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Investor Owned Private for Profit Care Facilities are to Die For

By P.J. Devereaux

Canadian health policy makers are considering an expansion of investor owned private for –profit health care delivery. Advocates of investor owned private for–profit health care delivery argue that for–profit providers can deliver high quality care more efficiently than not–for–profit providers. However, many fear for–profit facilities are more likely to respond to financial pressures by cutting quality of care to maintain shareholder returns. These viewpoints have resulted in a heated debate about whether the profit status of health care facilities influences patient death rates.

Health care can be separated into two essential and distinct components, funding (who pays for the health care) and delivery (who owns and administers the institutions or services that provide the care) (see Figure 1). Both funding and delivery can be public or private. Public funding means paid for by government (for example, through the use of tax dollars); public delivery means government ownership and administration of health care facilities. All public health care institutions are not–for–profit. Private funding and private delivery can both be for–profit or not–for–profit. On the funding side, insurance companies that channel premiums to pay for health care can be private for–profit or private not–for–profit. On the delivery side, hospitals and other health care delivery institutions that are private for–profit corporations are owned by shareholders/investors. Private hospitals can also be not–for–profit institutions that are owned by religious organizations, communities, regional health authorities, or the hospital boards.

Public funding is the dominant method through which Canadian hospitals obtain revenue. However, 9 per cent of Canadian hospitals are private not–for–profit institutions. Because Canadians commonly use the term 'public hospitals' to refer to private not for–profit hospitals, many are unaware of the private ownership and administration of our hospitals.

A group of us have recently published two studies that address issues of health care delivery, rather than health care funding (1,2). Accurate

understanding of the impact of alternative health care delivery systems requires a systematic, comprehensive, and unbiased accumulation and summary of the available evidence. We therefore, undertook a systematic review and a meta-analysis to address the following questions:

- * what is the relative impact of private for-profit versus private not-for-profit delivery of hospital care on patient mortality; and
- * what is the relative impact of private for-profit versus private not-for-profit delivery of hemodialysis care on patient mortality?

We published the results of the first study evaluating risk adjusted death rates among patients admitted to investor owned private for-profit and private not-for-profit hospitals in the Canadian Medical Association Journal in May 2002.

We identified studies through an electronic search of 11 bibliographical databases, our own files, consultation with experts, reference lists, PubMed, and SciSearch. We masked (blacked out) study results prior to determining study eligibility to eliminate any bias in the selection process. Our eligibility criteria included observational studies or randomized controlled trials that compared private for-profit and private not-for-profit hospitals. We excluded studies that evaluated hospital mortality rates in hospitals that were under a particular profit status that subsequently converted to the other profit status. For each study, we calculated a relative risk of mortality with private for-profit hospitals relative to private not-for-profit hospitals, and pooled the studies of adult populations that included adjustment for potential confounders (e.g., teaching status, severity of illness) using a random effects model.

Fifteen observational studies, involving more than 38 million patients, fulfilled our eligibility criteria. In the studies of adult populations, with adjustment for potential confounders, private for-profit hospitals were associated with an increased risk of death (relative risk 1.020 [95 per cent CI 1.003 – 1.038]; $p = 0.02$). The one perinatal study with adjustment for potential confounders also showed an increased risk of death in private for-profit hospitals (relative risk 1.095 [95 per cent CI 1.050 – 1.141]; $p < 0.0001$).

How important is the relative risk increase of 2 per cent we demonstrated in the adult population studies? At a population level, the potential impact

could be profound. Canadian statistics for 1999–2000 indicate 108,333 Canadians died in hospital (data provided by the Canadian Institute for Health Information). If we were to convert all our hospitals to private for-profit institutions, our results suggest that we would incur an additional 2167 deaths a year. This number of deaths is in the range of how many Canadians die each year from colorectal cancer, motor vehicle accidents, or suicide.

In our second study published in the Journal of the American Medical Association (JAMA) in November 2002 we provided evidence about death rates in the outpatient setting of investor owned private for-profit and private notfor-profit dialysis centres. We utilized explicit eligibility criteria; conducted a comprehensive search to identify all relevant studies; applied eligibility criteria to potentially eligible studies in an unbiased manner; examined the quality of the eligible studies; and conducted a rigorous statistical analysis of the data from the studies that ultimately prove eligible.

Our search identified over 7,000 medical articles of which over 700 passed an initial eligibility screen. We then undertook an extremely important measure to eliminate any bias in the selection process of which studies to include in our systematic review. We trained research staff to read through all the articles and use a black marker to obscure the results of the studies. Two reviewers then independently examined these articles with the results blacked out and determined study eligibility. As a result of this process we could not select studies to reach a specific conclusion. Eight studies including data on over 500,000 patients met eligibility and quality criteria for our systematic review.

The results of these studies show that for-profit care resulted in an 8 per cent increase in death rates relative to private not-for-profit care. The findings were consistent across studies, and show that if American patients received care in private not-for-profit dialysis facilities instead of for-profit facilities, approximately 27500 fewer patients would die each year. During 1999, 12,700 Canadians received hemodialysis, of whom 1,966 died. If we were to convert our private not-for-profit dialysis centres to private for-profit centres, we could expect approximately 150 additional deaths in Canada each year.

The results of both of our studies are plausible, because private for-profit

facilities have to both generate profits to satisfy shareholders and pay taxes (typically these two expenditures are in the range of 10–15 per cent of expenses). Not-for-profit facilities can spend this money on patient care. The higher death rates result when for-profit companies cut corners to make sure they produce the required profit margin. The studies included in our systematic reviews suggested that private for-profit hospitals and dialysis centres were employing fewer and less highly skilled personnel to take care of the patients. Other examples of how for-profit dialysis facilities may be cutting corners include less time on dialysis and thus less thorough "cleaning" of the blood; and sub-optimal doses of expensive necessary medications, such as erythropoietin.

Although our results only include American patients the results are directly relevant to Canada. The results of our hospital meta-analysis are based on Medicare patients and end-stage kidney disease is the only medical condition for which the United States government funded treatment (i.e. Medicare) is available regardless of age or socioeconomic background. American hospital and dialysis care is provided by both private for-profit and private not-for-profit facilities. Therefore the American hospital data included in our systematic review and the American dialysis health care delivery provides ideal examples upon which to draw inferences for our Canadian inpatient and outpatient health care delivery systems that are publicly funded and dominantly provided by private not-for-profit facilities.

The results of our systematic reviews are consistent over time, despite changes in American health care. This suggests that the adverse impact of private for-profit health care delivery is manifest within a variety of health care contexts. Furthermore, whatever the context within which they function, for-profit care providers face the problem of holding down costs while delivering a profit. One would, therefore, expect the resulting problems in care delivery to emerge whatever the setting. Finally, if Canada moved to for-profit hospital or dialysis facilities, the same large American hospital and dialysis chains included in our systematic reviews would be purchasing Canadian hospitals and dialysis facilities.

Our systematic reviews show a major increase in death rates at private for-profit inpatient and outpatient facilities. Our research raises serious concerns about moves to investor owned private for-profit care, whether in hospitals or outpatient facilities. It is time to move arguments in the

health care policy debate away from ideology and into the evidence based era.

1 Devereaux PJ, Choi PT-L, Lacchetti C, et al. A systematic review and meta-analysis of studies comparing mortality rates of private for-profit and private not-for-profit hospitals. *CM.A.J.* 2002;166:1399-1406.

2 Devereaux PT, Schunemann HJ, Ravindran N, et al. Comparison of mortality between private for-profit: and private not-for-profit hemodialysis centers: A systematic review and meta-analysis. *JAMA.* 2002; 288: 2449-2457.

Figure 1.

Health Care System

Financing			Delivery		
Public	Private		Private		Public
	For Profit	Not-for Profit	Not-for Profit	For Profit	