McMaster University | HEALTH FORUM

Rapid Evidence Profile #50

Impacts of private financing of health programs, services and products on equity-centred quadruple-aim metrics

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Context

- In response to pressure on provincial and territorial health systems (e.g., backlogs on diagnostics and procedures arising from the COVID-19 pandemic) there has been a resurgence of interest in the effects of private financing of health programs, services and products.
- Although some parts of the health system in Canada are publicly financed through taxation (e.g., medically necessary hospital-based and physician-provided services), there are significant elements of private financing through: 1) private insurance whereby individuals and/or their employers pay premiums to private insurers to pay for programs, services and products that are not publicly insured; and 2) user fees (out-of-pocket payments charged directly to patients) for certain products (e.g., prescription drugs) and services (e.g., long-term care).
- Understanding the impacts of private financing can help to 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 impacts of private financing of health programs, services, and products (e.g., user charges, extra billing) on equity-centred quadruple-aim metrics?

High-level summary of key findings

- The literature (25 evidence syntheses) on the impacts of private financing:
  - focuses mostly on the use of private financing mechanisms (largely user fees) in lieu of public mechanisms, and to a much lesser extent on the effects of private financing supplementing or complementing public financing mechanisms
  - predominately examines the impacts of user fees and private insurance on care utilization (as a proxy measure for health outcomes) and per-capita costs, with less evidence about impacts on patients' care experiences and their providers' experiences and none about social health insurance or health-savings accounts
  - covers most sectors (with the exception of home and community care and public health), with a concentration of findings focused on primary care, specific forms of treatment (prescription drugs and dental services), and low-income groups (with gaps for other populations including Indigenous peoples for Black people and other racialized communities).
- Most of the included evidence syntheses focused on proxies for health outcomes, and found:
  - introduction of insurance – whether public or private – improved health outcomes when compared to relying solely on user fees
  - private supplemental insurance resulted in improved health outcomes (e.g., improved oral health) for its beneficiaries, however, the effects on those using the publicly financed system were not reported
  - user fees are associated with a reduction in both unnecessary and necessary care in many sectors and for many services and treatments – although there is some evidence that user fees may result in improved uptake of healthy behaviours (due to cost-consciousness among consumers)
  - the negative effects of user fees were found to be greater among lower-income populations and may result in non-adherence to medications and treatment recommendations.
- Impacts of private financing on care experiences, include:
  - private financing reforms had inconclusive or negative effects on access relative to need

  - publicly and privately financed systems operating alongside one another increased the use of some procedures for which 'more' is not necessarily better (e.g., caesarean sections for low-complexity births)
  - patients accessing private insurance reported shorter wait times, increased access to new pharmaceuticals, and increased choice of care compared to those covered through public finance; but those accessing a parallel publicly financed system reported longer wait times for primary care and specialty care
  - the addition of privately financed diagnostics in Canada has not led to significantly shorter wait times
- Impacts of an increase in public financing – in this case, the introduction of public prescription drug coverage (Medicare Part D) alongside existing private coverage included an increased administrative load for nursing-home workers (a type of provider experience)
- Evidence syntheses that examined the impacts of private insurance on per-capita costs found:
  - increased individual costs, but greater cost regulation in the health system
  - overall increase in the cost of care in systems with a mix of public and private financing as a result of an increase in administration and increased use of select procedures (e.g., caesarean sections)
  - user fees and other out-of-pocket payments to cover prescription drugs increased cost to the health system as a result of delayed care
  - the introduction of public long-term care insurance reduced overall health spending, which was driven by a reduction in the length of hospital stays and resulted in a crowding out of private financing
- One particularly notable gap in the research literature is the impacts of private financing that supplements existing public financing and whether the implementation of regulations on private financing changes its impacts on quadruple-aim metrics.

Framework to organize what we looked for

- Financing programs, services and products
  - Social health insurance
  - Private insurance
  - Health savings accounts
  - User fees (or extra billing)
- 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 19 May 2023. The search strategies 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 evidence syntheses and protocols for evidence syntheses that are underway.

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 an evidence synthesis of the highest quality. The AMSTAR tool was developed to assess evidence syntheses 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 document contains three appendices:
1) background and methods for preparing this document (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 25 evidence syntheses addressing the question above. We outline in narrative form below our key findings, and Table 1 provides a mapping of available evidence syntheses related to private financing of health programs, services and products.

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

The majority of the literature focused on the use of private financing mechanisms in lieu of public mechanisms. There was some evidence on the effects of private financing supplementing public financing mechanisms (largely from Australia) but relatively little on its use as a complement to public mechanisms.

With respect to financing mechanisms, most of the literature focused on user fees and private insurance on care utilization (as a proxy measure for health outcomes) and per-capita costs, with less evidence about impacts on

patients' care experiences and only one that provided insights about providers' experiences. No syntheses addressed social health insurance or health savings accounts.

Evidence syntheses covered most sectors, with the exception of home and community care and public health, with a concentration of findings focused on primary care. Other well covered areas in the literature include the effects of user fees on prescription drugs and dental services. Relatively little was found for other conditions or treatments.

For populations, many syntheses examined the effects of private financing mechanisms on low-income groups. However, gaps were noted for other populations including Indigenous peoples (which was addressed by one Australian synthesis) and other racialized communities.

Given the volume of literature, we focused exclusively on evidence syntheses. This could mean that we missed single studies that were published since the evidence syntheses were conducted, including those focused on private financing for virtual-care visits.

What existing syntheses tell us about the impacts private financing on equity-centred quadruple aim metrics

Health outcomes

One synthesis focused on the expansion of Medicaid in the U.S. to include individuals who previously paid for care using user fees. The synthesis noted that public-insurance expansion led to the increased use of primary care and preventive visits and decreased hospital lengths of stay.(14)

As noted above, the majority of the literature focused on the effects of user fees on health outcomes. All but one of the evidence syntheses indicate that the introduction of user fees has generally been associated with a reduction in both unnecessary and necessary care, including in primary care, allied health services such as physiotherapy and occupational therapy, and perinatal services.(7, 9, 12, 15, 16, 22) The other evidence synthesis found that user fees and other cost-sharing payments were associated with a greater likelihood of engaging in healthier behaviours (due to cost-consciousness among consumers).(11) The effects on secondary care remain unclear, but two evidence syntheses report reductions in treatment adherence for dialysis and adjuvant therapies for cancer.(9, 19, 20)

In the long-term-care sector, the effects of the introduction of Medicare Part D (public prescription drug coverage) on health outcomes were unclear.(1) No differences were reported for drug utilization, but public financing was associated with a decrease in the use of drugs with safety concerns.(1) Introduction of public long-term-care insurance (as compared to reliance on user fees) improved the physical health of beneficiaries.(24)

Different financing options were found to have different effects for dental care. User fees reportedly reduced the use of dental care among Canadians, while private insurance in Australia (as compared to public insurance) increased use and improved self-reported oral health outcomes.(13; 21) It should be noted that the Canadian synthesis was largely looking at lower-income populations without any access to health insurance,(13) whereas the Australian synthesis was examining those with private-health insurance compared to those using the publicly financed system.(21)

User fees for prescription drugs were consistently associated with an increase in the odds of non-adherence to medicines in the short term, and in two evidence syntheses with a decline in health status in the long term.(3, 4, 11, 12) Non-adherence was found to be worse among lower-income populations who had to pay user fees.(4)

Care experience

Private financing reforms in high-income countries have been associated with inconclusive or negative effects on health equity in terms of access relative to need.(10) In Australia, the parallel privately financed system has led to an

increase in select procedures in both the public and privately financed systems, such as increases in caesarean sections for low-complexity births.(9)

Patients accessing private insurance reported shorter wait times, increased access to new pharmaceuticals, and increased choice as care compared to those covered through public finance.(5, 9) However, countries with parallel private insurance had longer wait times for primary care and specialty care for those accessing care in the public system than in countries that have stricter regulations on private financing.(25) Further, one evidence synthesis noted that the addition of privately financed diagnostics in Canada has not led to significantly shorter wait times.(23)

Provider experience

The introduction of Medicare Part D (public prescription drug coverage) alongside existing private coverage has resulted in an increase in administrative load on nursing-home workers.(1)

Per-capita costs

Private financing was found to be associated with increased individual costs,(1, 6, 14) but greater cost containment in the health system.(4, 11, 22, 25) However, in two evidence syntheses, the mix of public and private financing reportedly increased the overall cost of care as a result of an increase in administration and increased use of select procedures (i.e., caesarean sections).(1, 9) One evidence synthesis also noted that the use of user fees and out-of-pocket costs to cover prescription drugs resulted in increased cost to the health system as a result of delayed care, but the extent of these costs are context-dependent.(12)

One evidence synthesis concluded that a single-payer tax-based system in the U.S. would result in reduced health expenditures and improve the potential long-term cost savings to the system compared to the existing patchwork approach.(18)

In the long-term-care sector, the introduction of public long-term-care insurance was found to reduce overall health spending, particularly through a reduction in the length of hospital stays.(24) However, there have been some concerns noted about the long-term benefits and dependency on accurate needs assessments. The evidence synthesis found that the introduction of public long-term-care insurance to an existing privately financed system resulted in a crowding out of private financing.(24)

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

In general, there is 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. In particular, given the recent interest, additional research should focus on the effects of private finance that supplements existing public insurance, including its use for virtual-care visits. In addition, although we included one evidence syntheses related to the regulation of private financing, additional work should be done to examine whether the implementation of regulations on private financing change the effects on the quadruple-aim outcomes that we have identified in this profile.(8)

Table 1: Mapping of available evidence syntheses related to private financing of health program services and products in high-income countries

Focus	Quadruple-aim metrics examined			
	Health outcomes	**Care experiences**	**Provider experiences**	**Per-capita costs**
Financing programs, services and products				
• Social health insurance				
• Private insurance	5 – morbidity; care utilization 25 – care utilization	5 – wait times 10 – access to care 25 – wait times		18 – health-system costs 25 – health-system costs
• Health savings accounts				
• User fees or extra billing	7 – care utilization 11 – overall health status; care utilization 14 – care utilization 16 – care utilization 17 – injury; mental health; respiratory virus infections 20 – quality of life 22 – morbidity; care utilization	14 – access to care; wait times		6 – individual-financial burden 11- health-system costs 17 – individual-financial burden
Sectors				
• Home and community care o Paramedics (including ambulances) o Home care o Community-based care in general (not specific to conditions) o Other				
• Primary care (PC) o Family physicians o PC teams o Walk-in clinics o PC clinics targeting executives o PC clinics providing preventive services o Pharmacies providing PC services	7 – care utilization 8 – care utilization 9 – care utilization 22 – care utilization 25 – care utilization	9 –wait times; provider choice 25 – wait times		9 – individual financial burden; health-system costs

Focus	Quadruple-aim metrics examined			
	Health outcomes	**Care experiences**	**Provider experiences**	**Per-capita costs**
○ Digital PC providers				
• Specialty care ○ Diagnostic services (e.g., CT, MRI) ○ Procedures (e.g., dialysis, surgery like cataracts and hernias) ○ Specialty assessments (e.g., dermatology) ○ Other services where there may be volume-outcome relationships ○ Multi-specialty targeted clinics (e.g., U.K. indep. sector Rx centres) ○ Hospitals ○ Digital specialty-care providers	7 – care utilization 9 – caesarean-section procedure	23 – wait times for diagnostics 25 – wait times for specialist services		
• Rehabilitation care	15 – care utilization			
• Long-term care	1 – adverse effects 24 – physical health outcomes		1 – administrative load	1 – individual-financial burden 24 – health-system costs
• Public health				
Conditions (e.g., mental health and addictions)				
• Mental health & addictions				
• Other conditions	2 – physical activity; hospital admissions for chronic conditions 14 – dialysis treatment for chronic kidney disease 20 – adjuvant therapy for cancer			
Treatments				
• Prescription drugs	3 – adherence to medicines 4 – adherence to medicines 11 – adherence to medicines 12 – adherence to medicines; cardiovascular events			12 – health-system costs

Focus	Quadruple-aim metrics examined			
	Health outcomes	Care experiences	Provider experiences	Per-capita costs
	25 – adherence to medicines			
• Drug prescriptions (e.g., PrEP for HIV)				
• Medical authorizations (e.g., cannabis)				
• Dental services	13 – general oral health; care utilization 21 – general oral health; care utilization			
• Blood products (e.g., plasma)				
• Other treatments	14 – dialysis treatment 20 – adjuvant therapy			
Populations				
• Indigenous		9 – wait times; provider choice		
• Other BIPOC				
• Low-income groups	4 – adherence to medicines 6 – adherence to medicines 7 – care utilization 16 – care utilization 22 – care utilization; equity in health outcomes 25 – care utilization	9 – wait times; provider choice		
• Other equity-deserving groups	4 – adherence to medicines			

Waddell K, Wilson MG, Ali A, Bain T, Bhuiya A, Chen K, Cura J, DeMaio P, Soueidan S, Lavis JN. Rapid evidence profile #50: Impacts of private financing of health programs, services and products on equity-centred quadruple aim metrics, 26 May 2023.

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McMaster University | HEALTH FORUM

>> Contact us
1280 Main St. West, MML-417
Hamilton, ON, Canada L8S 4L6
+1.905.525.9140 x 22121
forum@mcmaster.ca

>> Find and follow us
mcmasterforum.org
healthsystemsevidence.org
socialsystemsevidence.org
mcmasteroptimalaging.org
mcmasterforum