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Financial Rules as a Catalyst for Change in the Canadian Health Care System

by
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Highlights

- In the context of this paper, management control systems (one component of which is a set of financial rules) are the mechanism by which governments ensure the judicious and appropriate use of funds by the organizations they have tasked with the delivery of health care. The paper focuses attention on the publicly managed and publicly funded segment of the health care system, the most visible components of which are health authorities and various institutional health providers. Management control systems enable, encourage and promote good management practices. When well designed, management control systems are, in themselves, catalysts for change.

- The management control systems used in the Canadian health system have relatively few features that represent systemic barriers to change. In many cases, barriers that have been identified are being actively addressed in more than one jurisdiction. Continued efforts must be made to share information on innovative financial practices between jurisdictions.

- A significant barrier to implementing change is a lack of access to the financial data needed to properly inform decisions. Continued investment and commitment to a national financial information systems infrastructure for health care is required.

- The use of evidence-based funding methods (such as those driven by population characteristics or case-based data) should be encouraged. These methods hold the greatest promise for promoting predictability and equity in funding.

- It may be useful to explore funding capacity in the health system using a multi-year planning horizon, while retaining a short-term horizon for the funding of activity levels. Current efforts to fund capacity using a short-term horizon simply promote ineffective change at the margin.

- Because significant differences exist in the capacity of health organizations to generate funds from non-government sources, and because of concerns that have been identified related to the real and perceived inequities these funding sources present, the impact of various options for raising and retaining non-government revenues should be examined empirically.

- Few health organizations have sufficient working capital to finance efficiency improvement initiatives. An innovation fund should be established against which health organizations would borrow and repay monies for this purpose.

- When introducing new elements to a management control system (such as new funding rules or practices), it is imperative to give careful consideration to the unintended behaviours that these elements may promote.

Executive Summary

This paper addresses the question of how organizational financial rules affect change in the context of the Canadian health care system. These financial rules are an integral component of the management control systems used to encourage and promote good management practices, and in doing so, ensure that goals are achieved and strategic directions are effectively pursued.

Three issues are explored from a perspective of management control, with a particular focus on how current practices offer prospects for change. These issues are:

- the approaches used to allocate financial resources;
- timing issues related to the budget planning process used by health organizations; and
- the capacity of health organizations to access alternative revenue sources.

A number of parties contribute to the fabric of the Canadian health care system. Many physicians, pharmacists, and others provide services directly to Canadians using a variety of for-profit business models. The services of these professionals are complemented by a large not-for-profit, publicly managed infrastructure characterized by organizations that usually deliver health care in multiple sectors (acute care, mental health, community health, etc.) using common funding and governance structures. This paper focuses on the management control practices of this latter group.

While a number of beneficial improvements in the design of the management control systems should be examined, it is encouraging to note that the financial mechanisms included in these systems present relatively few systemic barriers to change. This is not to say that practical barriers do not exist. A number of innovative improvements in funding and monitoring practices are being explored by jurisdictions across Canada. Continued efforts should be made to ensure these experiences are widely shared.

An area of considerable focus in all jurisdictions has been the mechanism used to allocate funds. When funding day-to-day operations, approaches that are evidence-based (such as those that use characteristics of the population, or case-based measures of activity) appear to offer the most promise for promoting predictability and equity in funding. When funded in this manner, organizations with multi-sector responsibilities are the best positioned to respond and adapt to change.

Effective management control is made more difficult in unstable conditions. In an effort to promote stability in the funding mechanism, it would be advantageous to explore the merits of separating funding the availability of capacity in the health system from the funding of day-to-day activity. This is because it is extremely difficult to shed or acquire the fixed costs associated with capacity over short time horizons. When organizations do attempt this, dysfunctional behaviours[1] often emerge, and change occurs only at the margin. Methods to fund capacity over longer-term rolling planning horizons (such as 3 or 5 years) are worthy of discussion.

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1 In the context of this paper, dysfunctional behaviours are actions taken by individuals or health organizations that will not result in the strategy encouraged by the government being realized.

For budgets to assume a valuable role in the design of effective management control systems, it is important that the timing of funding announcements be aligned with the budgeting cycle. When funding is announced after the beginning of a fiscal period, or when budgets are prepared without knowledge of the revenue stream, the utility of the planning exercise is seriously compromised. Weaknesses in planning limit the ability to achieve strategic goals.

Canadian health care organizations are found to have limited experience in accessing revenue streams from non-government sources. There are a number of valid reasons why this is so. There are also a number of valid concerns about how mechanisms should be introduced to promote equity among institutions with respect to the capacity to generate non-government revenues. Empirical studies of this issue are required.

Underlying the issues raised in this paper is the reality that we lack the financial information needed to inform many of the decisions that must be made with respect to change. Continued investment in the utility of Canada's financial information system infrastructure is crucial. Without good data we cannot make good decisions.

The issues raised in this discussion paper are designed to encourage debate. Our ability to create the robust management control systems needed to support a comprehensive and viable health system for Canadians depends on an open sharing of issues and ideas.

Introduction

In 2001, it is estimated that almost $40 billion was distributed by provincial/territorial governments to health organizations with mandates that include the provision of institution-based health services (Canadian Institute for Health Information [CIHI] 2001*a*). Individually and collectively, these organizations have responsibility for the delivery of quality services designed to enhance and promote the health of Canadians.

Designing organizational structures and policies that support the delivery of health services in a comprehensive and equitable fashion is a non-trivial endeavour, and has long occupied the minds of researchers, funders, and practitioners alike (see for example Palmer 2000; Coast et al. 2000; Anderson and Cosby 1998; and Aas 1995). The fact remains, however, that there appears to be no single answer to how the delivery of health services should be funded or organized. Nonetheless, it is valuable to engage in a process of continuous evaluation, seeking to exploit features of existing approaches that work well, while seizing opportunities to overcome challenges as they are identified.

Many parties contribute to the fabric of the Canadian health care system. Many physicians, pharmacists, and others provide services directly to Canadians using a variety of for-profit business models. The services of these professionals are complemented by a large not-for-profit infrastructure characterized by organizations that often deliver health care in multiple sectors (acute care, mental health, community health, etc.) using common funding and governance structures. This paper focuses on the management control practices of the latter group.

This paper is one of a series of documents prepared as background material for the Commission on the Future of Health Care in Canada. A selection of issues related to the rules and practices that currently govern funding and resource allocation practices in Canada are explored. Specific attention is given to three areas of interest. These are:

- the approaches used to allocate financial resources;
- timing issues related to the budget planning process used by health organizations; and
- the capacity of health organizations to access alternative revenue sources.

Each issue is explored from the perspective of the management control system to which it contributes, with a particular focus on how the current practices affect the prospects for implementing change.

A number of issues worthy of further exploration are identified, and where appropriate, recommendations are provided to stimulate discussion.

The Concept of Management Control: Toward an Understanding of How Organizations Respond to Financial Rules

Management control is the process of ensuring that the individuals within an organization conduct themselves in a manner that is consistent with what management desires to see done (after Merchant 1997). In effective organizations, what management desires to see done is the successful execution of the strategy established by the governors of the organization. This execution of strategy is achieved through the development and implementation of a variety of management control processes, one subset of which are the "financial rules" that form a focus for this paper. Collectively, these processes form a *management control system*.

Seminal works such as that by Barnard in 1938 (Barnard 1970), and Simon's (1995) much referenced work on levers of control, have established a legitimacy of considering management control as a discipline. Otley (1994) recognizes the centrality of financial rules and policies, but reminds us that these levers are but one element in a comprehensive management control system.

Although non-profit organizations (such as the organizational structures responsible for managing the largest single share of Canadian health expenditures) do not share the strategic goal of profit maximization with their market driven colleagues, evidence suggests that the activities engaged in by management in both settings are remarkably similar, and as such, management control concepts developed in the for-profit sector also have relevance in the non-profit sector (Anthony and Young 1995; Siciliano 1997).

In the context of this discussion paper, there are two management control systems in play. The first is the management control system implemented by a funding agency (a ministry or department of health), where there is a desire to ensure the system encourages (if not requires) the judicious and appropriate use of funds for the provision of health care by the organizations receiving funds. The second is the management control system employed by the funded agency, where mechanisms are implemented to ensure the funds received are deployed in a manner consistent with that organization's strategic goals.

While one might expect a natural alignment between the strategic goals (and therefore the management control systems) of these two actors, such is not always the case. For example, a funder may have a strategic goal of supporting a healthy population and, by extension, minimizing the need for hospitalization. The funder visualizes a system in which funds would be directed toward programs that promote healthy lifestyles, detect illness at an early stage, or support the delivery of services in the home.

This strategy, however, may not be directly aligned with that of the agencies receiving funding. Consider the situation faced by a health organization with multi-sector responsibilities, such as an organization with responsibility for mental health, community care, and acute care services. While the organization appreciates that investing funds in programs that promote healthy lifestyles will reduce hospitalization rates in future years, the fact remains that implementing such a strategy in the short term will limit the organization's ability to achieve its

strategic goals in the intervening years. (One such goal is probably to provide quality care to all those who seek care.) Faced with this prospect, the health organization feels it is able to make only modest investments in preventative health strategies. Instead, in keeping with the organization's strategy, increased investment in cardiac care and other high cost services are made.

While admittedly a contrived scenario, the example illustrates an important point that underpins the issues explored in this paper. Funders implement management controls (such as financial practices) in an effort to direct the behaviour of health organizations in a manner that is consistent with the funder's strategy. In the absence of these controls (or, at times, in spite of such controls) health organizations will take actions that are in their own best interests – in other words, actions that are consistent with the health organizations' strategy.

Merchant (1997) provides a simple framework that can be used to reflect on the efficacy of elements of a management control system. Merchant argues that effective management control systems are designed in a manner that overcomes the three reasons that explain why actors (such as health organizations) exhibit behaviours that are not consistent with the stated goals of the broader system (in this case the funding agency). His reasons are applied here in the context of the discussion in this paper.

1. *Lack of direction* – Health organizations may not know what is required of them.

   It is important that the management control system ensures health organizations understand the specific goals they are expected to achieve. These goals must include elements that can be objectively measured. While requiring a balanced operating position is an important first step, much more must be done in this area, particularly with respect to providing direction through the use of performance measures.

2. *Motivational problems* – Health organizations may know what is expected of them, but their own objectives are not aligned with those of the system.

   When funding agencies fail to address this problem in the design of their management control system, health organizations may take actions that benefit themselves at the potential expense of the system. "Gaming the system" by exploiting a shortcoming in the design of a funding formula is an example. The financial rules contained in the management control system must be designed in a manner that aligns the motivational objectives of health organizations with the objectives of the system as a whole.

3. *Personal limitations* – Health organizations may know what is expected and be motivated to achieve what is expected, but lack the expertise or knowledge to achieve the objectives.

   For example, in Canada's health system, financial data quality issues, and the dearth of robust information on the cost of providing care, limit the ability of managers to make certain decisions in an informed manner (McKillop, Pink, Porter and Schraa 2000). In order to facilitate decision making with respect to change initiatives, it is important that

personal limitations (such as by facilitating access to reliable financial information) be addressed by the management control system.

Effective management control systems have three characteristics. The first is that they are *future oriented.* The systems provide clear expectations and motivation to ensure a future state is achieved. Control is not about focussing on what has already occurred.[1] Secondly, effective management control systems are *objective driven*. The overriding purpose of the management control system is to ensure goals are realized (Flamholtz, Das and Tsui 1985). And lastly, effective management control systems *balance* the cost of implementing controls with the benefits expected. Good management control is not about imposing rules and constraints in the absence of an evaluation of the benefits to be gained by the rule or constraint. Accountability alone does not create efficiency in health systems as evidenced by the experience in Norway (Pettersen 2000). A balance is required between these characteristics as is found in the management control systems of all excellent organizations (Cawsey, Deszca and Teall 1994).

Guided by the principals of being future oriented, objective driven, and balanced, developers of effective management control systems rely on rules, policies and practices designed to overcome problems related to a lack of management control. Following from Merchant's (1997) framework, these rules, policies and practices are a combination of:

- *action controls* – Control elements that cause health organizations to take actions that are consistent with the strategy of the health system as a whole (or prevent them from taking undesirable actions). Requiring government approval before beginning a hospital construction project, or submitting an operating plan for approval are examples.

- *results controls* – Control elements that do not prescribe the means but, instead, focus on whether a desired end state is achieved. The decision by many jurisdictions to implement rules against operating deficits is an example. Achieving a performance benchmark is another example.

- *cultural or personnel controls* – Control elements that build on individuals' desires to help themselves and others. Examples are a strong sense of shared professionalism reinforced by a code of conduct, engaging in continual professional training, and effective selection processes.

Management control is about enabling, encouraging and promoting good management practices. As good management includes the ability to embrace change, this paper posits that a well-designed management control system (and the financial practices it embodies) is a required precursor for change initiatives to be successful. When well-designed management control systems are, in themselves, catalysts for change. It is inappropriate to view management controls as barriers to change. When barriers are identified, a weakness in the design of the management control system has been identified. This must be addressed through changes in the design of the system if the emergence of dysfunctional behaviours is to be avoided.

With this in mind, consideration is given to three elements of the management control system used in the Canadian health care sector. The discussion that follows focuses on health organizations whose mandate includes the provision of acute care services. In most jurisdictions in Canada, these organizations also have responsibilities for a variety of care delivery missions in the broader health services sector.

Funding Approaches as Catalysts for Change

One of the most visible elements of the management control systems used by provinces/ territories across Canada is the funding mechanism. Almost always, the funding mechanism contributes to the direction and motivation elements of the management control system. Each province/territory has developed a funding mechanism tailored to meet its individual needs. This has resulted in a wide variety of approaches being used. Nonetheless, all funding approaches share some common characteristics. Each,

- reflects the organizational structures found in the jurisdiction,
- provides incentives to ensure the effective and efficient use of financial resources by fundees, and
- respects fiscal realities in the jurisdiction.

Although jurisdictions differ in the means by which they choose to implement their funding approach, similarities in the objectives and mechanisms of each permits approaches with similar characteristics to be grouped together for discussion purposes. Doing so supports a broader discussion of the impediments and challenges associated with specific approaches, without dwelling on the attributes of mechanisms used by individual jurisdictions. The taxonomy for classifying Canadian funding approaches released by the Canadian Institute for Health Information (CIHI) in 2001 (McKillop, Pink and Johnson 2001) is used for this purpose. For information purposes only, a table summarizing the primary funding approaches used to allocate operating funds in the fiscal year 2000-01 is provided in Appendix A.

Canadian jurisdictions employ funding approaches that are a combination of a decision that is made with respect to the *scope* of the funding flow, and a decision that is made with respect to the *method* used to determine the relative share of the funding flow. Each of these characteristics has a profound influence on the receiving organization's prospects for implementing change.

Challenges and Opportunities Related to Funding Scope

The scope of the funding approach is determined by the mandate of the health organization being funded. The three funding scopes used in Canada are described in Table 1.

Because scope is matched to organizational delivery structures, and because almost all jurisdictions in Canada have moved to a system of supporting health organizations with multi-sector responsibilities, funding approaches with a comprehensive scope are the most prevalent in Canada.[2] Attention is therefore given to this approach.

From a management control perspective, comprehensive funding approaches offer a number of advantages.

- Comprehensive funding approaches support a total system view, allowing strategies that reflect the interactions between different sectors of the health system to be embraced.

Table 1
Scope of the Funding Approach

Scope	Description
Comprehensive	Comprehensive funding approaches flow money to health service organizations with multi-sector responsibilities (some combination of long-term care, acute care, mental health, community care, etc.). These organizations typically have considerable freedom with respect to how they choose to distribute funds to each sector.
Institutional	Institutional funding approaches flow money directly to specific acute care hospitals (or groups of acute care hospitals operating as a single corporate body) or other single-purpose health organizations (such as a long-term care facility.) Although these organizations may have some discretion over how money will be spent within their organization, they are usually not permitted to re-direct money to other organizations.
Service specific	Service-specific funding approaches flow money to organizations to support the provision of a specific service, or the care of a specific disease. The organization usually has a mandate to provide this care to residents drawn from a wide geographic area. Funds cannot be used for purposes other than the service or disease for which the funds were specifically granted.

Source*:* McKillop, Pink and Johnson 2001, p. 16.

- Comprehensive funding approaches transfer responsibility for decisions related to the "how and where" of care delivery from the province/territory to the health organization receiving the funding.

- Comprehensive funding approaches are theoretically devoid of the influence of functional silos, thus facilitating a more open approach to change, and one in which it should be possible to realize the re-investment of savings in one sector in another sector.

- The shared strategic goals of the sectors managed by the health organization should result in a shared sense of purpose, which is an important element of an effective management control system (Glouberman and Mintzberg 2001).

Health organizations funded using comprehensive approaches adapt more easily to change than those funded using institutional or service-specific approaches. This is because the heavy reliance on results-based controls, and the wider service mandate implicit in the use of a comprehensive approach, allows these organizations to more easily reallocate resources between activities.

Looking Forward

Management control problems related to lack of direction emerge when governments fail to ensure that health organizations have a clear understanding of the strategic goals and missions the government has in mind. This can manifest itself in health organizations pursuing initiatives that are not in the best interests of the jurisdiction as a whole.

An example might be a smaller health organization deciding to offer a specialized surgical service on a province-wide basis. From a motivational perspective, this action is perfectly rational. The financial rules allow the health organization to be reimbursed when providing services to residents domiciled outside their region. The health organization expects this transfer to be in excess of the direct cost of providing the service and will use the excess to cross-subsidize other activities of the health organization. Equally attractive is that when offering the service to residents domiciled inside its region, the organization contributes to its own mandate by providing comprehensive care for its citizens.

From a provincial/territorial perspective, however, this is a sub-optimal use of resources. Economies of efficiency and clinical effectiveness will be diminished as more and more health organizations choose to offer services that would otherwise be concentrated in a few centres of excellence.

One solution is to implement action controls that require approval by the health ministry/department before such a service can be implemented. Another is to be more explicit in the direction given with respect to the mandate of the health organization. Best of all, however, is to carefully consider the unwanted behaviours that will be encouraged when originally developing a funding method. It is argued that this is a step to which too little attention is paid. In this case, a decision to include a component that ensures equity when one health organization provides services to residents belonging to another health organization is being exploited. A small change in the design of the financial rule would overcome this problem.[3]

A challenge that resonates through funding approaches of all scopes is that few health organizations have accounting systems sufficiently developed to permit a detailed understanding to be gained of how resources are consumed and costs are incurred.[4] This limits the stewardship and monitoring activities of the funding agency, and the decision-making capabilities of the health organization.

If we are to foster change and make informed financial decisions about the impact of change, additional investment in the functionality and capacity of the financial information systems used in our health system is imperative. This is particularly true in times of perceived or real crisis (Ezzamel and Bourne 1990). Efforts have been made in the past few years to broaden our financial systems capacity beyond acute care. These efforts are welcomed and must be reinforced by health ministries/departments as they stand to realize benefits equal to those of the direct users of the systems. This is because better information leads to better decisions.

Challenges and Opportunities Related to Funding Methods

Although features of the funding scope have an influence over prospects for implementing change within health organizations, the funding method in use often has a more pervasive influence.

Funding methods describe the process used to determine the actual dollars to be flowed to a health service organization. Seven types of funding methods are used in Canada, with jurisdictions often using at least two different methods – one for apportioning operating funds and one for apportioning capital funds.

The eight methods are presented in Table 2. For each funding method, an assessment of the relative ability of a health organization receiving funds via this method to innovate or adapt to change is provided. An assessment of the relative stability of the funding method on a year-over-year basis is also given.

The freedom of health organizations to implement change is inversely proportional to the tightness of the action, result, and cultural controls implicit in the funding process. Funding methods that tie apportionment to characteristics of the population being served (be these demographic or case-mix characteristics) provide the greatest opportunity to not impede change initiatives. The lack of tightness in the funding process allows the funded organization to explore the impact of reallocating funds between programs (such as by investing savings realized in an orthopaedic program into renal dialysis), or between expense objects (such as by introducing rethermalization equipment and reducing in-house kitchen staff).

This freedom is considerably constrained when methods such as line-by-line funding are used. This is because funding decisions in these cases are largely a function of what has been spent before, and line-by-line review implies a strong action control orientation. Even when zero-based budget methods are introduced (requiring a critical examination of the rationale for each expense line item), the desire of actors to protect their relative share of the funding apportionment makes it difficult to identify savings in one line item that could be reinvested into another line item (Williams, Newton and Morgan 1985).

A number of funding methods (including population-based and case mix-based) have the potential to provide relatively stable funding allocations over time. When allocations do change, it is in direct response to changes in the underlying characteristics of the population served. As such, the response is a predictable and expected change in funding, and one that is consistent with the established delivery modalities of the organization receiving funds. Thus, although not explicitly designed as multi-year funding methods, these approaches have the potential to support longer range planning horizons by health delivery organizations (Duckett 1995).

This is in contrast to methods that involve multipliers (global and line-by-line) or the policy-based and ministerial discretion methods. In these cases, year-over-year stability in the funding allocation is not predictable. This forces organizations to adopt planning horizons that are equal to or less than the annual budgeting process. Such methods are not conducive to promoting long-term change strategies. Instead, what emerges are a series of reactionary measures, implemented quickly, to respond to funding realities without the opportunity to explore longer term implications.

Table 2
Types of Funding Methods

Method	Description	Usually relies most upon	Relative ability of fundee to respond to changes	Relative potential for year-to-year stability of funding
Population-based	Use demographics or other characteristics of the population (such as age, gender, socio-economic status, etc.) to determine the relative propensity of different population groups to seek health services.	Results controls	High	High
Facility-based	Use characteristics of the organization providing care (such as size of organization, type of organization, geographic isolation, occupancy rate) to estimate the cost of operating a health service organization.	Results controls	High	High
Case mix-based	Use a profile of cases and/or service volumes previously provided (such as number of knee replacements, number of dialysis procedures) to estimate the cost to sustain a specified profile of cases and/or service volumes in the future.	Results controls	High	High
Global	A factor is applied to a previous spending figure (or to a forecast spending figure) to derive a predicted spending level for an upcoming period.	Results controls	High	Medium
Line-by-line	Factors are applied on a line-by-line basis to previous cost experiences (or to forecasted costs) to derive a proposed funding level for each line item (such as housekeeping, inpatient nursing, etc.) for an upcoming period.	Action controls	Low	Medium
Policy-based	Funding is directed to address specific policy initiatives of the Department or Ministry of Health. These policy initiatives affect the operation of multiple organizations within the jurisdiction. (For example, funding designed to reduce waiting list time for a specific procedure.)	Results controls	Low	Low
Project-based	Funds are flowed to a single health service organization in response to evaluating a proposal from that organization for one-time funding, often for a major expenditure.	Action controls	Low	Low
Ministerial discretion	Ministerial discretion methods are those where the decision on the specific dollar amount to flow to health service organizations is made by the Minister of Health.	Action controls	Medium	Low

Source*:* McKillop, Pink and Johnson 2001, p. 2 (adapted).

Looking Forward

Two important points must be stressed that have a significant impact on the ability of almost all funding methods to flow funds at a rate that fully reflects the need identified by the funding method. These points are particularly relevant for the funding methods that should offer the best advantages in terms of flexibility to respond to change, and year-over-year stability in funding flow (i.e., population and case-based methods.)

The first is that in all jurisdictions in Canada, funding methods are used to apportion a relative share of a funding envelope. The funding methods are *not* used to flow funds equal to the need the funding method actually identifies. For example, a case-based method may identify that a health organization with a current year budget of $150 million has a projected service profile that will have an expected cost of $200 million to service next year. The cases involved represent 1% of the case mix in the jurisdiction. A health spending envelope of $1 billion is approved by the government. The health organization is allocated its proportionate share (1%) of the envelope, or $100 million. This is $100 million less than the expected need, and $50 million less than the organization received the previous year.[5] The health organization will find itself extremely constrained, and will struggle in its ability to meet its service mandate. This is despite the fact that the funding method was designed to be objective, should have provided considerable freedom for the organization to respond to change, and should have provided a relatively stable (or at least predictable) flow of funds over time.

Thus the financial rules used to operationalize otherwise quite rational and fair funding methods can themselves represent an impediment to change. Even if it is possible to develop management control systems that provide appropriate direction; motivate behaviours that are consistent with the strategy established; and that equip organizations with the skills and knowledge needed to make effective decisions, the effort expended to develop the management control system is moot if the very same system apportions resources that are insufficient to realize the strategy. In the absence of a viable management control system, dysfunctional behaviours emerge as organizations attempt to cope as best they can with the resources they have available (Merchant 1990).

The second important point is that we have limited experience in Canada with respect to the level and intensity of health interventions that are appropriate. Many of our funding methods are based on the premise that past levels and intensities of health interventions are indicative of actual need. To the extent that this assumption is flawed, many funding methods perpetuate the inequities of past practices in future funding decisions.

A few ideas related to financial practices deserve further attention to help overcome these challenges. These ideas are listed below.

1. If jurisdictions wish to use funding methods that rely on the propensity for Canadians to seek health care as an input measure, then we must encourage research to determine the relationship between the propensity to seek care and objective clinical evidence of the population's need for care. This information is critical to the viability of the financial funding mechanism.

2. In jurisdictions where funding models are able to objectively determine aggregate dollar requirements, a threshold limit should be set for the gap that is allowed to exist between the identified need and the size of the funding envelope. Governments must recognize that when this gap grows beyond the threshold, the management control systems used by health organizations will break down and dysfunctional behaviours will emerge.

3. Predictability and equity in funding should be favoured over year-to-year stability in funding. We have little history in Canada with using multi-year funding, other than for capital projects.[6] Notwithstanding this point, there are credible reasons to avoid funding flows that vary wildly year-over-year, most notable of which is that it is almost impossible for health organizations to shed or acquire fixed costs over such a short time horizon (leading again to dysfunctional behaviours emerging and a collapse of the management control system.) An idea worthy of exploration is to enhance funding mechanisms to distinguish between the funding of capacity and the funding of day-to-day activity. Capacity could be funded using a longer term rolling horizon (such as 3 or 5 years), while activity would continue to be funded on a one-year horizon. Such an approach removes the dysfunctional motivational challenges triggered by constantly adapting to funding increases or decreases by making changes in operations at the margin.

4. The financial practices associated with existing funding mechanisms fail to recognize that investment is often required to realize savings. These investments may be in new technologies (such as digital imaging), new organizational structures (such as mergers), or new practices (such as care in the home). The existing practice is to require health organizations to identify surplus funds within existing operating funding to make these investments. Unable to do so, health organizations pressure governments into establishing special funds to which they can submit claims for adjudication. Payment is often at some reduced rate for each dollar spent. As management control theory would confirm, health organizations are motivated to maximize their share of the special fund by being generous in their interpretation of expenses that qualify. To better align the objectives of the funder and health organizations, it is suggested that in lieu of the current approach, governments establish innovation funds against which health organizations can *borrow* to invest in initiatives expected to generate savings in later years. As savings are realized, repayment to the innovation fund by one organization replenishes the balance for others.

The Budgeting Process as a Catalyst for Change

In most corporate entities, responsibility for management of the revenue stream is owned by the same senior management team holding responsibility for management of the expense stream. This does not reflect how health delivery is organized in Canada. The revenue stream is determined by funding agencies that are separate from the health organizations tasked with delivering services.

The separation of the management of the revenue and expense cycles causes jurisdictions to include a variety of other management control elements in their management control system. Key among these elements are prospective and retrospective monitoring practices.

Prospective monitoring practices involve evaluating plans for expected future events. The preparation of business plans by health organizations, which are submitted to government for approval prior to funding decisions being made, are an example of a prospective monitoring practice and represent an action control. Budgets (a plan stated in monetary terms [Anthony and Young 1995, p. 442]) are a required element of operating plans in all jurisdictions in Canada.

Retrospective monitoring practices involve evaluating past performance, either in absolute terms ("expenditures exceeded revenues by 5%"), relative terms ("expenses by a health service organization were higher than those for another health service organization of similar size and scope"), or evaluative terms ("expenditures were 15% higher than the benchmark").

Jurisdictions in Canada focus much more effort on prospective monitoring activities than on retrospective monitoring functions. The latter is limited in many provinces/territories to the requirement that audited financial statements be submitted. There is, however, a growing interest in the role that performance monitoring activities could play in promoting and rewarding the effective and efficient delivery of health services as evidenced by publicly available performance information emerging in a number of settings (see for example CIHI 2001*c*; Helyar et al. 1998). As the ability to calculate these measures mature, they hold the promise of contributing in a valuable way to a results-based component of the management control system.

Challenges and Opportunities Presented by the Timing of Budget Submissions

The management control systems in all jurisdictions include components to support prospective monitoring. The most common component is the required preparation and submission of a budget. To promote fiscal accountability, almost all jurisdictions in Canada now also require health organizations to develop balanced budget estimates. This forces health organizations to carefully explore a wider variety of options as they seek to pursue their strategic goals. Table 3 outlines differences between selected jurisdictions with respect to the rules related to the timing of the budget submission.

Two distinct strategies are observed with respect to the timing of the budget process. In some jurisdictions, budgets describing estimated expenditures for the upcoming planning period are

Table 3
Timing of Budget Submission by Province/Territory
(for the Fiscal Year 2000-01)

Province	Budget required?	Must be submitted by	Budgeted deficit allowed?
Alberta	Yes	8 weeks after funding announcement	Yes[1]
British Columbia	Yes	June 30 following fiscal year end	No[2]
Manitoba	Yes	June 1, 2000, for the upcoming fiscal year	N/A[3]
New Brunswick	Yes	Mid-January for the upcoming fiscal year	No[4]
Newfoundland and Labrador	Yes	October 16 for the upcoming year	Yes[5]
Nova Scotia	Yes	Usually due in February for the upcoming fiscal year and 10th of each month for updates	No[6]
Ontario	Yes	Date varies annually – usually in February for the upcoming fiscal year	No[7]
Prince Edward Island	Yes	January/February for the upcoming fiscal year	No[8]
Quebec	Yes	3 weeks after being advised of the amount of the annual budget	No[9]
Saskatchewan	Yes	May 15, 2000, for fiscal year 2000-01	Yes[10]
Yukon	Yes	September 30 for the upcoming fiscal year	No[11]

1. Specific conditions apply for deficit to be accepted.
2. The Ministry works with health service organizations anticipating a shortfall.
3. In Manitoba, requests for additional funding are made with the budget submission.
4. The government of New Brunswick has issued a directive that Regional Hospital Corporations will operate within approved budgets. Transitional funding to cover working capital shortfalls will be available to Regional Hospital Corporations as required pending upcoming government decisions concerning system structure and governance.
5. In Newfoundland and Labrador, an action plan is being developed in an attempt to control deficits.
6. No planned deficit legislation exists in Nova Scotia. A planned deficit must be supported with a plan to eliminate within a specified period of time.
7. Ontario's policy is to not fund deficits, although some health service organizations have received special funding for this purpose because of financial pressures. Extended financial difficulty may trigger an operational review by the Ministry.
8. In Prince Edward Island, Regional Health Authorities are expected to submit a balanced budget.
9. When a deficit is projected, the Quebec Ministry of Health and Social Services requires submission of a fiscal balance plan to correct the deficit.
10. Saskatchewan Health is not committed to funding deficits. If a deficit budget is submitted, a plan for how this will be managed in the current year and eliminated in future years is required.
11. The Contribution Agreement in Yukon Territories requires the health service organization to operate within budget. Operating surpluses may be used to fund deficits from prior years or in future years.

Source*:* McKillop, Pink and Johnson 2001, p. 61.

submitted prior to the government making a decision about the size of the funding envelope. The other strategy is for a government to announce funding decisions, and then request health organizations to prepare a budget outlining how funds will be spent. Each approach offers advantages, as well as presenting some distinctive shortcomings as summarized in Table 4.

Table 4
Advantages and Challenges Presented by Financial Rules Related to the Timing of Budget Submissions

Budget submitted ***after*** funding is announced	Budget submitted ***before*** funding is announced
Advantages	**Advantages**
✓ Knowing the actual dollars available facilitates the planning decisions that must be made by health organizations to adjust service and activity levels to match available funding.	✓ Budget plans have a strong correlation with expected activity levels because they are the result of a detailed planning activity that is usually a required element of the management control system within each health organization.
✓ The effort required to prepare comprehensive budgets is rewarded as these budgets can contribute in a valuable way to the organization's management control system.	✓ The budgets provide the government with valuable insights into the strategic directions being pursued by the health organizations it supports.
✓ In many jurisdictions, announcing funding decisions before receiving budget plans causes the government to implement objective funding approaches using population-based or case-based methods. This is because the government is unable to use spending estimates to inform its decisions regarding apportionment.	✓ It is easy to identify the gap between the spending activity planned for in health organization budgets and the size of the funding envelope the government knows is available.
Challenges	**Challenges**
✕ The government does not have the opportunity to inform itself of the magnitude of the gap between the amount of funding being made available and the perceived funding need of health organizations.	✕ In situations where the government is unable to provide funding at a level equal to the aggregate value of budgets submitted (which is very common), the budgets prepared by health organizations become useless components of their management control systems. This is because the original budgets include revenues that will not be received, which will have implications for service volumes and potentially even the range of services the health organization is able to offer. The original budgeting process must be repeated using the announced funding. When this does not happen, the planning and control functions in the health organization are compromised.
✕ Increased usage of service-specific funding approaches is required in situations where the government wishes to ensure that specific strategic initiatives are pursued by the funded organizations. (This is because the government will not be aware of strategic initiatives being pursued by health organizations until after the funding announcement has been made.)	

From the perspective of encouraging effective management control, apportioning funds prior to asking health organizations to prepare a budget is the most attractive approach. This is because this sequence ensures that organizations evaluate their strategic plans in the context of the fiscal reality with which they are faced.

In all health organizations, this requires difficult decisions to be made. But importantly, once the strategic direction has been established, and decisions are made with respect to how this direction will be achieved, the organization is left with an operating plan and a budget that provides a realistic blueprint for achieving the strategy. Thus the budgeting activity (which is almost always highly participatory in health settings) is legitimized and ownership for the decisions made is held throughout the organization. A budget with the characteristics of ownership, validity, and achievability is able to assume an important role in the design of an effective management control system.

Looking Forward

Sadly, the benefits presented by this approach are often overshadowed by two limitations in the way in which the budget process is implemented. These limitations are:

1. Funding announcements are often made either after the beginning of the fiscal year or too close to the beginning of the fiscal year for the health organization to adopt any meaningful strategy to react to the fiscal realities. In both cases, costs are being incurred before learning that program changes must be implemented.

2. Health organizations have a difficult time reconciling funding allocations with the service mandates they have set for themselves. This can manifest itself in a belief that it is impossible to reduce services to match fiscal realities of the funding allocation. At the other end of the scale, there is the possibility that the funding allocation may provide support at a level in excess of that which is actually required. Unless the management control system is designed in a manner that causes this information to become known to the funder, the information will remain private to the health organizations.

These limitations represent an impediment to implementing change that would not exist were the planning process to be refined.

For budgets to act as a catalyst for change, funding announcements must be made sufficiently ahead of the beginning of the fiscal period to allow health organizations to adapt to the financial reality they now know they face. One way to help lessen this impact is to move to the system advocated earlier of funding capacity on a multi-year rolling time horizon. This would align financial plans for capacity requirements with a planning horizon that presents realistic opportunities to adapt by shedding or acquiring these costs. Equally attractive, from a management control and political standpoint, is that governments would be able to make decisions regarding capacity using financial information that is not distorted by utilization rates.[7]

Alternative Revenue Sources as Catalysts for Change

Given the fiscal reality that the funding provided by governments is rarely deemed adequate to meet all the strategic goals of health organizations, it is attractive for health organizations to consider how these funds can be supplemented with alternative revenue sources.

Many health organizations have the freedom to seek alternate revenue sources for non-medically related services. For example, acute care hospitals often generate revenues through charges for preferred accommodations and the use of parking facilities, as well as revenues from public cafeteria operations. Long-term care facilities commonly assess residents a share of costs related to the provision of housing and food, and home care services may ask recipients to share in the cost of this service to the extent they are economically able to do so. In addition, most health care organizations also have formalized arrangements with a charitable foundation they have established under their corporate umbrella or work with in close partnership.

The reality, however, is that with the exception of the significant contributions to fund investments in buildings and equipment made through foundation partnerships, these revenues represent a relatively modest proportion of overall operating revenues. For example, in 1998, community and small hospitals in Ontario generated only 12% of their total revenue stream from sources other than the Ministry of Health and Long Term Care. Teaching hospitals were found to have a greater capacity to generate funds from alternate sources at 18% of total revenues, while non-acute hospitals demonstrated the greatest capacity at 21.5% (University of Toronto 1998).

While it is attractive for health organizations to pursue alternative revenue sources, organizations differ greatly in their ability to access these revenue streams. A number of reasons explain these differences.

1. There may be an inability or unwillingness on the part of potential customers to pay for services. For example, more and more companies are removing coverage for semi-private and private hospital accommodation from their benefit plans. Hospitals have noted a corresponding decrease in their ability to raise revenue through this source. But when hospitals are able to retain 100% of the revenues they raise through this source, they will usually seek ways to ensure this revenue stream is optimized, often by dedicating a bed management specialist tasked with ensuring that no request for preferred accommodation goes unmet because of inefficiencies in the bed allocation process.

2. Market forces create differences in supply and demand for revenue producing activities like parking lot operations. While a health organization in a major urban setting may command fees of $20 per day and attract 500 vehicles, health organizations in other settings may find the supply of free neighbourhood parking negates their ability to raise any funds through parking tolls.

3. The health organization may not have excess management capacity to oversee revenue generating activities.

Table 5
Treatment of Realized Surplus by Province/Territory

Province/Territory	Can surplus be retained by hospital organization?	Restrictions on use of surplus
Alberta	Yes	None – province recommends using for capital equipment
British Columbia	Yes	None – province recommends using for capital equipment, except surpluses from specially funded services
Manitoba	Yes	A maximum of 2% of budget may be kept and used at their discretion
New Brunswick	Yes	Yes – a portion of surplus in transferable programs may be kept by Regional Hospital Corporations; government retains surplus in non-transferable programs
Newfoundland and Labrador	NA	In recent years, surpluses have not existed
Nova Scotia	Yes	Yes – all surpluses are reviewed by Department and an action plan is taken accordingly
Ontario	Yes	None – province recommends using for capital equipment
Prince Edward Island	No	
Quebec	Yes	Approval of Health and Social Services Board is required before facility is permitted to use its surplus
Saskatchewan	Yes	None
Yukon	Yes	None

Source*:* McKillop, Pink and Johnson 2001, p. 64.

4. The accounting information system used may be limited in its ability to provide accurate and timely information needed to manage revenue generating activities.

The way in which the management control system treats realized surpluses also has an influence on a health organization's incentive to find opportunities for savings. Some jurisdictions permit unrestricted access to surpluses, others limit this access to a certain degree, and yet others reclaim surpluses (see Table 5).

These actions need to be considered in the context of the behaviours jurisdictions wish to promote. There is a certain logic behind a jurisdiction reclaiming surpluses. First, a surplus indicates a potential flaw in the planning process. Had the funding and planning process operated more effectively, funds in excess of those needed for operations would not have been advanced. As such, it is arguably fair that these, now visible, excess funds be returned to the provincial/territorial treasury so that they can be redistributed to other health organizations.

If, however, the consequence of demonstrating good stewardship as evidenced by a realized surplus is that the surplus will be reclaimed by the funding agency, it is not surprising to discover that surpluses rarely emerge. This is in keeping with management control theory, which suggests

that actors have a natural desire to take actions that are in the best interests of their own organizations, even though these actions may not be aligned with the strategic direction of the system as a whole.

It is expected that actors anticipating a surplus would engage in actions to eliminate the surplus by directing the "surplus" funds to provide additional services within their organization, or to offset costs of a future period. The net effect is to mask the true cost of providing services to the sponsoring jurisdiction.

To the extent that the capacity to generate excess funds comes not from efficiency gains realized within the funding envelope but, instead, comes from ancillary operations or other revenue-generating activities of the health organization, a different problem emerges. It is one of perceived inequity.

Organizations with greater capacity to generate funds (e.g., a health organization operating in a large metropolitan setting) benefit from having a larger proportion of total revenues from non-government sources. If all health organizations have received base funding using an approach that in itself is equitable, then the differences in the ability to raise additional revenues creates an advantage for health organizations so fortunate.

In response to this point, health organizations with more limited revenue generating capacity have argued that, in a system based on equity, it is only fair that health organizations able to generate revenues from non-government sources above a certain threshold should be required to share these excess revenues (possibly on some type of a sliding scale) with other health organizations. Resolution of this point is difficult in the context of the design of an effective management control system. While the arguments in favour of equity are persuasive, the controls literature suggests that attempts to "tax" the revenue generating capabilities of actors will reduce their incentive to find avenues to maximize these revenues. Jurisdictions that choose to reclaim all preferred revenue premiums see this lived out when they learn that their preferred accommodation occupancy rate is much less than in jurisdictions where this management control element is not in place.

Summary

This paper has addressed the question of how organizational financial rules affect change in the context of the organizations tasked with managing the largest component of financial resources dedicated to health care. It has been shown that financial rules are an integral component of comprehensive management control systems, and that when well designed, these systems enable, encourage and promote good management practices. In doing so, these systems act as catalysts for change, providing motivation and incentives that cause actors within the health system to take actions that ensure goals consistent with desired strategies are achieved.

When barriers to change are encountered, these signal a weakness in the design of the management control system – a weakness that, by definition, implies the management control system will encourage behaviours that are inconsistent with the desired strategy.

Specific attention was given to three areas of interest:

- the approaches used to allocate financial resources;
- timing issues related to the budget planning process used by health organizations; and
- the capacity of health organizations to access alternative revenue sources.

It was shown that the timing of government funding announcements has a profound affect on the ability of organizations to develop budgets and plans able to contribute to effective management control systems. Insufficient lead time in funding announcements forces health organizations to make adjustments in service levels and activities without the benefit of careful thought and analysis. The inability of health organizations to easily shed or acquire capacity lies at the root of this problem.

It is unknown whether organizations with multi-year budgets behave differently from those with single-period budgets as multi-year funding is not used by any jurisdiction in Canada for primary operating funds. Likewise, we currently have little understanding of the impact on health organizations of having significant revenues generated from non-government sources. Very few organizations fit this profile in Canada.

Notwithstanding these points, there are issues related to financial practices to which attention can be turned with a view of ensuring that organizational financial rules do not impede change. These issues include the following.

1. If we are to foster change and make informed financial decisions about the impact of change, additional investment in the functionality and capacity of the financial information systems used in our health system is imperative. Without good financial data we cannot make good financial decisions.

2. The use of evidence-based funding methods (such as those that are driven by population characteristics, case-mix data, etc.) must be encouraged. These methods hold the greatest promise for promoting predictability and equity in

funding, particularly when used by health organizations with multi-sector responsibilities. Funding methods that have the risk of perpetuating past or emerging inequities (such as line-by-line or multiplier methods) should be discouraged.

3. It may be possible to promote stability in funding by encouraging the use of multi-year funding horizons for costs related to system capacity, while retaining single-year funding horizons for activity costs. Further research and an open discussion of options are required.

4. A planned response must be developed by governments to address situations when there is a gap between the resource needs identified by evidence-based funding methods and the size of a jurisdiction's funding envelope. When the gap is large, simply sharing the resource shortfall among the players compromises the efficacy of everyone's management control system.

5. While health organizations should be encouraged to demonstrate their capacity to generate funds from non-government sources, significant differences in their relative ability to tap these sources will create situations of real or perceived inequity. Before proceeding with determining expectations in this area, the impact of various options should be explored empirically.

6. Limited working capital resources constrains the ability of many health organizations to invest in projects that will yield efficiency gains. This limits a health organization's propensity to initiate change. To overcome this problem, an innovation fund should be established. Health organizations could borrow to implement efficiency initiatives, and repay the fund using the savings generated.

7. To help health organizations develop management control systems that ensure the goals and objectives of funders are realized, the continued development of performance measures is required.

And probably most importantly, when introducing new elements to a management control system (such as new financial rules or practices), it is imperative to give careful attention to the unintended behaviours these elements may promote. This is to ensure the system encourages the judicious and appropriate use of funds for the provision of health services and the realization of the strategic goals that have been set.

Appendix A

Primary Operating Funding Approaches Used, by Jurisdiction (in Effect for the Fiscal Year Ended March 2001)

Jurisdiction	Funding Scope	Funding Method
Alberta	Comprehensive	Population-based
British Columbia	Comprehensive	Line-by-line multiplier
Manitoba	Comprehensive	Ministerial discretion
New Brunswick	Comprehensive	Line-by-line and population-based
Newfoundland and Labrador	Comprehensive	Ministerial discretion
Nova Scotia	Comprehensive	Ministerial discretion
Ontario	Institutional	Global
Prince Edward Island	Comprehensive	Ministerial discretion
Quebec	Comprehensive	Global
Saskatchewan	Comprehensive	Population-based
Yukon	Institutional	Ministerial + global

Source: McKillop, Pink and Johnson 2001, p. 46.

Notes

1. In this respect, the position advocated in this paper differs from the view of control as being a component of feedback (or past performance) advanced by Anthony and Young (1995).

2. Service-specific funding is used in many jurisdictions to support the activities of agencies such as cancer care organizations that have mandates that exist in parallel with the multi-sector health organizations.

3. For example, establish the transfer price equal to the variable cost of providing the service. Fund the capacity costs of providing the province-wide service only to those health organizations the government wishes to see providing this service. (Alternatively, a service-specific funding approach could be used.)

4. Many jurisdictions are to be recognized for the significant efforts they have made to develop MIS compliant reporting systems (after CIHI 2001*b*), however, to a large extent these systems remain unable to provide valuable information at the service recipient level. In addition, only a few jurisdictions have explored developing information systems able to gather data on episodes of care that extend to include interactions with physicians, pharmacy systems and the broader health sector.

5. Numbers have been chosen to facilitate visualization of the concept, not to reflect typical magnitude.

6. The use of multi-year operating funding was not identified in any province/territory in the McKillop, Pink and Johnson (2001) study.

7. Using existing financial approaches, if an MRI cost $1M/year to own, and was placed in a community where 500,000 images were made per year, this MRI would be deemed to cost twice as much to operate per image ($2.00) as the same machine in a community where 1,000,000 images were made ($1.00 per image). Because adjustments have not been made for capacity, it is not actually known whether the per image cost differs between communities. And even assuming that it might only cost $1.00 per image in the first community, it may be politically and medically appropriate to “subsidize” the presence of an MRI in the community in the amount of $500,000. (All numbers simplified for purposes of illustration.)

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