

# **Canadian Doctors for Medicare Position on Activity-based funding in Canadian Hospitals and other Surgical Facilities**

## **1. Introduction**

In recent months there has been advocacy by some in Canada, including the leadership of the Canadian Medical Association, to shift away from hospital block grants and other budgeting mechanisms, and to instead fund hospitals through an “activity-based” or “patient-focused” method, linked to the number and type of patients seen. As Canadians consider the best mechanism for funding hospitals, it is useful to review how this type of “à la carte” or “fee-for-service” funding works in other nations, and what the positive and negative consequences of such a transition might be.

Hospital funding mechanisms should be consistent with the following four goals:

1. promote appropriate and rapid **access** to medically necessary hospital care
2. facilitate and ensure the highest **quality** of care possible
3. ensure **equity** of access as much as possible across the population
4. ensure that **costs** to our publicly funded health care system are not inflated by profit-making at the expense of the public good.

There appear to be inconsistencies in our collective understanding of what activity-based funding is, how it works, and how it doesn't. This position paper attempts to foster enlightened discussions amongst Canadians, informed by a common knowledge base. It describes the current design of Canadian hospital funding, briefly reviews activity-based funding in selected countries, and outlines the position of Canadian Doctors for Medicare (CDM) on activity-based funding.

## **2. What is activity-based funding?**

Widespread confusion exists around the jargon used to describe different ways of funding hospitals. **Activity-based funding (ABF)** is also known in the UK as **payment-by-results (PbR)**, as **patient-focused funding (PFF)** by the Canadian Medical Association, as **service-based funding** or **case-mix funding** by the Kirby Commission, as **prospective payment system (PPS)** in the US, and elsewhere as **payment-for-volume**, or **volume-based funding**. We use the relatively neutral term of activity-based funding, because the focus is not necessarily on the patient, but rather on the type and volume of service delivered.

Under ABF, the services that patients receive in hospitals for a particular illness are classified into clinically meaningful groups that use similar levels of hospital resources. These groups are known in the US as diagnosis-related groups (DRGs). DRGs are analogous to health-resource groups (HRGs) in the UK. Both DRGs and HRGs use complex algorithms to classify patients into groups that are homogeneous in their use of resources. Hospitals receive a fixed amount for treating patients diagnosed with a given illness to whom a specific bundle of grouped services is delivered (on average), regardless of the length of stay or type of care received. The money follows the patient to the facility that provides the service, with the amount paid to the hospital based on the specific “activity” or service bundle provided per patient. Thus, hospitals do not receive a budget from the government

based on what was spent last year, but instead receive money based on the numbers of patients seen with a given medical problem and DRG classification.

### **3. Pay-for-performance (P4P) is not Activity-based funding (ABF)**

Pay-for-performance (P4P) is *not* the same as Activity-based funding (ABF) but it is being confused with P4P by contributors to the debate.<sup>1, 2</sup> P4P is simply an incentive program that provides extra funding to hospitals that meet certain efficiency targets or to physicians whose patients achieve certain health outcomes. In other words, whereas P4P links money to specific *health outcomes or efficiency targets*, ABF links money to the *volume* of activity.

These two concepts — activity-based funding and pay-for-performance — should not be confused.

The following examples of P4P are provided to illustrate the point that P4P is about achieving outcomes and targets, not about activity or volume:

In 2003, the Centers for Medicare and Medicaid Services (CMS) launched the largest P4P pilot project in the US. The objective of the study was to determine whether P4P was associated with improved processes of care and outcomes or with unintended consequences for acute myocardial infarction.<sup>3</sup>

In the UK, P4P has had mixed results, and has led, in some cases, to manipulation of facility and physician performance data through “creative accounting” techniques such as gaming of clinical and non-clinical data, and fraudulent reimbursement claims.<sup>4</sup>

In Canada, the Emergency Department Decongestion Pay for Performance pilot project (in Vancouver) is an example of a P4P initiative that rewards four hospitals with financial incentives if they meet or exceed specific time targets for moving emergency department patients into hospital beds or back to the community.

### **4. Who owns Canadian hospitals and how are they currently funded?**

Canadian hospitals are mostly not-for-profit entities owned by community-based organizations, by religious orders, or rarely by universities or municipal/provincial governments. Except for some psychiatric hospitals, provincial and federal governments rarely own hospitals. Most hospitals, however, are funded by the provincial/territorial department of health.<sup>5</sup>

*Capital* projects (the bricks and mortar of hospitals) function on a project-based model for funding across Canada. By contract, hospital *operating* costs are funded through a variety of budgeting methods summarized below and outlined in Table 1 (adapted from Kirby, 2003). In some cases, hospitals rely on a primary funding method, supplemented through a number of secondary methods to apportion lesser amounts. Population-based, ministerial discretion, and global budget approaches are the most common primary funding methods.

1. **Line item:** involves negotiating amounts for specific line items in a budget. The sum of all line items equals the total hospital budget. Line item budgeting allows a ministry to link specific policy objectives with the amount of funding allocated to a

particular objective, and has the benefit of allowing for predictable budgets. The limitations of line item budgeting include inflexibility to move funds from one line to another thus reducing the link between activity and community need, a lack of efficiency because the focus is not on performance or volume, and the amount of effort required to scrutinize line-by-line budget detail.

2. **Ministerial discretion:** decisions are made by the provincial minister in response to specific requests. This method allows the greatest flexibility and has the fewest constraints, but it is also the most subjective, lacks transparency, and places funding at risk of being politicized by interest groups.
3. **Population-based:** uses demographic data to forecast demand for services. Demand for services based on patient characteristics is matched to average service costs, and a budget is derived. Individual hospitals or regional health authorities (RHAs) with different demographic characteristics are funded differently, but equally.
4. **Global budgets:** use the previous year as the cost-basis, and then for the upcoming year use a multiplier or add a lump sum amount. Global budgets are straightforward to calculate, and allow hospitals maximum discretion in the efficient use of funds. The downside of global budgets is that there is no direct link between budgets and services, inequities across budgetary categories may be perpetuated, and efficiency is not necessarily rewarded. Most significant is that there is a loss over time of true cost basis for services because hospitals rely on the original, and possibly inaccurate or outdated, cost calculations as the starting point for annual changes to the budget. This absence of data is important in any consideration of shifting to activity-based funding because in many cases, depending on the type of budgeting currently in place, there is no solid cost basis for deciding what a DRG should be “worth” either provincially or nationally.
5. **Policy-based:** funding is distributed to achieve certain policy objectives, such as minimum length of stay. This supported the implementation of health policy-based standards in hospitals, but also can be unpredictable if policies change from year to year, or from government to government.
6. **Facility-based:** uses hospital characteristics, such as size, level of care, rural vs urban, teaching vs non-teaching, or occupancy to determine budgets. This method accommodates certain features of hospitals, but doesn’t account for demography or disease patterns.
7. **Project-based:** distributes funds to various hospitals to implement government-initiated policy, typically for a one-time need.
8. **Service- or activity-based:** described in detail throughout this paper.

**Table 1. Methods of hospital funding, by province**

Province	Basis for Hospital funding	
	Primary funding	Secondary funding
British Columbia	line item	policy-based
Alberta	population-based	policy-based
Saskatchewan	population-based	none
Manitoba	ministerial discretion	none
Ontario	global budget	policy-based population-based service-based facility-based
Quebec	global budget	policy-based population-based
New Brunswick	line item	none
Nova Scotia	ministerial discretion	none
PEI	ministerial discretion	none
Newfoundland	ministerial discretion	none
Territories	unknown	unknown

**5. Why is activity-based funding now being considered in Canada?**

Some argue that ABF would provide an incentive to improve productivity, thereby decreasing waiting times and costs. The argument goes that if hospitals rely on high volumes of “activity” to get their funding, then they will perform more procedures and see more patients, thereby reducing waiting times.

This argument assumes, of course, that hospitals are not currently performing at their maximum volume (in other words, that there are both underutilized human resources and facility space), and that if volumes increase, there will be adequate funding available from governments to pay for those increased volumes. Theoretically, it is certainly true that if governments increase available funding and then give it to hospitals *per procedure* or *per patient treated*, waiting times could be reduced – as long as the money available is sufficient and there are clinicians and space available to treat those patients.

Promoters of ABF in Canada, however, often have a second component to their argument. They advocate for an increase in the number of private for-profit clinics and surgical centres, that would “compete” with hospitals for government activity-based funding, thus forcing hospitals to improve their productivity. The basis for this argument is not so much grounded in actual evidence, but more in a belief in the primacy of the market and the principle of competition. It also assumes that there are sufficient doctors, nurses, and other healthcare providers to staff both private for-profit clinics/surgical centres *and* public not-for-profit hospitals, and to service an increase in the volume of patients. It further assumes that private for-profit facilities will be able or willing to provide services at the same cost as public hospitals, while still managing to skim off a profit.

Thus, when analyzing a move towards ABF, one must ask whether it is only ABF that is being promoted, or ABF *plus* increased private for-profit clinics and surgical centres, and the impact of each of these changes needs to be considered.

## **6. Where is activity-based funding used, and what impact has it had on waiting times and costs?**

Most countries use a mix of various payment systems, similar to those outlined above. Activity-based funding, either alone or as part of a mixed funding strategy, is used to greater or lesser degrees in the US (where it was first developed and implemented) and in several European countries.

### ***6a. Activity-based funding in Western Europe and Australia***

In *France*, public hospitals are budgeted globally, with activity-based funding used mostly in private hospitals. French hospitals have been collecting case-mix information for 20 years, and are now considering a move toward more activity-based funding, but it is likely the overall organization of France's health care system that accounts for the lack of waits, not just the relatively small proportion of activity-based funding.

*Denmark* began to experiment in 1997 with activity-based funding in some counties. In 2000, the national government formally introduced a system combining global budgets, activity-based funding, and performance targets. The Danish model is a blended innovation in that it uses the DRG rates in determining global budgets, and then funds hospitals globally to 90% of the DRG rate, with the remaining 10% only allocated according to the actual activity performed. Hospitals that provide more volume than their negotiated target receive the extra funds, and there are plans to shift more to activity-based funding if efficiencies are realized. *Norway* has a similar blend of global budgets and activity-based funding.

*Australia* introduced activity-based funding in 1995 as part of a broader strategy to reduce waiting times.<sup>6</sup> This included centralized waiting lists, additional funding for complex procedures, performance bonuses for hospitals that met access targets (P4P), optimization of the OR schedule, electronic patient data, and more day surgeries. Yet, in 2008, Australia is still one of the OECD countries that continues to have wait-time problems for scheduled elective surgeries.

*Sweden* has also introduced some activity-based funding, but, again, this was part of a broader strategy that included a new national treatment guarantee, the 0-7-90-90 rule wherein initial contact with the health care system is instantaneous (0 delay), contact with a general practitioner takes no more than 7 days, contact with a consultant takes no more than 90 days, and treatment takes place no more than 90 days after that<sup>7</sup>. Together, these and other initiatives, have improved waiting times.

### ***6b. Activity-based funding and the English NHS experience: PbR mixed with For-Profit Delivery***

Because the discussions in Canada seem to focus on **English**-style ABF, known in the NHS as PbR, a more thorough analysis of this experiment is presented.

The English health care system has implemented a number of strategies to reduce waiting times, including financial rewards for hospital trusts and primary care trusts that meet targets, dedicated elective surgery and diagnostic testing centres, significant cash infusions, commissioning of publicly funded services in privately owned facilities, and, in 2003/4, activity-based funding (known in the UK as payment-by-results or PbR).

Under the PbR system, care is grouped into HRGs (the equivalent of DRGs), and public hospitals compete for patients (and, therefore, funding) with private, investor-owned Independent Sector Treatment Centres (ISTCs) that contract to the English National Health Service (NHS). This inclusion of private facilities is not always part of the design in other European countries experimenting with activity-based funding. Unlike in other countries where activity-based funding has been experimented with only on a controlled and small scale, PbR is expected to be implemented extensively, eventually covering all outpatients and ambulatory health care.

### **Evidence on cost in England**

On the cost front, services delivered by investor-owned facilities but financed by England's NHS through PbR (the UK term for ABF) have cost more than the equivalent services performed in public facilities. In 2006, the Department of Health reported that procedures purchased by ISTCs cost, on average, 11.2% more than the public hospital equivalent. A British House of Commons committee concluded in 2006 that the ISTCs had not improved capacity and did not offer more efficiency or better "value for money" than the public sector<sup>8</sup>.

Similarly, "HRG drift" occurred in the form of up-coding diagnoses, resulting in higher payments to hospitals and higher overall costs to the system. In one study of PbR in England, the proportion of lobar, atypical, or viral pneumonia episodes for treatment of patients under 70 years with complicating conditions rose significantly for some trusts using the new PbR system, but not for others still using block grant contracts.<sup>9</sup> A similar pattern of up-coding diagnoses was found in the US when DRGs were first introduced.<sup>10</sup>

Primary care trusts and hospital trusts have seen their administrative costs increase dramatically because of PbR. The main cost driver has been the increased information-collecting demands of moving to an activity-based payment system.<sup>11</sup> Other administrative costs include higher data collection costs, higher monitoring costs to track activity, and higher enforcement costs.<sup>12</sup>

The PbR system was temporarily withdrawn in 2005 because the Department of Health miscalculated the amount to be paid per HRG. The tariffs for specialist children's hospitals, for example, were undercalculated, resulting in the need for a cash injection.<sup>13</sup> Part of the problem with calculating accurate tariffs has been that, "since fixed tariffs are based on national average costs, 50% of acute providers will have costs below and 50% will have costs above the tariff."<sup>14</sup> The risk is that hospitals with costs that exceed the tariffs for certain procedures may stop doing those procedures rather than improve efficiency. Establishing accurate DRGs/HRGs is difficult for some services, such as mental health care and critical care.

### **Evidence on access to care in England**

Numbers of short-stay hospital admissions in England escalated disproportionately within foundation trusts implementing PbR as compared to other trusts, presumably because hospital payment is based on volume. In one study, the numbers of short-stay inpatients admitted through accident and emergency (the ER) increased by between 16% and 17% in some hospitals, 24% in others, and by a whopping 54% in one hospital.<sup>15</sup>

The move towards more investor-owned private for-profit delivery is highly controversial, in part because the private sector was enticed to participate through preferential treatment in the form of income guarantees. By developing a “rigged market”, a playing field was created that disadvantaged the public sector and advantaged the investor-owned private sector. This has led to the closure of some public facilities, thereby limiting access to care and increasing waiting times, and to high profits for the private sector. ISTCs were meant to provide extra capacity and staff, “but 23,000 NHS beds in England have closed and many NHS clinical staff have transferred to the private sector since their introduction.”<sup>16</sup>

### **Evidence on quality of care in England**

The British Medical Association (BMA) voted to oppose PbR, in part because it “creates profitable and unprofitable patients and services. The result is overdiagnosis and overtreatment of some patients, and neglect and undertreatment of others. Particularly vulnerable are people who have chronic care or physical and/or learning disabilities.”<sup>17</sup> The BMA unanimously passed a motion saying that “more emphasis should be placed on collaboration as opposed to competition...”<sup>18</sup>

### **Evidence on benefits of English-style PbR**

Payment-by-results is no panacea for controlling costs or for improving access. In the English experience, there have been some benefits such as enhanced, albeit costly, data collections, and a perhaps more sensible distribution of resources to providers as an incentive to increase capacity and to reduce waiting lists.<sup>19</sup> However, a comprehensive analysis of what is working, and what is not, has yet to be done.

### ***6c. Activity-based funding and the U.S experience: Prospective Payment System (PPS)***

In the **United States**, Medicare, enacted in 1965, is the largest publicly-financed component of the healthcare complex, providing coverage for all people age 65 years and older. It was Medicare’s transition in 1983 to a Prospective Payment System (PPS, the US version of ABF) that triggered the economic restructuring of the U.S. health care system. This model was first introduced to reimburse hospitals for inpatient expenses only, and then, nearly 20 years later, it was expanded in 2000 to include some ambulatory payments.

Under this activity-based system Medicare prospectively sets the payment amount (DRG rates) that providers who service the Medicare population will receive for most covered products and services. These DRGs are based on complicated formulae and clinical information including principal diagnosis, complications, comorbidities, surgical procedures, age, gender, and discharge disposition. Providers agree to accept those pre-determined rates

as payment in full for their Medicare patients.<sup>20</sup> Diagnoses and procedures are documented by the attending physician, and coded by hospital personnel using ICD-9/10 nomenclature.<sup>21</sup>

The result of the PPS has been reasonable cost containment in Medicare (as compared to the privately funded sector), but the savings have been derived through aggressive regulation, not because of competition.<sup>22</sup> The discovery of rampant Medicare fraud and abuse in the 1990s was dealt with by a federal government crackdown. Legislation that increased financing for investigation and prosecution<sup>23</sup>, coupled with laws delivering harsh civil penalties<sup>24</sup>, and particularly visible prosecutions of large health care providers<sup>25</sup>, appear to have had the desired effect of containing the most obvious kinds of fraud and abuse uncovered in the publicly financed portion of Medicare. In response to the antifraud initiative, “DRG creep”—the phenomenon in which more and more admissions were classified as more complex and costly diagnoses—suddenly stopped in 1997 (U.S. CBO 1999).<sup>26</sup>

**Table 2. Evidence on reduction in waiting times, reduction in costs, benefits, and unintended consequences associated with activity-based funding (ABF), by Country**

	<b>Extent to which ABF is used</b>	<b>Effect on waiting times</b>	<b>Effect on costs</b>	<b>Other positive effects</b>	<b>Other negative effects</b>
<b>France</b>	Minor, mostly in private hospitals	Overall organization of health care system accounts for few waits, not ABF alone	No evidence that ABF, alone, has reduced costs	Undocumented	Undocumented
<b>Denmark</b>	Blended with global budgets, as of 2000	Little effect on reducing waits for elective surgeries, effect on other waits unknown	No evidence that ABF, alone, has reduced costs	Undocumented	Undocumented
<b>Australia</b>	Nationally (in 1995) as part of a broader strategy to reduce waits	Little effect on reducing waits for scheduled elective surgeries, effect on other waits unknown	No evidence that ABF, alone, has reduced costs	Undocumented	Undocumented
<b>Sweden/Norway</b>	Nationally as part of a broader strategy to reduce waits	Effect of ABF, per se, unknown	No evidence that ABF, alone, has reduced costs	Undocumented	Undocumented
<b>England (PbR)</b>	Incrementally beginning in 2003	Some reduction in wait times, but the effect of PbR, per se, on wait times is unknown because it was simultaneously introduced with increased system capacity through more public funding	Costs have escalated, but no data show whether this is due to PbR, to increased use of private facilities introduced concurrently with PbR, or to other causes	Enhanced data collection	HRG drift; increasing administrative costs for data collection, for monitoring, and for enforcement; inaccurate DRG rates initially due to lack of cost basis data.
<b>USA (PPS)</b>	In single-payer publicly funded Medicare population since 1983, expanded to about 80% of all hospitals	Wait times unchanged by PPS	Generally unknown. Cost escalation may have been limited with PPS in heavily regulated publicly funded system. Regulation, not competition, is controlling costs.	None	DRG creep, inaccurate DRG rates initially due to lack of cost basis data, rampant fraud, increased administrative costs, premature hospital discharge, increased legislation to counteract negative externalities



The belief that activity-based funding, alone, will reduce waiting times is not borne out by the experience in Western European health care systems, or in Australia. In all Western European systems and in Australia where surgical waiting times have decreased, the use of some activity-based funding is only one part of a broader, multi-faceted strategy that includes everything from improved surgical capacity resulting from more ambulatory surgeries (Germany), to high availability of equipment, physicians, and acute care beds (Switzerland), to new funding for surgical activity (Denmark, France), to private delivery coupled with public financing (France). It appears that it is the synergy of various financing and delivery strategies that reduce waiting times and/or contribute to cost control in some European countries, not necessarily activity-based funding, *per se*. We do not know, therefore, what, if anything, activity-based funding contributes to reducing waiting times or to controlling cost in most countries where it has been studied.

### **7. What lessons can Canada learn from other countries?**

There is little, if any, evidence that activity-based funding, by itself, is a cure for waiting times, and under some conditions it may lead to increased healthcare costs. If not implemented carefully, ABF can lead to hospital closures in rural communities and provide a disincentive for hospitals to provide low-volume but needed care. If linked to increased investor-owned for-profit delivery then it can also threaten coordination of care, increase the unit cost of healthcare, and threaten care quality.

If Canada is to explore activity-based hospital funding, we should do so with our eyes wide open to the risks and benefits. We are poised to learn from each of the countries currently experimenting with activity-based funding and to create a uniquely Canadian version of activity-based funding that, hopefully, avoids the pitfalls. If, therefore, adequate funding and human resources are available and governments wish to experiment with ABF to increase the volumes of some services, then there are a few lessons we can learn from the experience of other nations.

#### ***Lesson 1: If governments decide to study ABF, then restrict the implementation of ABF to a carefully controlled, discrete experiment in the financing of care.***

We don't know whether activity-based funding, alone, is the solution to reducing waiting times or to controlling costs. Nowhere in the world has this been shown to be the case. In all countries where activity-based funding has been implemented, it has been part of a broader strategy aimed at increasing efficiency and quality, and at reducing costs. Little evaluation research, therefore, has been done to measure the efficacy of this intervention alone. If Canada wishes to contribute to the international evidence on this front, we should choose to carefully introduce activity-based funding, on a small scale, in a carefully controlled, methodologically rigorous experiment, to measure its efficacy on reducing waiting times and on controlling costs. Introduction of activity-based funding should not be complicated by simultaneously allowing public financing of private investor-owned for-profit facilities, if the goal is to test whether activity-based funding, *per se*, is an effective intervention for reducing waiting times and costs. Equally important to a well-designed study is the imperative that Lessons 2-6 be undertaken *prior* to commencing the experiment.

***Lesson 2: Start with services that are under-provided.***

If an intent of ABF is to reduce surgical waitlists, then begin the experiment with under-provided services where waiting times are judged to be excessive.

***Lesson 3: Take the time to get accurate cost data for the DRGs/HRGs.***

The Kirby Commission concluded that “after years of global budgets in a number of provinces, no one knows how much anything costs anymore and that, as a result, it is difficult to know even approximately what the public is getting for its spending on hospitals.”<sup>27</sup> The OECD (2004), citing Kirby (2003) similarly noted that with these funding methods, decisions are not usually based on detailed cost information, since funding is either decided politically or based on historical trends, neither of which encourages efficiency. Establishing the true unit cost of health services is complicated, and detailed data needed to correctly allocate direct and indirect costs to the units of services are not always available, especially where global budgets have been used for a long period of time. Without accurate cost data, any move toward the use of DRGs is sure to fail because hospital reimbursement depends on the coding assigned to each patient. The rush to implement activity-based funding too fast, and too extensively, will result in chronic “tinkering” with the costing in an effort to get it right. This has been one of the ongoing defects in England’s adoption of PbR.

***Lesson 4: Account for more than just “activity” in the DRG algorithms.***

The DRGs/HRGs must account for “quality” endpoints, such as post-operative outcomes, complications, and relapses. Confounding factors that affect both cost and outcome measures, such as acuity and diagnostic co-morbidities, must also be considered. Simply paying a flat fee based on primary diagnosis and treatment will result in incentives for some facilities to offer care to the healthiest and least complicated patients (i.e. cherry picking), while rejecting the sickest, most complicated, and most expensive patients. If private, investor-owned for-profit surgical facilities, with only outpatient capacity, were allowed to compete for patients, they undoubtedly would win the volume selection game, and public hospitals would have no choice but to accept the more complicated patients, thereby reducing their volume and undermining the financing of the public sector in favour of the private, investor-owned sector. An alternative to accounting for more than just “activity” in the DRGs/HRGs would be to only allow ABF for procedures that are largely independent of confounding factors and of patient characteristics, and that are unlikely to have unavoidable complications. This alternative would limit the kinds of procedures that could be funded through ABF to include, for example, surgeries that don’t involve general anesthetic.

***Lesson 5: Develop a strategy to deal with the unique costs of teaching, rural, small town, and other types of non-typical hospitals.***

Under activity-based funding, hospitals and other surgical facilities would compete with each other for patients. However, although activity-based funding may work well in urban community hospitals, other unique facilities, such as teaching hospitals, high acuity centres caring for patients with complex diagnoses, and rural or remote hospitals may need to be treated differently as it is not possible to create a market for many of the services they provide. “Extra or alternative funding arrangements, therefore, may have to be negotiated

with these unique hospitals that do not have significant patient volumes but where it is deemed appropriate that such facilities should continue to provide certain services.”<sup>28</sup>

***Lesson 6: Develop robust policies to monitor coding practices that protect against DRG creep/HRG drift and other forms of fraud and abuse.***

Evaluation of activity-based funding has shown a propensity toward what amounts to “gaming”, fraud, and abuse through deliberate manipulation of the system for financial gain. Gaming techniques include discharging and readmitting the same patient to attract additional payment, creatively up-coding complexity of care by billing for a more expensive DRG (DRG “creep”) to gain greater reimbursement, over-admitting patients from ERs to increase hospital revenue, undertreating of some patients (e.g. chronically ill whose treatment is more labour and time-intensive) and overtreating of others (those with less complex “bread and butter” conditions that are quick and easy to treat), increasing hospital service charges *prior* to the development of DRGs so as to elevate the baseline costs from which the DRG rates are to be derived, and shortening lengths of stay for some DRGs to the point of being dangerous for unstable patients (e.g. mandatory discharge of all maternity patients and newborns in less than 24 hours).

***Lesson 7: Unless governments intend to increase the total amount of available funding, limits will need to be set on the total amount of activity allowed.***

Without the “rate limiting step” of global budgets, there is a risk that activity will be increased at such a pace that it exceeds the capacity of governments to pay. There must be a mechanism to prioritize and limit activity to control expenditure; thus far, this has been the global budget, but without global budgets other mechanisms will need to be developed, or Canadians will need to prepare for, and consent to, increases in healthcare costs.

## **8. Conclusion**

There is little, if any, evidence that activity-based funding alone contributes to improved access to health care by shortening waiting times. At best, data from other countries are unclear because ABF has largely been part of a potpourri of interventions aimed at improving health. We don’t yet know, for example, whether ABF improves quality, reduces (or at least stabilizes) overall health system costs, or ensures equitable care — and equal access to that care — across the population. We can, however, support an experiment to study ABF, but only under the strict conditions outlined in this paper, to learn whether this approach to hospital funding is any more successful than other funding mechanism currently in use. If ABF proves, over the course of a sustained period of time, to improve access to high quality, equitable care, for less money than other financing systems, then we would be inclined to support wider implementation.

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<sup>1</sup> Collier, R. *Activity-based hospital funding: boon or boondoggle?* CMAJ, May 20, 2008:178 (11)

<sup>2</sup> Bains, C. *B.C. considers radical shift in hospital funding, based on patients treated*, The Canadian Press, February 15, 2008.

<sup>3</sup> Glickman, S. et al. *Pay for Performance, Quality of Care, and Outcomes in Acute Myocardial Infarction*, JAMA, 297:2373-2380, 2007.

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<sup>4</sup> Pitches, D., Burls, A., and Fry-Smith, A. *Snakes, ladders, and spin: How to make a silk purse from a sow's ear – a comprehensive review of strategies to optimize data for corrupt managers and incompetent clinicians*, *BMJ*, 327;1436-1439, 2003

<sup>5</sup> Standing Senate Committee on Social Affairs, Science, and Technology ("Kirby Commission Report"), *The Health of Canadians – The Federal Role, Volume 6: Recommendations for Reform*, 2002, p. 25,

<sup>6</sup> BCMA Council on Health Economics and Policy, *Waiting too long: Reducing and managing wait times in BC*, 2006

<sup>7</sup> Glenngård, A. et al. *HiTs Summary Sweden*, European Observatory on Health Systems and Policies, 2005.

<sup>8</sup> House of Commons Health Committee, *Independent Sector Treatment Centres*, Fourth Report of Session 2005-06, retrieved May 25, 2006 from

<http://www.publications.parliament.uk/pa/cm200506/cmselect/cmhealth/934/934i.pdf>

<sup>9</sup> Rogers, R., Willians, S., Jarman, B., and Aylin, P., *HRG drift and payment by results*, *BMJ*, 330 (7491)

<sup>10</sup> Assaf, A., et al. *Possible Influence of the Prospective Payment System on the Assignment of Discharge Diagnoses for Coronary Heart Disease*, *NEJM*, Vol 329:931-935, 1993.

<sup>11</sup> Street, A. *Demand management and administrative costs of payment by results*,

07.11.2006, retrieved May 25, 2006 from [http://www.innovations-report.com/html/reports/economy\\_finances/report-73523.html](http://www.innovations-report.com/html/reports/economy_finances/report-73523.html)

<sup>12</sup> *ibid.* (note 11, Street)

<sup>13</sup> Eaton, L. *Ministers relaunch their payments by results scheme*, *BMJ* 2006;333:170

<sup>14</sup> Dixon, J. *Payment by results-new financial flows in the NHS*, *BMJ* 2004;328:969-970.

<sup>15</sup> *op. cit.* (note 9, Rogers et al)

<sup>16</sup> Pollock, A. M. *Independent sector treatment centres: evidence so far*, *BMJ*, 336:421-424, 2008

<sup>17</sup> Ferriman, A. *BMA condemns competition and payment by results in the NHS*, *BMJ*, 331:7507:9

<sup>18</sup> *ibid.* (note 17, Ferriman)

<sup>19</sup> *op. cit.* (note 9, Rogers et al)

<sup>20</sup> Mayes, R., and Berenson, R. *Medicare prospective payment and the shaping of US health care*, The Johns Hopkins University Press, 2006

<sup>21</sup> American Hospital Directory, <http://www.ahd.com/pps.html>, retrieved June 19, 2008

<sup>22</sup> White, J. *Markets and Medical Care: The United States, 1993-2005*, The Milbank Quarterly, Volume 85, Number 3, 2007

<sup>23</sup> such as BBA-97 and the Kassebaum-Kennedy insurance reform law in 1996

<sup>24</sup> Federal False Claims Act, (31 U.S.C. § 3729–3733, also called the "Lincoln Law")

<sup>25</sup> University of Pennsylvania system and the Columbia/HCA for-profit hospital chain

<sup>26</sup> *op. cit.* (note 22, White)

<sup>27</sup> *op. cit.* (note 5, Standing Senate Committee, p. 31)