

Health Economics Analysis:
Fee for Service vs. Capitation

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Introduction

The Ontario Ministry of Health and Long-Term Care (MOHLTC) and the Ontario Medical Association (OMA) are currently conducting an evaluation of Primary Care Reform (PCR) pilots in Ontario. PCR involves changing the delivery of primary health care services from the traditional model Ontarians, and indeed Canadians, have come to know. The goals of PCR¹ are:

- Improved access
- Improved quality and continuity of care
- Increased patient and provider satisfaction
- Increased cost-effectiveness of health care services

Some of the changes resulting from PCR include: 24 hour access to primary health care; more preventive interventions; better access to care from nurse practitioners; information technology integration into practice; and patients must enroll with only one Primary Care Network (PCN).²

Another major difference with PCR is the way physicians are remunerated for their services. The traditional mode of physician remuneration is Fee for Service (FFS). In Ontario's PCR pilots the method of remuneration is Capitation.^{3,i}

Fee for Service (FFS) Vs. Capitation

Fee for Service sees physicians being compensated based on an established rate for each individual service provided to a given patient.⁴ This is the most common method of physician remuneration, but many have accused this system of giving physicians incentive to provide minimum care to an individual patient in order to see more patients in the same amount of time – with this system, the more patients a physician sees in a given time period the more she will be compensated.

Capitation on the other hand is a population-based method of funding services. Compensation is calculated, in advance, based on a specific, defined population, on a per patient basis, regardless of health status.⁵ The per patient amount is adjusted for

ⁱ It should be noted that one of the PCR pilot sites used a “Reformed Fee for Service” (RFFS) remuneration method. The others all used capitation.

age, sex, and urban versus rural residence. Capitation removes the incentive to treat more patients in a pre-defined amount of time, but it does create a new incentive. It encourages physicians to enroll patients in their rosters who are healthy and don't require care. It also is a riskier form of remuneration for physicians since it is possible that all patients on a physician's roster could be relatively unhealthy and thus require a substantial amount of care. This situation would see the physician compensated an equal amount as compared to one where the same patients (in terms of demographics) are in a healthy state and therefore require little care. The former physician would obviously end up with fewer profits at the end of the day.

Other Forms of Physician Remuneration

Apart from FFS and Capitation, there are two other major categories of physician remuneration. These include:

1. Case Payment
2. Salary

Case Payment is somewhat similar in concept to Capitation, except that it pays based on a case or episode of care for a given patient (rather than per patient). Salary remuneration is simply paying based on a time period. All four categories of remuneration types are depicted below in Figure 1.

Fee for Service	Capitation	Case Payment	Salary
service-based	population-based	case-based	time-based

Figure 1. The four major categories of physician remuneration.

Theoretical Effects of Capitation

Three areas considering the theoretical effects of Capitation remuneration relative to FFS are discussed here. They are patient access to services, patient health outcomes and overall health care costs. For each case, a table is provided comparing

the advantages and disadvantages for the two remuneration types. It should be noted that there is some inherent overlap in the three areas considered.

Patient access to services

In Table I below, the advantages listed under the Capitation side do not include those that are related to PCNs. For instance, “24 hour access to care” is not listed because it isn’t a result of Capitation remuneration, but rather the entire PCN system. From a comprehensive viewpoint, Capitation has more advantages for patient access to services than the current FFS approach. The weighting of the benefits of Capitation however are greater than those of FFS, and the one disadvantage for Capitation is considered a drawback mostly at the beginning when the patient is joining a roster. As a result Capitation should provide improved access to services for the patients of Ontario.

Table I. Advantages and disadvantages for patient access to services

Capitation		Fee for Service	
Advantages	Disadvantages	Advantages	Disadvantages
<ul style="list-style-type: none"> • Explicitly establishes relationship between the physician and the patient • Encourages physicians to establish long-term relationships with patients, thus requiring better knowledge of their patients needs • Encourages physicians to hire other primary care practitioners at their practice 	<ul style="list-style-type: none"> • Patients must receive their primary care with one physician or physician group 	<ul style="list-style-type: none"> • Able to provide continuity of benefits to mobile population • Provides for patient freedom since it allows the patient to choose the physician 	

Adapted from: “Capitation and Compensation,” BCMA⁶ & Birch et al, 1994.⁷

Patient health outcomes

There is one glaring disadvantage to patient health outcomes, or quality of care, for each of Capitation and FFS based remuneration. For Capitation it is physicians refusing to treat patients with complex diagnoses that would result in “expensive” treatment for the physician as compared to the average.⁸ In the case of FFS the concern

lies in physicians over treating patients because they are trying to give as much treatment as possible in a given period of time in order to bill for the most services. For the latter case regulation is very difficult. For the former however regulation is not so difficult, at least in the context of Canadian health care. In fact, the example cited where physicians refused to treat complex patients was in the US. In Canada primary care physicians must treat all patients.

Table II. Advantages and disadvantages for patient health outcomes

Capitation		Fee for Service	
Advantages	Disadvantages	Advantages	Disadvantages
<ul style="list-style-type: none"> • Treatment unlikely to be influenced by relative profitability of a given procedure • Encourages physician use of preventive and educational methods 	<ul style="list-style-type: none"> • May give incentive for physicians to roster a large number of patients • May result in physicians avoiding patients most in need of care, or refusing care for complex (and expensive) conditions 	<ul style="list-style-type: none"> • Provides incentives for completeness of care • Gives physicians clinical autonomy 	<ul style="list-style-type: none"> • Gives physicians a financial incentive to “over treat”, or treat with invasive procedures • May result in physician processing patients too quickly

Adapted from: “Capitation and Compensation,” BCMA⁹ & Birch et al, 1994.¹⁰

Overall health care costs

It is a complicated task to predict which of Capitation or FFS would be best for overall health care costs in Canada. For this issue to be properly addressed and evaluated, a full assessment and review of the PCR pilots must first be made. And even with that evaluation it can be argued that a true representation of costs will only be available after Capitation based remuneration has been in practice for some time.

One thing related to health care costs is clear however. Capitation offers a much higher degree of predictability for health care funding in the province. By simply knowing the age, sex and residence type (rural versus urban) of all Ontario residents the government can accurately predict its spending on primary health care in advance of services being rendered. This is obviously a huge benefit.

Table III. Advantages and disadvantages for patient overall health care costs

Capitation		Fee for Service	
Advantages	Disadvantages	Advantages	Disadvantages
<ul style="list-style-type: none"> • Less incentive for physician to provide unnecessary services • Expenditures can be tailored to size and characteristics of patient population • Provides fiscal predictability to funding source, and relative income predictability to the physician 	<ul style="list-style-type: none"> • Difficult to fully predict <i>actual</i> costs of health care services in advance 	<ul style="list-style-type: none"> • Adjusts for complexity and allows compensation to be linked to output 	<ul style="list-style-type: none"> • Can be expensive to administer • Administration is inflexible and very complex

Adapted from: "Capitation and Compensation," BCMA¹¹¹² & Birch et al, 1994.

Overall, Capitation based funding arguably approaches a situation of allocative efficiency better than FFS funding does. This is true from the perspective of the patient, the physician, and the payer (government). Neither option however solves the problem of supply and demand in the health care market. Under FFS, physicians (in general) have incentive to supply more care than is demanded. In Capitation, the demand may be higher or lower than the supply depending on the situation.

Obstacles to Implementation

Since FFS has been the status quo since the emergence of public health care in Canada, the obstacles to implementing a Capitation based funding approach are many. They can conveniently be grouped into three categories:

1. Physician resistance
2. Administration of the program
3. Patient acceptance and perceptions

For the most part, physicians like the current method of FFS funding. This is also true of the position of the Ontario Medical Association.¹³ The OMA further claims that it recognizes the need for alternative payment methods, but does not recommend that

straight Capitation should be one of these. Its main recommendation is Reformed Fee for Service.¹⁴ Physician resistance can only truly be overcome with time. By taking an “evolutionary” approach as opposed to a “revolutionary” approach to the introduction of Capitation based funding physicians will be more accepting.¹⁵ The PCR pilot programs will hopefully continue to show positive results, which will also help the cause. The other option of introducing Capitation and removing physician resistance from the equation is to enforce Capitation from the government level. This of course would result in resistance of other types.

Capitation based funding is inherently less expensive than FFS. That is, until you consider the fact that shadow billing is still a likely requirement with Capitation in order to maintain a stream of rich data to monitor practice patterns. This indeed is the case for many physicians currently remunerated by Capitation methods in Ontario.¹⁶ Furthermore, the calculation of Capitation amounts can be a labour intensive task depending on the parameters involved.

Patient acceptance is likely to be a factor for a limited population and only at the start of implementation. The important piece here is to ensure patients are confident that services will be as good as or better than before. This can be argued as per the benefits listed in Tables I & II.

The Problem with Physician Choice

Allowing physicians to choose what form of remuneration they want to receive (i.e. FFS or Capitation in the context of this paper) can cause more problems than it solves. The OMA has established the position that physicians should have a say in the decision, but give little reason as to why.¹⁷ In fact, the major problem with giving physicians a choice is that they are likely to decide for personal reasons, in attempt to maximize their own profits and forego any opportunity costs. At the end of the day physicians need to make a buck, in addition to helping their patients lead healthier lives.

Remuneration method choice in general should have positive implications however. The government should be able to adapt the remuneration type based on a number of predefined factors. These factors would be related to the patient's, the physician's and the government's perspectives.

Future Possibilities

It is not difficult to conclude that there are deficiencies with the current system of physician remuneration. It is also not difficult to realize that capitation is not *the* answer, nor the only answer. Physicians want choice. The government wants better control of spending and funding allocation. Patients want better care, and better access to care. All three want to remove risk from the equation. How can all of these things be achieved? The answer probably lies in using a variety of remuneration types based on the type of physician, and the environment in which he works. It may also mean combining more than one method together (i.e. creating a hybrid, or blended method as proposed in Birch et al, 1994¹⁸) in order to provide for the best solution. And all of this must result in low costs and resource requirements for administering the program while maintaining a rich source of data to track practice patterns. This is not a trivial task.

Conclusion

The initial MOHLTC evaluation of the Ontario PCR pilots from March 2001 showed fairly promising interim results. Physicians in most of the networks reported a fairly high level of satisfaction with PCR. In fact, most were more satisfied than prior to joining the pilot programs.¹⁹ Patients also reported satisfaction with the program. They appreciated after hours access to care, access to a nurse practitioner reported overall satisfaction of at least seven on a ten-point scale.²⁰ However, a more recent survey suggests otherwise. The Coalition of Family Physicians released interim results of a survey of its members in February 2002. Of the 1200 doctors who responded thus far, 98% said they don't approve of the formation of PCNs.²¹ Dr. Kathryn Lockington, the OMA's chairwoman on general and family practice feels that the biggest problem is that physicians aren't ready for this large a change yet. "It's a major change, and they're [the physicians] are skeptical," she says.²² The general results point to the need for more options in primary care delivery beyond the current two: remaining independent or joining a Primary Care Network. Clearly, the government has its work cut out for it.

References

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¹⁶ "Alternative Payment Agreement," between the Minister of Health and Long-Term Care and the members of the Gynaecology/Oncology Physician Services of Cancer Care Ontario and the University Health Network – Princess Margaret Hospital. 1 January 2001.

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²⁰ *ibid*

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²² *ibid*