Medical Savings Accounts in Publicly Financed Health Care Systems: What Do We Know?

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Executive Summary

Medical Savings Accounts (MSAs) are a method of financing health care that includes two essential features:

- An individual (or household)-specific account whose balances are earmarked for health care expenses;
- A high-deductible, catastrophic insurance plan that covers expenses above the deductible.

An individual uses MSA funds, and personal resources if the MSA funds are not adequate, to pay for health care expenses for which she is personally liable (expenses below the deductible; cost-sharing above the deductible if required). The catastrophic policy insures extraordinary, high-cost care.

Advocates argue that MSAs can be integrated into Canada’s system of health care financing without compromising universal access to medically necessary services while generating substantial benefits, including: increased consumer choice, better access to many services, greater cost control, improved system efficiency, and increased personal responsibility and accountability.

Surprisingly little high-quality evidence exists documenting the effects of financing health care through MSAs.

- Analysts’ differ sharply on the effects of MSAs in Singapore, the only country that has fully integrated MSAs into its system of health care finance.
- US studies consist mainly of reports of the experiences of private firms that have limited scientific validity and generalizability, and hypothetical predictions based on simulation models.
- A recent US-based pilot project of MSAs within its publicly financed Medicare program failed to produce meaningful results due to lack of demand for MSA policies among Medicare beneficiaries and an unwillingness of private insurers to develop and market the required MSA-based catastrophic insurance policies.

A review of direct MSA experiences of other jurisdictions and the broader research literature on demand-side cost sharing and the dynamics of insurance markets suggests the following effects.

1. Will MSAs Control Costs and Increase System Efficiency?

- Both the evidence on MSAs to date and the broader experience with demand-side, competition-based approaches to health care financing suggest that MSAs will not reduce costs or improve system efficiency.
- MSAs will likely lead to reductions in the utilization of health care. But, reductions in utilization associated with MSA financing will not occur selectively among unnecessary services.
- Reduced utilization by individuals will not necessarily translate into costs savings to the public sector.
- MSA-induced demand-side competition has not been associated with reduced costs or improved efficiency.
- The rate of increase in health expenditures per capita in Singapore actually increased.
following the introduction of MSAs in 1984.

Singapore’s ability to control costs has resulted not from MSA financing, but rather from a series of supply-side regulatory initiatives that control the introduction of technologies, physician supply, physician fees, and the number of hospital beds.

Evidence indicates that, unlike standard markets, consumer-based demand-side competition among health care providers is associated with increased costs and wasteful utilization.

2. Will MSAs Expand Consumer Choice and Increase Access to Health Care Services?

MSAs can offer individuals greater flexibility in the range of health care services they can purchase at public subsidy.

Unless new resources are injected into the financing scheme or efficiencies arise, MSAs cannot increase real choice for everyone.

Those who will benefit most by allowing MSA funds to be used to purchase services not currently insured are healthy individuals whose expenditures on insured services are less than the deductible and who purchase large amounts of services not currently publicly insured.

3. Will MSAs Preserve the Equity Principles Underlying the Canadian System?

The economics of insurance make it difficult to implement MSAs in a fiscally neutral manner for the public sector, unless individuals are liable for some out-of-pocket payments from personal (not MSA) funds.

MSAs redistribute (and re-privatize) revenue raised through the general tax system, financially benefitting those who have less-than-expected health needs.

This is particularly so if accumulated MSA balances can be used to purchase goods and services beyond health care. The poor face a trade-off between health care and necessities such as housing and food, while upper-income individuals trade-off health care against “luxuries.”

4. Can MSAs be Easily Integrated into the Canadian Health Care Financing System?

A recent voluntary MSA pilot program in the US Medicare system failed when consumers showed little interest in MSAs and private insurers refrained from developing the required new insurance plans, which they judged to be complicated and difficult to sell to beneficiaries.

Risk selection compromises any voluntary MSA scheme.

Publicly financed MSAs that allow MSA funds to be used to purchase services not currently insured puts the existing role for private insurance in Canada a risk, and hence would be opposed by the private insurance industry.

5. Conclusions
MSA design embodies an inherent tension between features necessary to generate the promised benefits (e.g., cost control, improved efficiency, greater choice) and their likely effects on equity and access.

Under a number of plausible scenarios, MSAs could lead to higher public costs, reduced efficiency, reduced equity and compromised access.

The demand-side emphasis of MSAs conflicts with the predominance in the 1990s of supply-side approaches to health reform (e.g., internal markets in the UK and NZ, managed care in the US), developed because of the limitations of demand-side approaches.

MSA financing and the implied organizational arrangements of the delivery system as well as the relationship between providers and patients, may also hinder efforts to better integrate and coordinate care, particularly at the primary care level.

Careful design may temper some of the deleterious effects noted above, but critical analysis suggests that MSAs have little to offer within publicly financed health care systems and they put much at risk.
1. Introduction

MSAs offer an enticing method for financing health care. Advocates argue that MSAs can be integrated into Canada’s system of public health care financing without compromising universal access to medically necessary services while generating substantial benefits, including, increased consumer choice, better access to many services, greater cost control, improved system efficiency, and increased personal responsibility and accountability (Ramsey 1998; Gratzer 1999, Owens and Holle 2000; Coffey and Chaoulli 2001; Senate of Canada 2001). The recent calls for Canadian-style MSAs make it timely to assess the evidence regarding the performance of MSA-based financing schemes in publicly financed health care systems.

All MSA schemes include two essential features: (1) an individual (or household)-specific account whose balances (which can accumulate over time) are normally earmarked for health care expenses; and (2) a high-deductible, catastrophic insurance plan that covers expenses above the deductible. An individual uses MSA funds (and personal resources if the MSA funds are not adequate) to pay for health care expenses below the deductible and, if required, cost-sharing above the deductible. The catastrophic policy insures extraordinary, high-cost care. MSAs can be integrated into virtually any system of health care finance, with myriad variations of this two-part design depending, for instance, on the source of the MSA contributions (taxes, employers, individuals), the source of the catastrophic insurance (public, private), the extent of cost-sharing required by the catastrophic insurance, restrictions on how the MSA balance can be spent (health care only; health care and other goods and services), the tax treatment of MSA contributions, withdrawals and interest earned, and the range of insurance choices individuals have alongside MSAs.

MSAs are intended to counter the incentive for increased health care utilization associated with comprehensive insurance that provides care free of charge. MSAs do this by forcing individuals to purchase routine health care at full price (while reducing the inequities of standard user charge policies by providing resources to make such purchases) and limiting the role of insurance to low-probability, high-cost events.
2. MSAs in Publicly Financed Health Care Systems - What Do We Know?

Surprisingly little high-quality evidence exists documenting the effects of financing health care through MSAs (Hurley 2000a). Singapore is the only country that has fully integrated MSAs into its system of health care finance, and analysts’ interpretation of their effects differ sharply (Hsiao 1995; Massaro and Wong 1995; Nichols, Hong and Prescott 1997; Barr 2000). China’s recent MSA pilot projects cannot isolate the effects of MSAs per se because they are part of a larger set of financing, funding and organizational reforms (Yip and Hsiao 1997). The MSA literature from the U.S. consists mainly of analytic commentary and proposals (Physician Payment Review Commission 1996; Pauly and Goodman 1995), reports of the experiences of private firms that have limited scientific validity and generalizability (Physician Payment Review Commission 1996), or predictions based on simulation models (American Academy of Actuaries 1995; Nichols, Moon and Wall 1996; Ozanne 1996; Zabinski et al. 1999; Kendrix and Lubitz 1999). A recent MSA pilot project authorized by the U.S. Congress for beneficiaries in the publicly financed US Medicare Program (which provides public health insurance to elderly US citizens) produced no meaningful results. The pilot failed due to lack of demand for MSA policies among the target populations and an unwillingness of private insurers to develop and market MSA-based catastrophic insurance policies (Medicare Payment Advisory Commission 2000).¹

These direct experiences with MSAs provide meager evidence for assessing the likely effects of a Canadian-style MSA scheme. However, because MSAs rely in their essence on demand-side incentives (designed to force individuals to make financial trade-offs when considering health care purchases), one can draw on the extensive analytic and empirical research on demand-side cost-sharing and insurance markets more generally to identify the likely effects of MSAs when integrated into a system of public health care finance.

The following sections examine both other jurisdictions experiences with MSAs and the broader research literature on insurance markets to assess claims made about MSAs.

¹This experience mirrors the outcome of an earlier private-finance MSA pilot program targeted at the self-employed and those working in small firms, for which enrolment fell so far below anticipated levels that the pilot project failed to generate the desired information (US General Accounting Office 1998).
2.1 Will MSAs Control Costs and Increase System Efficiency?

MSAs require consumers to pay full price for health care services (drawing on MSA funds and/or personal funds) up to the point at which the catastrophic insurance coverage begins. This demand-side cost-sharing is intended to reduce costs and improve system efficiency by: (1) reducing utilization of unnecessary health care services; and (2) stimulating price competition among providers who compete for the business of cost-conscious consumers. Reductions in unnecessary utilization improve allocative efficiency (delivering the right service, at the right time, to the right person to improve health) while competition is argued to improve both supply-side efficiency (producing health and health care in the least-cost manner) and allocative efficiency (by increasing responsiveness to consumer preferences). However, both the evidence on MSAs performance and the broader experience with demand-side, competition-based approaches to health care financing suggest that MSAs will not be effective in controlling costs or improving efficiency.

2.1.1 Controlling Costs and Improving Efficiency through Reduced Utilization

MSAs will likely lead to reductions in the utilization of health care. The reductions in utilization if MSAs were widely implemented in Canada, however, would be smaller than is commonly predicted in the MSA literature. Predictions of the effects of MSAs on costs generally assume no countervailing provider responses to reduced consumer demand (e.g., Keeler et al. 1996; Ozanne 1996; Kendix and Lubitz 1999). Reduced consumer demand, however, would translate under fee-for-service payment into a large decrease in provider incomes. Providers may partially offset this decrease by inducing demand for their services, a phenomenon that was observed in the most comprehensive study of user fees for physician services in Canada (Beck and Horne 1980), or by raising the price of their services.

Reductions in utilization induced by MSA financing will not occur selectively among unnecessary services. The evidence is now incontrovertible that, because consumers frequently do not possess the information required to selectively reduce only unnecessary care, demand-side cost-sharing deters both necessary and unnecessary care (Rice and Morrison 1994; Stoddart, Barer and Evans 1994; Tamblyn et al. 2001). Recent Canadian evidence also documents that the reductions in necessary care can generate important adverse health effects in vulnerable populations, including increased use of emergency rooms, increased admissions to hospitals, and even death (Tamblyn et al. 2001). Hence, the reductions are not efficiency improving.
Finally, reduced utilization by individuals will not necessarily translate into costs savings to the public sector. When consumers use the annual public contribution to purchase catastrophic coverage from private insurers, the savings associated with any reduced utilization accrue not to the public sector but to individuals or private insurers. MSA financing in this case would, at best, be fiscally neutral for public payers. This can be illustrated with a simplified example. Assume that:
(a) MSAs are publicly financed; (b) MSAs are universal (i.e., mandatory); (c) the annual public contribution to individuals’ MSAs is equal to the mean age-sex adjusted public expenditures under the current system; (d) individuals purchase catastrophic insurance from private insurers for which there is a $1000 deductible; (e) private insurance companies incur no administrative costs in providing insurance; and (f) MSA funds can be used to purchase a wide range of health-related goods and services, both those currently publicly insured and those not currently publicly insured.

This reflects designs discussed in many proposals, and below we modify the example to illustrate the effects of alternative designs. Assume further that there are two individuals of the same age and sex, one of whom incurs $500 in expenditures for publicly insured services under the current system and the other of whom incurs $3500 in such expenditures. The total annual current expenditure is $4000; mean per capita expenditures is $2000. Assume also that MSA financing results in substantial reductions in utilization, so that spending on health care services falls from $4000 under the current system to $3300 under the MSA scheme (from $500 to $350 for person 1; from $3500 to $2950 for person 2). Table 1, panel (a), lists the financial outcomes under these assumptions. Even though spending on health care services falls, public expenditures remain unchanged at $4000 ($2000 deposited in each person’s MSA). The difference ($700) between public expenditures on MSAs and actual health care expenditures accrues to individuals ($650 balance in person 1’s MSA at end of year) and insurance companies ($50 in profit). Utilization fell, but it served only to redistribute income from providers to individuals and private insurance companies; no public sector savings arose.

The potential for savings to public expenditures arises if the public sector provides the catastrophic insurance itself. In this case, those with above-average expenditures must reduce their

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2The outcomes illustrated in this simplified example generalize to settings with real populations in which the contributions are age-sex adjusted. The arithmetic just gets more complicated when one works with 38 age-sex categories. In addition, expenditures on non-insured services will be explicitly incorporated below.

3Competition among private insurers could conceivably lower premiums over time. If government is able to lower its MSA contributions by the amount of private insurance company profit, a small savings would arise; otherwise, the benefit of price competition will go to individuals. Lowering government contributions any further to capture some of the savings accruing to individuals will mute their incentive to use MSA resources prudently.
utilization sufficiently to offset the “excess” funds the government contributes to the MSAs of low-risk individuals who use few services. Such savings are likely small, however, because the bulk of health care expenditures are incurred by a small proportion of users with very high expenditures for whom care is free at the margin because it is covered by the catastrophic insurance. Table 1, panel (b) depicts the outcomes when catastrophic insurance is provided by the public sector. In this case, public expenditures fall by $50.

The potential for cost savings is further mitigated if enrollment in the MSA scheme is voluntary rather than mandatory. MSAs are particularly appealing to those who have low health risks, leaving the traditional insurance system with expensive, high-risk individuals (Physician Payment Review Commission 1996; Prescott and Nichols 1998; Zabinski et al. 1999; Medicare Payment Advisory Committee 2000). The imprecision of even the best current risk-adjustment methods (Ellis and van de Ven 2000) means that risk-adjusting MSA contributions can only partially address the problem of risk selection. Risk selection can cause government expenditures to increase relative to the no MSA case (Medical Payment Advisory Committee 2000; Kendrix and Lubitz 1999). This is illustrated in panels (c) and (d) of Table 1, which make the same assumptions as above except enrollment in the MSA scheme is voluntary. Because MSAs are financially attractive to low risk individuals only person 1 enrolls in the MSA scheme; person 2 remains in the traditional public insurance plan. Public expenditures increase from $4000 under the current system of finance to up to $5500 under a system of voluntary MSAs.

Are these results of this simplified, hypothetical example simply the artifact of rigging? The specific numbers chosen, of course, are artificial. But the basic cost patterns they predict are not. In fact, many simulations of the effects of MSAs for developed countries predict increased overall spending (Nichols, Hong and Prescott 1998; Keeler et al. 1996; Kendricks and Lubitz 1999).

2.1.2 Controlling Costs and Improving Efficiency through Demand-side Competition

The second mechanism by which MSAs are designed to control costs and improve system efficiency is price competition induced by cost-conscious consumers spending their MSA dollars. The limited experience with MSAs as well as more general evidence regarding the effects of demand-side competition, however, suggest that demand-side competition by health care consumers often fails to generate costs savings or improved efficiency. Singapore, which runs a modern health care system spending only 3-4% of its GDP on health care, is the most commonly cited case to
support the claim that MSA-induced competition will control costs in a publicly financed health care system. Recent evidence, however, demonstrates that MSAs have not been effective in controlling costs in Singapore (Barr 2001; Hsiao 1995). First, MSA-financed purchases account for only a small proportion of total health care expenditure — only 8.5% in 1995 (Hsiao 2001). Second, the rate of increase in health expenditures per capita actually increased following the introduction of MSAs in 1984 (Hsiao 1995). By 1993 increasing costs arising from increased physician fees and the over-adoption of expensive new technologies as hospitals competed with each other forced the government to conclude that: “Market forces alone will not suffice to hold down medical costs . . . the government has to intervene directly to structure and regulate the health system.” (Singapore Ministerial Committee on Health Policy 1993, as quoted in Barr 2001). Singapore’s ability to control costs has resulted not from MSA financing, but rather from a series of supply-side regulatory initiatives that control, for instance, the introduction of technologies, physician supply, physician fees, and the number of hospital beds (Barr 2001). This mirrors the relative success of Canada (which has relied extensively on similar supply-side initiatives) compared to the United States (which has historically relied more heavily on demand-side initiatives) in controlling health care costs.

Singapore’s experience with demand-side competition is neither anomalous nor surprising. For well understood reasons, health care markets do not operate as do most markets for ordinary consumer goods (Evans 1984; Hurley 2000). It has long been observed that, contrary to predictions based on standard market theory, physician fees are frequently positively rather than negatively correlated with physician supply (Evans 1984) and consumer-based competition among hospitals is associated with wasteful duplication and increased spending on new technologies (Folland, Goodman and Stano 2001; Robinson and Luft 1985; Benjamini and Gafni 1986).4

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4Recent work from the U.S. (Kessler and McClellan 1999) has found that some forms of hospital competition can reduce costs without reducing measured quality. This work, however, reinforces the above conclusion. It found that demand-side competitive strategies, such as those which dominated prior to the 1990s, was associated with increased costs. Only after the early 1990s, with the spread of managed care and the development of large health plan purchasers that could extract price concessions, did cost reducing effects of competition emerge. These effects were strongest in markets with the greatest penetration by HMOs, which rely on supply-side rather than demand-side regulatory approaches to control utilization and expenditures.
2.2 Will MSAs Expand Consumer Choice and Increase Access to Health Care Services?

MSA advocates emphasize the potential for MSA funds to be used to purchase a wide range of health-related services (e.g., drugs, non-physician health professionals, health club memberships). MSAs can offer individuals greater flexibility in the range of health care services they can purchase at public subsidy. In practice, however, expanded choice bumps up against basic actuarial facts that make it less clear whether, on average, MSAs truly expand choices. If individuals are allowed to spend MSA funds on services not currently publicly insured, then one or more of three things must happen: (1) benefits are limited to a subset of relatively healthy individuals; (2) costs increase to reflect the more extensive coverage; or (3) individuals face greater risk of out-of-pocket expenses for services that are currently publicly insured.

These patterns are illustrated in Table 2, for which the assumptions are identical to those in the previous example except that we now include expenditures on uninsured services ($300 for each person). Panels (a) and (b) assume that such expenses do not count toward meeting the deductible in the catastrophic policy. Because person 2 needs available MSA funds to finance insured services, no MSA funds remain to purchase non-insured services. MSAs therefore make him no better off than under the current system. In contrast, MSA financing makes Persons 1 better off because her expenditures on insured services are less than the deductible, allowing the balance of MSA funds to be used to purchase non-insured services. Hence, she saves $300 in personal expenditures. Choice has expanded for person 1 but not person 2. In general, only the subset of relatively healthy individuals whose expenditures on currently insured services are less than the deductible will benefit under MSAs through expanded choice. This conclusion is unchanged if we allow only the accumulated MSA balance from previous years to be used to finance the purchase of non-insured services.

An alternative design might allow the purchase of non-insured services to count toward meeting the deductible. This, however, is de facto an expansion of insurance coverage, which causes the insurance company to lose money under the previous premiums (Table 2, panel c). Therefore, its viability would require either that the catastrophic insurance premium increase (if the deductible remains the same) or that the deductible increase (if the premium remains the same). In either case a gap opens between annual MSA balance available after paying the premium and level of the deductible beyond which catastrophic coverage begins.

In the end, there is not such thing as a free lunch: unless new resources are injected into the
financing scheme (or efficiencies arise), there is no way to increase choice for everyone.

2.3 Will MSAs Preserve the Equity Principles Underlying the Canadian System?

The above analysis of the effects of MSAs on costs to the public sector document that it will be a challenge to integrate MSAs into the Canadian system of health care financing without compromising universal access to medically necessary services (particularly for low-income citizens). This will be especially so if catastrophic insurance is provided through the private insurance sector.\(^5\)

A number of intrinsic features of MSA financing, however, inevitably generate adverse effects on equity and access. Within a publicly financed system, MSAs redistribute (and reprivatize) revenue raised through the general tax system, financially benefitting those who have less-than-expected health needs. Risk-adjusting the MSA can only partially offset the effects of the well-established correlation between socio-economic status and health, so MSAs disproportionately benefit healthy, high-income members of society. Simulation models of the effects of introducing voluntary MSAs alongside traditional comprehensive insurance consistently predict that low-risk, high-income individuals financially benefit the most; and that high-risk, low-income individuals financially suffer the most (Nichols, Moon, and Wall 1996; Ozanne 1996; Zabinski et al. 1999).

Zero money prices are a necessary (though not sufficient) condition for equal access when individuals’ economic resources differ (Olsen and Rogers 1991). The whole point of MSAs, however, is to eliminate free care. User charges, as noted above, particularly adversely affect the poor, both fiscally and in terms of reduced health status (Stoddart et al. 1994; Rice and Morrison 1994; Tamblyn et al. 2001). The MSA mitigates the effects of requiring individuals to pay the full cost of care up to the deductible, but it does not remove them. This is particularly so if accumulated MSA balances can be used to purchase an assortment of goods and services beyond health care. If this is allowed, the poor face a trade-off between health care and necessities such as housing and

\(^5\)This above example has abstracted from issues that only complicate matters, such as administrative costs for private insurers. Inclusion of administrative costs would require that the catastrophic premium be greater than the expected costs of the policy. If MSA funds were to be sufficient to cover expenses up to the deductible, this would require that the annual government contribution exceed the current age-sex expenditure. Alternatively, if the contribution remains equal to the current age-sex expenditure level, a gap is introduced between the available MSA balances and the level of the deductible, a gap that must be met from an individual’s personal resources. In the above scenario, for example, if administrative charges increased the premium to $1100, then only $900 in MSA balances remain to meet the $1000 deductible. Once again high-need individuals are most hurt.
food, while upper-income individuals trade-off health care against “luxuries.” It is telling that in some instances MSAs have been marketed to high-income individuals as tax-preferred savings vehicles (Prescott and Nichols 1998).

### 2.4 Can MSAs be Easily Integrated into the Canadian Health Care Financing System?

The transition to MSA financing appears simple: the government simply stops paying providers directly and instead deposits the funds into individual MSA accounts. Even if all the required administrative changes can be made, experience suggests that a transition to MSA financing would not be easy, especially given the current institutional details in Canada.

A recent voluntary MSA pilot program in the US Medicare program, based on publicly financed MSAs with private catastrophic insurance, failed (Medicare Payment Advisory Commission 2000). Individuals showed little interest in MSAs and private insurers were reluctant to invest the resources to develop the required new insurance plans, which they judged to be complicated and difficult to sell to beneficiaries. Some of this reluctance was due to the temporary nature of the pilot projects, but the Medicare Advisory Payment Commission concluded that there was no way to adjust the design of the MSA schemes that would serve the interests of the publicly financed Medicare program and elicit sufficient response from private insurers (Medicare Payment Advisory Commission 2000). This failure in the US, which has a stronger, better developed insurance market than does Canada, does not bode well for such a program in Canada.

A design in which the public system act as the catastrophic insurer may be preferable in any event, and is likely more feasible as it eliminates problems related to private insurance markets and represents a smaller departure from the current system. Even then, if the MSAs are voluntary risk selection remains a serious problem. Full-scale switch-over from the current system to mandatory MSAs, however, would appear to be a bigger step than many policymakers would be willing to contemplate. Further, if individuals are allowed to use MSA funds to purchase a wide range of health care (dental care, drugs, physiotherapy, aroma therapy, personal trainer, etc.), the public MSA-scheme would put at risk the existing role for private insurance in Canada, and hence would be fought vigorously by the private insurance industry.

These problems may not be insurmountable, but they do suggest that a transition is not as simple as it is sometimes portrayed.
3. Conclusions

The above analysis documents that, under plausible scenarios, integration of MSAs into Canada’s system of health care financing could lead to higher public costs, reduced efficiency, reduced equity and compromised access for many Canadians. This is particularly the case if MSAs are voluntary and provide catastrophic coverage through private insurers. Further, the analysis highlights an inherent tension in MSA design between features necessary to generate the promised benefits and features necessary to avoid unwanted adverse effects on costs, efficiency and equity. The very features that enhance incentives to reduce utilization and use MSA funds prudently (e.g., increased cost sharing, greater flexibility in how accumulated MSA funds can be spent, favourable tax treatment of accumulated MSA funds) generate some of the greatest inequities in the distribution of the benefits and burdens of health care financing. In addition, MSAs by design re-privatize funds that were previously held in a collective public insurance pool, reduce risk-pooling among high- and low-income and among the sick and the healthy, and induce a tighter link between one’s health status and one’s expected expenditures. In doing so, they conflict directly with the fundamental tenet on which Canada’s current system of hospital and medical financing is based – payment according to ability to pay; service according to ability to benefit.

MSAs’ bring with them all the well-known (and inescapable) limitations of demand-side approaches to expenditure control and utilization management. The demand-side emphasis of MSAs conflicts with the predominance in the 1990s of supply-side approaches to health reform, such as internal markets in the UK and NZ and managed care in the US, which were developed in part because of the limitations of demand-side approaches. MSAs’ emphasis on the one-on-one relationship (both financial and clinical) between an individual and a free-standing provider may also hinder efforts to better integrate and coordinate care through primary care reform.

Careful design may temper some of these deleterious effects, but critical analysis suggests that MSAs have little to offer within publicly financed health care systems and they put much at risk.
4. References


Table 1: The Effects of MSAs on Health Care Utilization and Public Sector Costs

**CURRENT FINANCING SYSTEM**

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<th>Person 2</th>
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**MSA-BASED FINANCING SYSTEM**

**Universal, Mandatory MSAs**

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**Voluntary MSA Enrollment**

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Table 2: The Effects of Allowing MSA funds to be Spent on Uninsured Services

**CURRENT FINANCING SYSTEM**

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<th>Person 1</th>
<th>Person 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Health Care Expenditures on Insured Services</td>
<td>$500</td>
<td>$3,500</td>
<td>$4,000</td>
</tr>
<tr>
<td>Private Health Care Expenditures on Uninsured Services</td>
<td>$300</td>
<td>$300</td>
<td>$600</td>
</tr>
</tbody>
</table>

**MSA-BASED FINANCING SYSTEM**

**Universal, Mandatory MSAs**

Expenses on Uninsured Do not Count Toward Deductible

**(a) Private Catastrophic Insurance**  
**(b) Public Catastrophic Insurance**

<table>
<thead>
<tr>
<th></th>
<th>Person 1</th>
<th>Person 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Allocation to MSAs</td>
<td>$2,000</td>
<td>$2,000</td>
<td>$4,000</td>
</tr>
<tr>
<td>Insurance Premiums</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>MSA Funds Available to Purchase health care</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>Actual Health Care Expenditures</td>
<td>$350</td>
<td>$2,950</td>
<td>$3,300</td>
</tr>
<tr>
<td>Currently Insured Services</td>
<td>$300</td>
<td>$300</td>
<td>$600</td>
</tr>
<tr>
<td>Services Not Currently Insured</td>
<td>$350</td>
<td>$350</td>
<td>$700</td>
</tr>
<tr>
<td>How Paid For</td>
<td><strong>MSA Funds</strong></td>
<td>$650</td>
<td>$1,000</td>
</tr>
<tr>
<td>Catastrophic Insurance</td>
<td>$0</td>
<td>$1,950</td>
<td>$1,950</td>
</tr>
<tr>
<td>Private Out-of-Pocket</td>
<td>$0</td>
<td>$300</td>
<td>$300</td>
</tr>
<tr>
<td>MSA Balance at end of year</td>
<td>$350</td>
<td>$0</td>
<td>$350</td>
</tr>
</tbody>
</table>
| Insurance Profit | $1,000 | $(950) | $(50)
| **Total Public Expenditures** | **$2,000** | **$2,000** | **$4,000**|

**Universal, Mandatory MSAs**

Expenses on Uninsured Count Toward Deductible

**(c) Private Catastrophic Insurance**  
**(d) Public Catastrophic Insurance**

<table>
<thead>
<tr>
<th></th>
<th>Person 1</th>
<th>Person 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Allocation to MSAs</td>
<td>$2,000</td>
<td>$2,000</td>
<td>$4,000</td>
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<tr>
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<td>$1,000</td>
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<td>$350</td>
<td>$350</td>
<td>$700</td>
</tr>
<tr>
<td>How Paid For</td>
<td><strong>MSA Funds</strong></td>
<td>$650</td>
<td>$1,000</td>
</tr>
<tr>
<td>Catastrophic Insurance</td>
<td>$0</td>
<td>$2,250</td>
<td>$2,250</td>
</tr>
<tr>
<td>Private Out-of-Pocket</td>
<td>$0</td>
<td>$300</td>
<td>$300</td>
</tr>
<tr>
<td>MSA Balance at end of year</td>
<td>$350</td>
<td>$0</td>
<td>$350</td>
</tr>
<tr>
<td>Insurance Profit</td>
<td>$1,000</td>
<td>$(1,250)</td>
<td>$(250)</td>
</tr>
<tr>
<td><strong>Total Public Expenditures</strong></td>
<td><strong>$2,000</strong></td>
<td><strong>$(2,250)</strong></td>
<td><strong>$4,250</strong></td>
</tr>
</tbody>
</table>