McMaster University | HEALTH FORUM

Rapid Evidence Profile #51

Impacts of for-profit delivery of health programs, services and products on equity-centred quadruple-aim metrics

31 May 2023

Context

- In response to pressure on provincial and territorial health systems (e.g., surgical backlogs), there has been a resurgence of interest in parallel for-profit delivery of health programs, services and products alongside private-not-for-profit and public delivery.
- In the Canadian context, for-profit delivery primarily takes place in: 1) settings such as high-volume surgical centres where medically necessary care remains publicly financed; and 2) parts of some sectors (e.g., some home and community care, rehabilitation care delivered outside of hospitals, and some long-term care), for some conditions (e.g., mental health and addictions), and for some categories of treatments (e.g., dental services).
- Most of health-service delivery in Canada takes place in private-not-for-profit organizations, such as hospitals, while publicly owned and operated services are much rarer (e.g., municipal government owned and operated long-term care homes in Ontario).
- Understanding the impacts of for-profit delivery can help inform discussions about whether to pursue such an approach beyond what is already in place.

Question

- What is known from available evidence syntheses about the impact of private-for-profit delivery of health programs, services and products – compared to private not-for-profit and public delivery – on equity-centred quadruple-aim metrics?

High-level summary of key findings

- We identified 16 evidence syntheses addressing the question, which:
  - are all quite old (largely conducted in the early 2000s)
  - contain literature primarily from the U.S.
  - mostly focused on two sectors (specialty care and long-term care), and to a lesser extent on one category of treatments (haemodialysis) and one category of conditions (mental health and addictions)
  - do not address other sectors, conditions or treatments or any specific populations.
- While the findings are quite old, it's important to note that they were typically consistent over multiple periods of health-system transformations.
- The literature examining volume-outcome relationships was considered out of scope given the comparison between for-profit and not-for-profit status is typically not made explicit.
- Across the quadruple-aim metrics, the evidence syntheses found that for-profit delivery was associated with:
  - higher mortality rates and adverse-event rates in hospitals and in long-term-care homes, as well as increased hospitalizations among long-term-care residents
  - lower quality of care, increased the use of some procedures for which 'more' is not necessarily better (e.g., caesarean sections for low-complexity births) and sub-optimal staffing (e.g., fewer staff per resident and a less extensive mix of staff than not-for profit care homes)
  - worse reports of provider well-being and higher staff turnover
  - more expensive, less cost-effective, and with less money spent on direct patient care.
- Future research should focus on evaluating for-profit delivery in provinces and territories and in sectors (e.g., home and community care and rehabilitation) where such models exist.

Framework to organize what we looked for

- Sectors
  - Home and community care
  - Primary care
  - Specialty care
  - Rehabilitation care
  - Long-term care
  - Public health
- Conditions
  - Mental health and addictions
  - Other conditions
- Treatments
  - Prescription drugs
  - Drug prescriptions (e.g., HIV PrEP)
  - Medical authorization (e.g., cannabis)
  - Dental services
  - Blood products
  - Other treatments
- Populations
  - Indigenous
  - Other BIPOC
  - Low-income groups
  - Other equity-deserving groups
- Quadruple-aim metrics examined
  - Health outcomes
  - Care experiences
  - Provider experiences
  - Per-capita costs

Box 1: Approach and supporting materials

We identified evidence addressing the question by searching Health Systems Evidence and PubMed. All searches were conducted on 25 May 2023. The search strategies used are included in Appendix 1. In contrast to synthesis methods that provide an in-depth understanding of the evidence, this profile focuses on providing an overview and key insights from relevant documents.

We searched for full evidence syntheses (or synthesis-derived products such as overviews of evidence syntheses) and protocols for evidence syntheses.

We appraised the methodological quality of evidence syntheses that were deemed to be highly relevant using AMSTAR. AMSTAR rates overall quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. The AMSTAR tool was developed to assess reviews focused on clinical interventions, so not all criteria apply to evidence syntheses pertaining to delivery, financial or governance arrangements within health systems or to broader social systems.

A separate appendix document includes:
1) methodological details (Appendix 1)
2) details about each identified synthesis (Appendix 2)
3) documents that were excluded in the final stages of review (Appendix 3).

This rapid evidence profile was prepared in the equivalent of three days of a 'full-court press' by all involved staff.

What we found

We identified 16 evidence syntheses addressing the above question. Given the volume of literature on this topic, we focused on identifying evidence syntheses. As a result may have missed single studies that were published since the evidence syntheses were conducted, including those focused on publicly paying for-profit providers in Canada or in the U.S. to help clear care backlogs. Below, we outline in narrative-form our key findings, and Table 1 provides a mapping of available evidence syntheses related to for-profit delivery of health programs, services and products.

The literature examining volume-outcome relationships was considered out of scope given the comparison between for-profit and not-for-profit status is typically not made explicit. The following documents synthesize this evidence: 1) evidence brief and dialogue summary on creating community-based specialty clinics; 2) rapid-evidence profile on optimizing out-of-hospital surgical capacity; and 3) rapid-evidence profile on improving wait times for scheduled (elective) surgery.

We did undertake a separate search for the impacts of for-profit delivery on patient safety but did not identify any recent evidence syntheses.

Coverage by and gaps in existing syntheses in areas of significant policy attention in Canada

The literature on for-profit delivery of health programs, services and products is all quite old – largely conducted in the early 2000s – and comes largely from the U.S. Despite being older findings, they likely remain relevant given that the findings were typically consistent over multiple periods of health-system transformation.

Evidence syntheses largely focused on two sectors – specialty care and long-term care – with fewer focused on home and community care and primary care, and none on rehabilitation or public health. One evidence synthesis focused on mental health and addictions (9) and one on haemodialysis.(1) Apart from these two syntheses, the evidence base was silent on the effects of for-profit delivery on other conditions and treatments or on specific populations.

What existing syntheses tell us about the impacts of for-profit delivery on equity-centred quadruple aim metrics

Health outcomes

Evidence syntheses focused on the effects of for-profit delivery on mortality and adverse events (including hospital admissions) in specialty care,(1; 4; 6; 10; 11) and long-term-care homes.(2; 13; 15) The syntheses identified higher levels of mortality in for-profit hospitals (1; 4;10; 11) and for-profit long-term-care homes,(2) as well as higher levels of hospitalization among residents of for-profit long-term-care homes.(13; 15) For long-term care, it was noted that some of these effects were mediated by staffing ratios, which tended to be worse in for-profit long-term-care homes compared to their not-for-profit counterparts.(2) Higher rates of mortality were also recorded in for-profit haemodialysis clinics compared to not-for-profit clinics.(1)

One evidence synthesis examined morbidity in for-profit home and community care, however, the synthesis identified very few studies and was unable to draw conclusions on their effects.(5)

Care experiences

Apart from long-term care, there were relatively few findings from evidence syntheses related to care experiences. In the specialty-care sector, one evidence synthesis reported lower quality of care in for-profit hospitals,(10) while a second evidence synthesis reported increased use of some procedures for which 'more' is not necessarily better (e.g., caesarean sections for low-complexity births).(14) In the long-term-care sector, for-profit long-term-care homes were found to have lower quality of care, as reflected by greater use of physical restraints, higher prevalence of catheterization, and increased use of psychoactive drugs, compared to their not-for-profit counterparts.(2; 7; 8) In addition, for-profit long-term-care homes were found to have fewer staff per resident and a less extensive mix of staff than not-for-profit care homes.(2; 8)

One evidence synthesis reported on the effects of for-profit in-patient psychiatric services and found reduced access and quality of care compared to not-for-profit services.(9)

Provider experiences

Two evidence syntheses reported on provider experience in the long-term-care sector and found worse reports of provider well-being and higher staff turnover when compared to not-for-profit care homes.(7; 8)

Per-capita costs

Findings in both home and community care and in specialty care (including in-patient psychiatric services) reported for-profit delivery as being more expensive and less cost-effective than not-for-profit services.(3; 10; 11; 12) One evidence synthesis also found that fewer dollars were spent by for-profit hospitals on direct-patient care than by not-for-profit hospitals.(6)

Table 1: Mapping of available evidence related to for-profit delivery in high-income countries

Focus	Quadruple-aim metrics examined			
	Health outcomes	**Care experiences**	**Provider experiences**	**Per-capita costs**
Sectors				
• Home and community care ○ Paramedics (including ambulances) ○ Home care ○ Community-based care in general (not specific to conditions) ○ Other	5 – morbidity			5 – cost of care 10 – efficiency
• Primary care (PC) ○ Family physicians ○ PC teams ○ Walk-in clinics ○ PC clinics targeting executives ○ PC clinics providing preventive services ○ Pharmacies providing PC services ○ Digital PC providers		16 – staffing ratios		
• Specialty care ○ Diagnostic services ○ Procedures ○ Specialty assessments (e.g., dermatology) ○ Other services where there may be volume-outcome relationships ○ Multi-specialty targeted clinics ○ Hospitals ○ Digital specialty-care providers	1 – mortality 4 – mortality 6 – adverse events 10 – mortality 11 – mortality	10 – quality of care 14 – use of caesarean sections		3 – hospital payments 6 – revenue spent on patient care 10 – efficiency 11 – hospital payments 12 – hospital cost; hospital revenue
• Rehabilitation care				
• Long-term care	2 – mortality 13 – hospital admission 15 – hospital admission	2 – use of physical restraints; quality of care; staffing ratios 7 – quality of care; patient well-being 8 – quality of care; staff mix	7 – provider well-being 8 – staff turnover	
• Public health				
Conditions				
• Mental health & addictions		9 – access; quality of care		9 – efficiency
• Other conditions				
Treatments				

Focus	Quadruple-aim metrics examined			
	Health outcomes	Care experiences	Provider experiences	Per-capita costs
• Prescription drugs				
• Drug prescriptions				
• Medical authorizations				
• Dental services				
• Blood products				
• Other treatments	1 – mortality in haemodialysis clinics			
Populations				
• Indigenous				
• Other BIPOC				
• Low-income groups				
• Older adults				
• Other equity-deserving groups				

What key gaps in existing syntheses should be prioritized to address areas of significant policy attention in Canada?

As mentioned above, most of the literature, except for three evidence syntheses, are more than ten years old and most focus on the U.S. health system. Additional research should focus on evaluating for-profit delivery in select provinces as well as its use in particular sectors, namely home and community care and rehabilitation, where there are currently significant gaps in the available evidence. In general, there is also a need for increased capacity for rapid evaluation to learn from natural experiments to understand the impacts of different approaches to private financing of health programs and services, such as publicly financed for-profit facilities.

Waddell K, Wilson MG, Ali A, Demaio P, Soueidan S, Lavis JN. Rapid evidence profile #51: Impacts of for-profit delivery of health programs, services and products on equity-centred quadruple aim metrics, 31 May 2023.

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