remains one of the more contentious issues in Canadian public policy. Understanding the implications of using these private companies with respect to accountability, health system integration, and cost will help inform evidence-based health policy.

Canada is not alone in using for-profit companies to provide some portion of its medical laboratory services. In the United States, 50 large laboratory corporations control 40% of a fragmented domestic market.⁴ Australia, which is similar to British Columbia, Ontario, and Manitoba in the financing and ownership structure of its laboratory services, uses private companies, paid from a national public insurance program on a fee-for-service basis, to provide most community laboratory services, while inpatient services are paid for out of hospital budgets, which are funded by the individual states.⁵ England has recently started to use for-profit diagnostic service providers as part of its efforts to bring market forces to bear on the National Health Service.⁶ What these countries share with Canada is an increased reliance on private providers, increased concerns about the cost of laboratory services, and a debate on the wisdom of using publicly funded for-profit providers.

Effects on accountability

A requirement for greater accountability in health care is open, informed policy discussion. However, since private sector corporations are substantially protected by law from the public disclosure of "confidential business information," increased for-profit delivery has had the effect of decreasing transparency, which has in turn limited informed debate on how laboratory services are delivered.

In the 1970s and 1980s, Ontario's laboratory quality assessment programs published detailed information by type of ownership and size of laboratory.⁷ After 2004, Ontario's Quality Management Program—Laboratory Services (QMP—LS), having long since abandoned any breakdown by type of laboratory, stopped providing detailed information on both the total errors and the number and type of significant errors made by laboratories. As Jim McCarter, Auditor General of Ontario, pointed out in his Annual Report for 2005, sections of the *Quality of Care Information Protection Act, 2004*, and related regulations had come into force that "prohibited the disclosure of information prepared for or by a designated quality-of-care committee"—in this case, the Ontario Medical Association—"unless the committee consider[ed] the disclosure necessary to maintain or improve the quality of health care."⁸ Because of these constraints, he was "unable to determine whether the quality-management program for laboratory services was functioning as intended."⁸ QMP—LS, as all provincial quality assurance programs, oversee both public and for-profit laboratories.

In 1987, the Ontario Legislature's Select Committee on Health published detailed information on the laboratory sector, including how much was paid to each private company.⁹ By 2010, it had taken me 2 years to obtain data through an access-to-information process on how much each corporation is paid by Ontario's public health insurance program (OHIP) for laboratory services. I encountered similar problems in attempting to gain access to recent studies on the laboratory industry and information on how much was paid to the Ontario Association of Medical Laboratories, a private sector lobby group for research, and how it was spent.

Section 17(1) of Ontario's *Freedom of Information and Protection of Privacy Act, 1990* excludes from public discussion scientific, technical, commercial, or labour-relations information provided in confidence to the government when disclosure of that information might harm the company providing the information.¹⁰ In contrast, the Ontario government publishes hospitals' infection rates, mortality ratios, and hand-washing compliance. In Manitoba an access-to-information request led to the release of documents on the public sector laboratories, but the investigators were not able to win the release of information on the quality of the private labs.¹¹ Private labs in Manitoba, as in Ontario, are paid primarily from the public purse to deliver an essential medical service, but the public is not allowed to know whether they are producing high-quality results.

Effects on integration

Integration is one of health care's current Holy Grails. Indeed, Ontario's new regional health networks are called Local Health Integration Networks. Billions of dollars of public money are being spent on an "infoway" to integrate Canada's electronic medical records, and laboratory data are central among these.

Although integration among different public non-profit providers has proved difficult, adding the extra layer of a parallel for-profit system significantly complicates the process. In British Columbia, Manitoba, and Ontario separate administrative structures, payment mechanisms and data networks are maintained for the private sector's work in the community and the public hospitals' inpatient services. For example, the electronic integration of Ontario's laboratory records with other patient records, a provincial need identified as early as 1981,¹² is made more complex by the existence of 3 competing for-profit laboratory record systems operating alongside multiple hospital systems.¹³ Bayne, in a 2003 review of British Columbia's laboratory system, notes a

similar problem.¹⁴ One of the more successful attempts to integrate laboratory records has been in Nova Scotia, which has only public laboratories.¹⁵ Wales, Scotland, and Northern Ireland, where the incorporation of market structures within the National Health Service has been resisted, have been more successful in developing integrated laboratory networks, while England, where market structures have been more fully implemented, lags behind.⁶ Operating parallel laboratory systems could also work against the most effective use of staff: a growing problem as staff shortages increase in all areas of laboratory medicine.^{16,17}

The experience in Alberta and Saskatchewan provides some indication of the potential harm integration poses for private providers. Over the 15 years since all laboratory services were integrated under the control of the regional governments, the role of for-profit laboratories in Alberta has been significantly diminished, and in Saskatchewan for-profit laboratory provision has effectively ended.

Effects on cost

Whether the use of private companies will increase or decrease public health care costs continues to be the subject of rancorous debate in Canadian politics.

In 1977, Dennis Timbrell, then Ontario's Minister of Health, framed the debate on who should provide laboratory services when he told the Ontario Medical Association executive that the public interest demands respect for the fact that "all" laboratory work "is paid from public funds ... there is only one customer [the government]."¹⁸

The logic of the argument for using public sector institutions, primarily hospitals and public health laboratories, for all laboratory services is straightforward. Hospitals need on-site laboratories to promptly meet the needs arising from emergencies and to satisfy their daytime inpatient requirements. For most hospitals, this means substantial unused capacity and, often, the underutilization of staff in the evening and at night. Community laboratory work could be done in hospitals with equipment that has already been paid for, at times when it is not being used, in buildings that are already heated and maintained. The cost of performing this work would become the marginal costs of extra staff, more reagents, and wear and tear on the machines and buildings.

This is Economics 101, as the provincial government in Ontario was recently reminded by a report on the last programs in the province to use hospital laboratories to

process lab requisitions for community patients. The report states that “automation and operating synergies enable incremental test volumes to be accommodated at low marginal costs.”¹⁹ Although it is not known how much excess capacity exists in public hospitals, the situation, especially for the automated analyses and the more routine tests, has probably not changed a lot since 1994, when the head of the Ontario Hospital Association commented, “there is massive reserve capacity in the hospital laboratories ... a fully staffed evening shift could absorb the private laboratories’ workload without difficulty.”²⁰ A 2008 study for the Ontario Ministry of Health looked at 12 different communities that used their respective hospital laboratories for all tests and found that the local hospitals were able to process the community laboratory work in less than 4 hours per day.¹⁹ The consultants also identified excess capacity in Ontario’s private sector, and it has been reported that BC Biomedical Laboratories operates its main lab for only 35 hours per week.²¹ Excess capacity in either the public or private sector is paid for with public funds and, aside from the redundancy necessary to accommodate fluctuations in demand, is a waste.

The above method of determining cost—i.e., on the basis of marginal costs of extra staff, reagents, and wear and tear—is not the one advocated by the private laboratory industry. They want to compare the discrete unit cost of providing a test in a for-profit laboratory to the cost of performing the same test in a hospital, arguing that the public should pay only for the lowest cost test. But there are a couple of daunting problems with the unit cost approach.

Comparing costs in hospital labs to private labs is at best difficult: this problem has bedevilled analysts for decades because of the differences between these two types of service providers. Hospitals provide more “stat” services, do more esoteric and reference work, and provide a greater percentage of the labour-intensive pathology, cytology, and microbiology tests than private labs do; in addition, the hospital system provides services to many small and marginalized communities, all of which carries an inherently higher cost. Private laboratories need to pay their shareholders and to run a system of collection centres and transportation services. To complicate matters further, hospital labs and private labs often use different units and techniques to measure their workload.

Despite these difficulties in comparing the costs in the public and non-profit sectors with those in the for-profit labs, there have been many attempts to do so. The

results are, at best, neutral. A study undertaken by the Saskatchewan Ministry of Health in 1991 found that all community tests could be done in public laboratories at 30% of the cost of using for-profit labs. This calculation was based on the extra staff, reagents, material, and overhead needed to keep the hospital laboratories open longer to process the community tests. Further, the unit costs for 5 common tests (biochemistry panel, thyroxine, iron, antistreptolysin O, and urine culture) were 75% less in the provincial lab than in the fee-for-service labs.²²

In contrast, a 1997 study done for the Ontario Ministry of Health, which was released to me only after a lengthy access-to-information process, found that, taking into account the problems of incomparable data and adding 25% to hospital costs for overhead and specimen procurement, the average cost per reported test in a hospital was \$7.44, as compared with \$6.33 in a private laboratory.²³

More recently, the 2008 Ontario study found that in 12 small Ontario hospitals that were still processing their community’s laboratory work the cost was \$22 per community patient per year while the for-profit laboratories cost \$33 per community patient.¹⁹ The *Globe and Mail*, investigating the rapidly rising costs of vitamin D testing, reported that the private laboratories in British Columbia charged \$94 per test, Ontario private labs \$52, and Ontario hospitals \$32, while the Saskatchewan government lab did the test for \$17.²⁴

Another indication of the excess money spent on for-profit laboratories is that, through the 1970s, 1980s, and 1990s, the expense of relatively uncontrolled fee-for-service provision resulted in costs rising faster in the private sector than in hospitals.^{14,22,25–27} To control costs, in 1993 Ontario cut payments to private labs by 10%,²⁸ Alberta in 1994 by 53%,²⁵ Manitoba in 1995 by “over 20%,”²³ and BC in 2004 by 20%.²⁹ Australia and the United States went through similar efforts to control for-profit laboratory costs in the 1980s and 1990s.^{30,31}

The most compelling evidence that using money can be saved by using hospitals to process community laboratory work comes from 2 programs in Ontario: the Hospitals In-Common Laboratory (HICL) and the Hamilton Health Sciences Laboratory Program (HHSLP). Both HICL and HHSLP ran a network of community specimen collection centres, provided in-home pickup and service to nursing home residents, and used hospitals to process most community specimens in financially stable long-term arrangements.

From 1975 to 1996, HICL provided community laboratory services at fee-for-service rates that averaged at 75% of the rate paid to the commercial laboratories and dipped as low as 67% in 1982. In fact, these savings to the public system are understated:^{32,33} because HICL paid the hospitals for the tests processed in their labs, it was effectively recycling money in the public laboratory system rather than paying it out in private profits.

The costs realized by the HHSLP were less definitive, both because the program was financed through the hospitals' global budgets and because the calculations suffer many of the same problems described above for unit-cost comparisons; nevertheless, published results indicate savings similar to those achieved by HICL. HHSLP's test costs in 1990/91 were 26.4% less than if a for-profit laboratory had performed the same work,³⁴ and the HHSLP total program costs from 1977 to 1990, including inpatient and academic responsibilities, were 16% less.³⁵ As part of a province-wide move to process inpatient laboratory work and community work in different facilities, both the HICL and Hamilton programs had ended their community work by 2010.

Most provinces in Canada use only non-profit labs to perform publicly financed laboratory work. Alberta and Saskatchewan have shown that it is possible to restore contracted laboratory work to the public sector, and the fact that all private laboratories operate under fixed-term contracts makes it possible, in theory at least, to shift work back to the public sector when the contracts end. Two useful steps toward ending for-profit provision would be to stop fee-for-service funding and to integrate all laboratory work under the same public administrative structures.

Judging from the real-world experience of HICL and the HHSLP, it is reasonable to assume that the Canadian health care system could save a minimum of \$250 million per year by moving all publicly funded medical laboratory work into an integrated public non-profit medical laboratory system. Such a move would have the added benefits of facilitating the integration of medical records, staff, and administration, and of improving public accountability of the health care system. Both of these outcomes should lead to better cost control.

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Published: 18 December 2012

Citation: Sutherland R. The effect of for-profit laboratories on the accountability, integration, and cost of Canadian health care services. *Open Med* 2012;6(4):e166–e170.

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