



COMMENTARY NO. 365

# How to Pay Family Doctors: Why "Pay per Patient" is Better Than Fee for Service

Primary care doctors today act more as patient managers within the health system — they diagnose, prescribe and refer, but deliver less direct services than in the past. This role fits better with a "per patient" method of compensation.

Åke Blomqvist and Colin Busby

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# ABOUT THE AUTHORS

#### ÅKE BLOMQVIST

is an Adjunct Research Professor at Carleton University and Health Policy Scholar at the C.D. Howe Institute.

#### COLIN BUSBY

is a Senior Policy Analyst at the C.D. Howe Institute.

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#### THE STUDY IN BRIEF

Physician compensation accounts for about one-fifth of all Canadian healthcare spending. But physicians' decisions, particularly those made by primary care doctors – such as referrals, use of facilities and prescriptions – are the conduit for the majority of the system's costs. The incentives physicians have to promote efficiency, therefore, affect the overall quality and value of healthcare services.

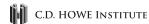
Primary care doctors manage the front lines of the healthcare system – their decisions are paramount for a patient's ability to get, and remain, in good health. They are currently paid predominantly for each service provided to a patient, under the traditional fee-for-service system. But technological change and the evolution of primary care are making this method of payment less appropriate for the efficient operation of the health system. Primary care doctors today act more as patient managers within the health system – they diagnose, then prescribe or refer – and deliver less direct services than in the past. This type of role fits better with a capitation, or per-patient, method of compensating physicians.

Under a capitation system physicians receive an up-front, lump sum of money based on the number of patients under their care, but independent of the number of services provided to each patient. This gives physicians incentives to sign up many patients and keep them as healthy as possible so that they do not need to be seen very often. Ontario has expanded the use of capitation remuneration plans for doctors such that roughly 17 percent of all income – for physicians who receive blended payments – comes from capitation, making it a unique example in the Canadian provinces.

We believe that a remuneration model for primary care doctors that emphasizes per-patient payments is the best way for health systems to pay its front-line doctors, although it is less applicable to specialists. The risks of this compensation model – for example, that primary care physicians will avoid selecting the sickest patients – can be reduced in a blended remuneration scheme that keeps a small portion of fee-for-service payments, and with appropriate regulatory oversight. Further, we believe that over time the capitation scheme could be extended so that primary care physicians would keep track of the costs of their referrals and prescribed treatments, to encourage the most appropriate and cost-effective methods of treatment and make better use of total health system resources.

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Policies governing payments to doctors, both those in primary care and specialist physicians, are critical in creating a cost-effective healthcare system. Although professional ethics might be the main guideline for most doctors' decisions, how they are paid also affects their behaviour and the quality and quantity of services they supply.

A major challenge for policymakers is to create payment systems that align incentives with the twin objectives of improving the quality of care and containing costs. In this *Commentary*, we review the incentive effects of different physician payment mechanisms and propose options to improve the quality and value for money in provincial healthcare systems.

Today, most doctors in Canada are paid via fee for service, but some provinces, particularly Ontario, are expanding the use of a per-patient payment system – commonly referred to as capitation – for family doctors. Although Ontario's experience in this regard has not been problem-free, our main conclusion is that other provinces should also make more use of capitation; in doing so, they could draw on the lessons Ontario has learned. We also recommend the development of extended capitation plans that link resultant health costs from referrals and prescriptions to family doctors' pay, indirectly helping control the cost of specialist and diagnostic services.

# BACKGROUND: HOW CANADIAN DOCTORS ARE PAID

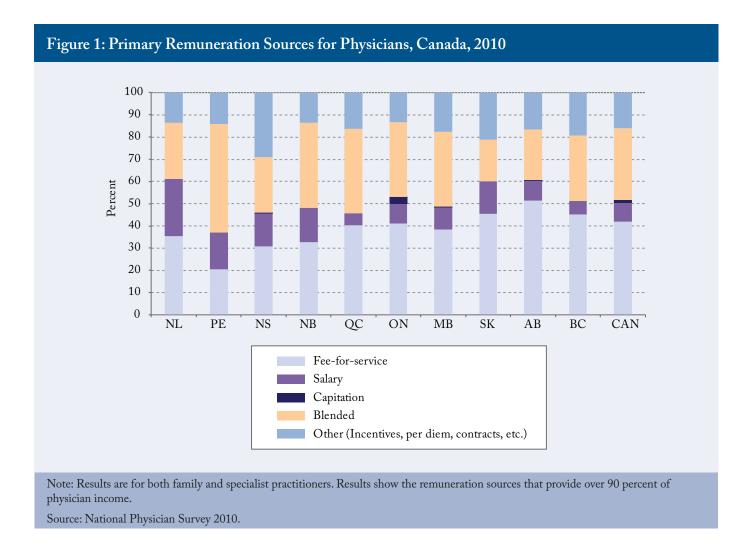
In Canada (and elsewhere), three different methods are used – either uniquely or, often, blended together – to pay for the services of doctors: salary or short-term contracts; fee for service; and capitation. Under salary and short-term contracts, doctors are paid a fixed amount per unit of time, regardless of how many patients they see or what services they supply for each one. With fee for service, they are paid a fixed fee for each service they perform from among those on an approved list. Under capitation, a doctor is paid a fixed amount per month for each patient who has registered with his or her practice, regardless of what services the patient has received during the month.

Fee for service is by far the most common payment method for doctors in Canada, roughly 40 percent of whom receive nearly all (more than 90 percent) of their income in this way (see Figure 1). Another 33 percent receive most of their income in the form of "blended" payments – that is, they

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In the early and mid-2000s, the Ontario government offered primary-care doctors the option of being paid at least partially by capitation, with annual lump-sum payments per patient ranging from \$50 to \$500 depending on their age and sex. The Auditor General of Ontario has been critical of problems in Ontario's new capitation system (see Ontario 2011).

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derive significant shares of their total income from more than one payment method – and feefor-service revenue makes up about 45 percent of that amount (see Figure 2). Hence, fee-for-service payments make up, by far, the largest share of

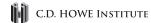
physician payments in Canada.

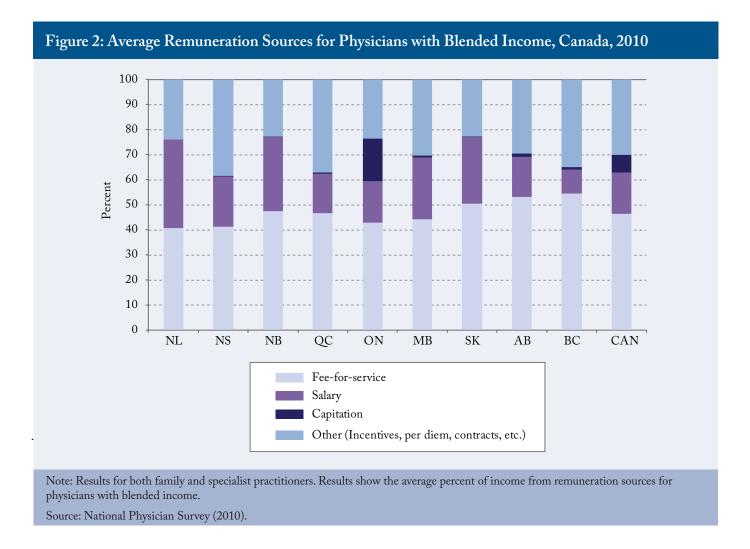
The second most important payment method is salary and short-term contracts. Around a quarter of Canadian doctors receive almost all of their income in the form of either a straight salary (9 percent) or short-term contracts (15 percent).<sup>2</sup>

Capitation, in contrast, is much less common, with only about 1 percent of all Canadian doctors receiving nearly all their income in this form. Moreover, capitation payments account for no more than 7 percent of the total in the blended payment category.

The composition of the blended income that 33 percent of doctors receive varies by province. While fee-for-service payments account for at least 40 percent of blended income in all provinces, contract and per diem rates are relied upon heavily

In the data, payments via short-term contracts and per diems are shown as a residual category of "others," which also includes certain types of performance payments related to targets for preventive services and so on. However, most payments in the residual category are under short-term contracts.





in Nova Scotia, Quebec, and British Columbia, with nearly 40 percent coming from these sources. Capitation, while present in most provinces, is most significant in Ontario, where it accounts for roughly 17 percent of income for physicians who receive blended payments.

#### PAYMENT MODELS AND INCENTIVES

Although the direct costs of physician services constitute no more than about one-fifth of aggregate healthcare costs, decisions by physicians indirectly affect other components of healthcare costs as well, including the cost of prescription

drugs and the use of hospital facilities. The reason the methods of paying physicians are so important a determinant of a healthcare system's costeffectiveness is that they can create very different incentives for the decisions doctors make.

When doctors are paid a fixed salary or under a short-term contract, their income does not depend on what services they supply or how many patients they take responsibility for, so they have little or no direct incentive to be productive by either of those two measures. This does not entirely rule out the use of straight salary as a compensation method, especially in settings where doctors are employed by the clinic or hospital in which they work and

where their performance can be monitored at least partially by managers. Salary can also be used as a component in blended payment systems,<sup>3</sup> but its lack of a direct incentive for doctors to be productive explains why a pure salary model is rarely used in healthcare systems where most physician services are supplied by primary care doctors and specialists who practise independently, as in Canada.

In contrast, when payment is via fee for service, doctors have an incentive to be productive in terms of the volume of services they produce, since their income will be higher the more services they bill for. Although high productivity is obviously desirable, the incentive to produce a large volume might raise aggregate costs, especially in healthcare systems where there are many doctors (Léger 2011) and where doctors are able to influence the quantity of services the average patient receives.<sup>4</sup>

Capitation, on the other hand, implies an incentive for doctors to take responsibility for many patients, but to supply only relatively few services to each one. If properly designed, a system with a large capitation element can help keep aggregate costs down. But there are also possible downsides: if a doctor signs up too many patients, some might not receive needed services, and patients who are likely to need a large volume of services might have difficulty finding a doctor who is willing to accept them. (We discuss these issues below; see Table 1 for a summary comparison of the pros and cons of the three main compensation methods).

Although fee for service continues to be the

main model for physician compensation in Canada, its disadvantages, especially in terms of contributing to rising service volumes and increasing healthcare costs, have caused many provinces to experiment with alternative compensation models (see Wranik and Durier-Copp 2010).<sup>5</sup> We believe these experiments should be continued. In particular, we believe that there is a strong case for more emphasis on capitation rather than on fee for service in the primary care sector, given the way that sector is evolving in Canada and elsewhere, and that regulatory methods and systems of mixed payment can overcome, at least partially, its potential disadvantages.

# FEE FOR SERVICE VERSUS CAPITATION IN PRIMARY CARE

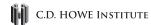
When medical technology was less advanced, general practitioners supplied most treatments and available drugs, and only a small minority of patients went to hospital or received treatment by specialists. At that time, the fee-for-service method of paying doctors was a simple and convenient one, and the distinction between primary and higher levels of care was less relevant than it is today.

Over time, however, as the bulk of activity in the health system has shifted away from acute care to the monitoring and treatment of chronic illnesses, the suitability of fee for service as the primary remuneration method has decreased. As medical technology has become more complex, a wider range of treatment methods and drugs is available,

<sup>3</sup> Doctors in teaching hospitals with academic duties are usually paid partly by salary.

<sup>4</sup> The ability of doctors to influence the amount of services their patients receive can also result in a very uneven geographical distribution of physicians when their fees are regulated. For example, if doctors like to practise in large cities, the pattern that emerges is likely to be one where there are many doctors per capita, and high per capita costs, in cities, but a shortage of doctors and low service utilization in small towns and rural areas.

<sup>5</sup> Also, many provinces have experimented with pay-for-performance models, which we do not cover in much detail.



	Remuneration Method				
	Fee for Service	Capitation	Salary		
Definition	<ul> <li>payment to a physician for each service provided</li> <li>fees normally negotiated between health ministry and doctors' associations</li> <li>fee schedules vary by province</li> </ul>	<ul> <li>payment to a physician, or groups of physicians, based upon the number of patients registered under their care</li> <li>upfront fixed payments vary by age and sex of patients under care and sometimes by care needs</li> <li>physician required to supply care as needed, for period of time, without additional payments</li> </ul>	<ul> <li>payment to a physician to work an agreed upon number of hours</li> <li>salaries may vary depending on physician experience and complexity of position</li> </ul>		
Incentive Effects	may cause services to be overprovided     once established, simple to administer and enforce     no incentive to consider overall health costs     encourages quick doctor visits and rapid care	<ul> <li>may cause services to be underprovided</li> <li>complex to establish and enforce</li> <li>incentives to keep cost per patient low</li> <li>encourages preventative care and good health maintenance</li> <li>encourages doctors to take on more patients</li> <li>encourages doctors to select the healthiest patients ("cream skimming")</li> </ul>	<ul> <li>decreases volume of services provided</li> <li>simple to administer and enforce</li> <li>encourages less time and effort with patients</li> <li>allows for predictable physician costs</li> <li>overtreatment is unlikely</li> <li>no incentive to consider overall health costs</li> </ul>		

and many doctors now are specialists who treat only specific diseases. One consequence of these changes is that the choice between primary and higher levels of care is relevant for more patients today than it was in the past, and the role of doctors who supply primary care has become quite different. It is this change in the role of primary care providers that has made fee for service an increasingly inappropriate method of paying for their services.

#### The Changing Role of Primary Care Providers

Primary care is usually defined as care provided by the doctors (or nurse practitioners) to whom people first turn when they are sick. Typically, of course, patients do not have the medical expertise to know what is wrong with them, so an important function of primary care providers is to diagnose a patient's problem. Even this role has become more complex and dependent on outside services over time: an increasing portion of healthcare costs today is attributable to diagnostic tests performed in independent laboratories and imaging facilities. Once a diagnosis has been made, primary care providers must then advise patients on further treatment – most importantly, whether they should see a specialist or go to hospital. In comparison with an earlier era, therefore, primary care providers today supply a much smaller proportion of the actual services that patients receive. Instead, their

role is more that of managers who oversee and advise patients as they undergo tests or treatment by other providers or take the drugs they have been prescribed. But the fee-for-service payment system does not mesh well with this advisory and management role.

Under a fee-for-service system, doctors are essentially paid for the procedures they perform in treating their patients or for the time they spend with them during consultations. But when the primary care doctor's role is mostly to decide what tests patients should undergo, interpret the results, prescribe drugs, and find the appropriate specialists to whom patients should be referred, most of the work they do does not involve specific procedures nor does it always require patients even to be present.

#### Capitation as an Alternative

Given the evolution of the role of primary care providers as healthcare managers, capitation, or a blended system with a large capitation component, is a better way to compensate them for their services, for several reasons.

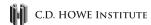
First, under capitation, a healthcare provider has an incentive not only to sign up many patients, but also to keep each one as healthy as possible so they do not have to be seen very often. Indirectly, therefore, capitation rewards primary care providers who supply various forms of preventive care and who are successful in persuading their patients to adopt healthier lifestyles and better practices to control their chronic conditions.

Second, a properly designed capitation system promotes more efficient production of primary care services by encouraging doctors and clinics to make use of ancillary personnel (such as nurse practitioners) and, more generally, to organize their practice as cost effectively as possible. For example, doctors with many diabetic patients might find they can manage a larger number by using some of the capitation revenue to pay a clinical pharmacist to monitor their patients' medication. Under pure fee for service, it would not be profitable to follow this strategy since doctors would be paid only if they had monitored the patients themselves. In general, capitation-based systems can be designed more efficiently to encourage team-based provision of primary care than fee-for-service models where team members have to be paid separately for the services they provide.

Third, the incentive for doctors to take responsibility for a large number of patients might make it at least somewhat easier for patients to find a practice that is willing to give them ready access to services that are covered under the capitation contract (including evening and weekend care).

In the long run, assuming an increase in the number of doctors creates a better balance between the supply of and demand for primary care, competition for patients in a capitation system might drive further improvements in productivity and reinforce physicians' sense of professional responsibility in ensuring a high quality of patient care. Since patients can switch doctor affiliation, doctors under capitation compete with each other by trying to acquire a reputation for keeping their patients healthy, providing them with high-quality care when needed, and having a good network of specialists to whom they can refer patients if necessary.6 The incentive it implies for each doctor to take responsibility for many patients, rather than producing a large volume of services, is its main advantage as a device for helping control healthcare

<sup>6</sup> The effectiveness of competition as a force for maintaining or improving the quality of care should not be exaggerated: many Canadians living in rural areas or small towns – and even some living in larger cities – have no real choice of healthcare provider, whether doctor or hospital.



costs and ensuring that more patients have access to a regular primary care provider.

No payment method is perfect, of course. As noted above, one potential problem with capitation from the point of view of patients is that elderly persons or those with a history of previous illness might have difficulty finding a doctor who is willing to take them on. However, this can be counteracted, to a degree, both by regulations that require doctors to accept all patients who want to sign up with them (up to a limit) and by paying larger capitation amounts for patients who are likely to need a large volume of services because of factors such as age or chronic conditions (Box 1). Another potential problem is that doctors paid by capitation might not have sufficient incentive to pay attention to the costs their patients incur as a result of tests or treatment by specialists to whom they are referred.<sup>7</sup>

But this problem, too, can be alleviated, at least to some extent, through an extended capitation system that takes referral costs into account, as we discuss in the next section. Finally, although proponents of capitation often note that competition among doctors to sign up patients can drive improvements in the quality of care, foreign experience with capitation suggests that competition in markets for primary care might not always be effective. And although improvements in the quality of care can be seen where there are geographic concentrations of primary practices, patients are generally reluctant to change doctors (Pike 2011), which underscores the important supporting role governments can play in informing patients and ensuring accountability, with public reporting of physicians' performance, to make capitation work as intended.

#### Box 1: Challenges with Capitation: Cream Skimming and Risk Adjustment

Capitation is an example of an up-front ("prospective") payment for medical services, meaning that the amount the provider receives is determined in advance of treatment, and hence independent of the actual quantity of services the patient receives. Indirectly, it is precisely this feature of capitation that gives providers an incentive to be productive, in the sense of taking responsibility for a larger number of patients, rather than simply producing a larger volume of services.

But the fact that payment is prospective also implies another type of incentive: to attract patients who are unlikely to need a large volume of services or, equivalently, to discourage enrolment of patients who are likely to be sickly and need a lot of services. This is the concept of "cream skimming," a problem that is not easy to deal with and that must be counteracted effectively for any system of prospective payment to be compatible with the equity objective that is fundamental to the way Canadians want their healthcare system to operate.

One way to avoid cream skimming is to allow doctors to switch individual patients back to fee for service if they turn out to need more services than expected. But this can be very costly because it eliminates the doctors' incentive to control the volume and cost of care of heavy users, while it enhances their net revenues thanks to the relatively few services they have to supply to the light users who remain on capitation. What is needed is a compromise that preserves most of the incentives for doctors to control costs for all patients, but limits the risk to which they are exposed if many of the patients who enrol with them turn out to be heavy users.

Of course, primary care doctors paid via fee for service have no direct incentive to take such costs into account, either. However, unlike doctors paid by capitation, they do lose some revenue when they refer patients to specialists, rather than trying to treat conditions on their own. For an extended discussion, see Blomqvist and Léger (2005).

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#### Box 1: Continued

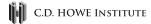
#### Risk-Adjusted Capitation

One method to accomplish this is to adjust the amount of capitation so that doctors are paid a larger monthly amount for patients who are likely to be heavy users.\* Ontario partially applies this principle, as the capitation amount is larger for older patients, for example. But adjustment according to criteria such as age and sex is unlikely to be enough. A more accurate and powerful predictor of a person's likely need for future care is his or her recent medical history or socio-economic determinants of health. Other things being equal, someone who was seriously ill and required a lot of care last year is also likely to need a relatively large amount of care this year. A capitation schedule can reflect this at least partially by, for example, paying larger amounts for patients who have been diagnosed with specific illnesses (such as diabetes), increasing their attractiveness to doctors.†

That said, evidence from the United States shows that risk-adjusted capitation payments are subject to cream skimming as well, as doctors simply try to choose patients, even sick ones, with the highest chance of successful treatment (Brown et al. 2011). After risk-adjustment payments were introduced in US Medicare Advantage Plans, individuals who faced higher-than-average health costs, conditional on their medical conditions, were much less likely to enrol in a capitation plan, which resulted in substantial overpayments to such plans. For this reason, a risk-adjusted capitation scheme also might need to be supplemented by regulations specifying that doctors cannot deny a patient the right to sign up unless their practice has reached some upper limit on the number of patients, and perhaps also by regulations that retain doctors' right to be reimbursed on the basis of fee for service in extreme cases.‡

Another option to limit the incentives for doctors to avoid taking on patients who require more care is to have a blended payment system that devotes a significant share of total remuneration in the form of fee for service, which would mute the negative incentives often encouraged under a pure capitation system.

- \* There is an extensive international literature on risk adjustment in health insurance plans; see, for example, Ellis (2008) and Van de Ven and Schut (2011).
- † One method that does not work well is to adjust the capitation amount paid for a given patient on the basis of the cost of the care that the patient has recently received. Such a payment scheme reduces doctors' incentive to control the cost of a patient's care, since they know that providing a large volume of costly care today will increase the capitation revenue they will receive for this patient tomorrow. The trick is to find observable factors that will predict the amount of care that the patient will need in the future, but that are not influenced by the decisions doctors make about the person's care today.
- ‡ Another issue that might arise when there are large differences in the amount of care that different patients need is adverse selection. This term refers to the fact that, when patients have a choice between different types of insurance coverage, those who know they are likely to need a large amount of care in the future are more likely to choose plans that are relatively generous. With respect to choosing a primary care provider, adverse selection could arise if patients may either sign up with a doctor who is paid via capitation or seek care from a provider who is paid via fee for service. If people who expect to need a large amount of care tend to choose fee-for-service providers, only those who expect to be light users will end up choosing providers paid by capitation. If such a tendency is present, it must be allowed for in fixing the amounts these providers are paid.



Despite these reservations, one of the more well-established findings in the health economics literature is that capitation, or a blended model with a significant capitation element, provides a better set of incentives for primary care providers than pure fee for service (see, for example, Christianson and Conrad 2011; and McGuire 2011). It is not surprising, therefore, that governments in Ontario and other provinces are moving toward greater use of this method of payment and beginning to address the associated policy design issues.

# Lessons from Ontario's Experience with Capitation

In a 2011 report, Ontario's Auditor General raised concerns about the effects of that province's use of capitation to pay a large share of the cost of primary care services (Ontario 2011). The Auditor General's criticisms of the capitation initiative were based on its relatively high cost and on data suggesting that it had not made much difference in patients' access to a regular family doctor or in the patterns of care they were receiving. Some of the Auditor General's arguments have themselves been criticized (see Kralj and Kantarevic 2012). More importantly, we believe that the problems he refers to exist partially because of the incomplete and somewhat tentative way in which Ontario has introduced capitation.

One feature of the current Ontario model is that, although participating doctors are paid capitation only for patients who formally sign up with their practice, such patients nevertheless retain the right to seek treatment from other primary care providers. Indeed, the Auditor General estimates that about half of all patients who are part of the Ontario

capitation system use non-emergency services by other providers during the year. Although the amount of capitation doctors receive is partially reduced when patients go to other providers (who then are paid via fee for service under the provincial plan), the net result is that the total cost to the provincial plan is likely to be higher than under the old system. In other systems where capitation is used – for example, the United Kingdom and some private US insurance plans - the rules are stricter in the sense that patients are covered only for the primary care services they receive from their designated provider; if they nevertheless choose to go to another provider, they must pay the full cost out of their own pocket. Although we recognize that a proposal to restrict Canadian patients' right to receive care at no out-of-pocket cost from any doctor would be controversial, we believe that such a restriction might enhance the effectiveness of capitation in strengthening the primary care system, and that governments should consider moving in that direction.8

Another feature of Ontario's system that has raised costs is that doctors may elect to switch individual patients from the capitation scheme and receive compensation for the care provided to them through the old fee-for-service system instead. This enables doctors to raise their income by choosing to be paid via fee for service for patients to whom they provide a large volume of services and via capitation for those who need only relatively few. In the capitation systems of the United Kingdom and elsewhere, doctors typically do not have this option, and we think their right to do so should be limited in Ontario as well. Although this change

8 Further, a number of reviewers of this *Commentary* pointed out that Ontario's reforms did not ensure that the expansion of the capitation system was accompanied by public accountability mechanisms to encourage a high level of patient care quality. The role of patient choice, and the effects on physicians from patient switching, would improve with better public measurement of primary care quality among alternative providers.

might require offsetting rules to protect individual doctors from an excessive workload in dealing with patients who require many services and to ensure that individuals with a high predicted demand for services are able to find a family doctor, it would close a potentially costly loophole in the current model.

# THE COST OF SPECIALIST CARE: GATEKEEPING AND EXTENDED CAPITATION

Although capitation has characteristics that make it appealing as a method for compensating primary care providers, the arguments in its favour do not apply with equal force to the case of specialist physicians. Unlike primary care providers, specialists typically are sought out to administer specific treatments or procedures when the nature of the patient's health problem has been identified. Many are not expected to have a long-standing relationship with their patients. 9 Given this, paying specialists on the basis of fee for service is reasonable: it gives them an incentive to be productive, in the sense of treating many cases. This being said, however, markets for specialists who are paid via fee for service have posed policy problems of their own in many places.

In the United States, for example, with its ample supply of doctors and largely unregulated fees, there is a great deal of discussion about the possible overuse of high-cost specialist services. Such overuse might occur, in part, because insured patients have little incentive to limit their demand for specialist services, even when doctors charge

high fees. In Canada, there is less concern about the cost of specialist services generally, in part because of lower fees negotiated between the government and the doctors and because there are fewer specialist doctors per capita here, and hence long waiting lists for their services. 10 However, the lack of incentives to use specialist care conservatively might also aggravate the problems that arise when specialists are in short supply, if there is no effective mechanism to ensure that those who most urgently need treatment are moved to the head of the waiting lists. This situation of excess demand of course is the one that is relevant in provincial markets for most kinds of specialist services in Canada today, and long waits for such services, even for some patients who need them urgently, is a serious health policy issue.

# Waiting Lists, Extended Capitation, and Commissioned Care

In basic economic theory, one simple answer to the question of what to do in a market with excess demand is to allow the market price to rise, so as to ensure that the limited supply is allocated to those buyers who are willing to pay the most for it. But in healthcare, this solution is ruled out because it is neither equitable nor efficient to ask those unlucky enough to need expensive healthcare to pay for it out of their own pocket.

A partial solution to the resulting dilemma, however, is to recognize that the decision to seek care from a specialist typically is made jointly by patients and their primary care providers. Even though patients in Canada may be allowed to seek

<sup>9</sup> There are exceptions, of course, such as psychiatrists or cardiologists, who form long-lasting relationships with patients with chronic conditions. One reviewer of this *Commentary* raised the interesting possibility that capitation-based payment models might be worth considering for certain specialties of this kind.

<sup>10</sup> Even with regulated fees, the cost of specific kinds of specialist care might become quite high when technological advances (such as in cataract surgery) shorten the time needed to treat each patient and when fees have not been adjusted to reflect this.

care directly from a specialist, most do so only after referral from a primary care provider. In the UK National Health Service and many US managed-care plans, a referral from a primary care doctor is required before the insurance plan will pay for specialist or hospital services. With such a system of "gatekeeping," it is possible to encourage a more conservative pattern of care by giving primary care providers an incentive to refer their patients to specialists only in urgent cases.

Creating such an incentive is relatively straightforward when providers are paid via capitation. A simple model is to give them a notional budget for a defined range of specialist and hospital services that are used by the patients on their roster. At the end of the fiscal year, the actual costs incurred by their patients for these services are then compared with the budgeted amounts, and the primary care providers are rewarded by being allowed to keep part of any budget surplus or penalized by having their regular capitation payments reduced by some fraction of any deficit. Versions of this model, which may be described as "extended capitation," were used in the United Kingdom in its "fund-holding" experiment in the 1990s and are part of practice-based commissioning now being implemented in that country. It is also found in some US managed-care plans in which primary care providers are eligible for year-end bonuses if the costs of specialist and hospital care for the patients under their care come in below preestablished budgeted amounts.

The capitation models currently in use in Ontario and other provinces, however, do not contain incentives for primary care doctors to pay attention

to the diagnostic and specialist services that patients use on their recommendation. <sup>12</sup> In part, this might be because provinces have been unwilling to create systems that formally restrict patients' right to seek services from any doctor of their own choice, a right they typically have had in the past. Another reason might be administrative complexity: designing and managing an extended capitation system is far from easy. Indeed, a recurring theme in discussions of the UK experience with this type of approach is that primary care doctors have found it more complicated and time-consuming to deal with their expanded responsibilities under the new system than was anticipated (Smith et al. 2004).

Nonetheless, we believe the potential advantages of a consistently enforced capitation and gatekeeping system are sufficiently great that provinces would be well advised to confront these issues, even if it would create controversy. Although patients would still retain the formal right to sign up with another primary care doctor (if they can find one), a clear understanding on their part that the family doctor with whom they have registered is their only gateway to access insured services would enhance the effectiveness of the capitation model and pave the way for an extended version of the type we have described. The extended capitation model<sup>13</sup> could also be applied to another cost component that is becoming increasingly important as the population ages - namely, prescription drugs. Also, this reform could be complemented by clearer methods of paying for the services that are jointly performed by hospitals and the specialists who treat hospitalized patients (see Box 2).

<sup>11</sup> Most Canadian specialists will not accept patients who have not been referred to them. In some provinces, specialists will be paid fees at a lower rate if they treat patients without a referral.

<sup>12</sup> In some cases, the diagnostic services that doctors recommend for their patients are owned by the same doctor who recommends them. The obvious incentive problems that arise in such cases are being addressed in the current round of negotiations between the Ontario government and the Ontario Medical Association.

<sup>13</sup> One reviewer of this *Commentary* suggested the alternative term "incentivized gatekeeping," a phrase that perhaps conveys its meaning somewhat more directly.

#### Box 2: Paying for Specialist Care in Hospitals: Creating a More Competitive Market

Canadian specialists who work in hospitals are normally paid on a fee-for-service basis by the province, separately from the allocation of provincial funds to hospitals. In many countries, however, including the United Kingdom, specialists who treat patients in hospital receive all or most of their income in the form of salaries from the hospital where they work, so that their compensation is funded out of the revenue the hospital receives from private or public insurance plans (see Barros and Olivella 2011). Under this type of arrangement, payments to the hospital for the services involved are a package that covers the costs both of the specialist services and of providing the hospital facilities, so that the agencies that pay for them on behalf of patients can more easily compare the terms offered by competing hospitals. This method of payment can also facilitate competition among hospitals and specialized free-standing clinics, at least in major urban areas where patients, and payers, have at least some degree of choice among several providers. Establishing the precise terms according to which specialists are paid can then be left to negotiations between individual specialists and the hospitals or clinics that employ them.

In Canada, where acute-care hospitals are funded by financially strapped provincial governments, a lack of resources to provide the complementary hospital facilities has contributed to lengthening waiting lists for the services of those kinds of specialists. Although we recognize that emulating the UK approach would be difficult in the Canadian system, where hospitals and specialist doctors traditionally have been funded through different streams, we believe its potential advantages are substantial enough to warrant serious consideration by provincial insurance plans.

# CONCLUSIONS AND RECOMMENDATIONS

A stable relationship with a primary care provider who can help patients navigate the bewildering variety of drugs and diagnostic and treatment services is increasingly recognized as a critical element of good healthcare today (see Scobie et al. 2009; CFPC 2011; Picard 2012). <sup>14</sup> Paying for primary care through a blended model with a major capitation element would encourage this function much more effectively than the traditional fee-for-service model, and we believe the provinces should increase the share of funding that flows via the capitation stream. Drummond (2011) recommends

moving toward a compensation blend of roughly 70 percent capitation and salary combined and 30 percent fee for service. To that end, however, the provinces have a long way to go.

Ontario is unique among the provinces in already having taken substantial steps toward greater reliance on capitation. We strongly believe that other provinces should follow Ontario's lead and learn from its mistakes to date – that a stricter and more consistent application of the capitation payment model would benefit all provincial health systems. A clearer understanding of the way capitation works, what it implies for doctors and patients, and how it might be extended could help politicians to decide what approaches they should

<sup>14</sup> A phrase that has been used to describe this role for primary care providers is that each patient needs a "medical home" (McGuire 2011). Another is that these providers are the health care system's "front door."



try to sell and the public to decide whether they want to buy them.

In many countries with large publicly funded health systems, policymakers have engaged with their citizens to establish the right physician compensation mechanisms; in Canada, however, these discussions have yet to take hold. The policy challenge is to provide the right level of financial rewards, tied to health outcomes, to improve the quality and cost effectiveness of care. In our view, once a greater reliance on capitation payments is established, a form of extended capitation could also give primary care providers incentives to reduce the demand pressures on specialists, leading to shorter waiting lists and reduced overall cost of patient care.

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#### REFERENCES

- Barros, Pedro Pita, and Pau Olivella. 2011. "Hospitals: Teaming Up." In *The Oxford Handbook of Health Economics*, edited by Sherry Glied and Peter C. Smith. Oxford: Oxford University Press.
- Blomqvist, Åke, and Pierre Léger. 2005. "Information Asymmetry, Insurance, and the Decision to Hospitalize." *Journal of Health Economics* 24 (3): 775–93.
- Brown, Jason, Mark Duggan, Ilyana Kuziemko, and William Woolston. 2011. "Will Risk-Adjustment Decrease Health Care Costs? New Evidence from the Medicare Advantage Program." NBER Research Paper. Cambridge, MA: National Bureau of Economic Research. August.
- Christianson, Jon B., and Douglas Conrad. 2011.

  "Provider Payments and Incentives." In *The Oxford Handbook of Health Economics*, edited by Sherry Glied and Peter C. Smith. Oxford: Oxford University Press.
- CFPC (College of Family Physicians of Canada). 2011. "A Vision for Canada: Family Practice – The Patient's Medical Home." Mississauga, ON. September.
- Drummond, Don. 2011. "Therapy or Surgery? A
  Prescription for Canada's Health System."
  Benefactors Lecture. Toronto: C.D. Howe Institute.
- Ellis, Randall P. 2008. "Risk Adjustment in Health Care Markets: Concepts and Applications." In *Financing Health Care: New Ideas for a Changing Society*, edited by Mingshan Lu and Egon Jonsson. Weinheim, Germany: Wiley-VCH Verlag.
- Kralj, Boris, and Jasmin Kantarevic. 2012. "Primary Care in Ontario: Reforms, Investments and Achievements." *Ontario Medical Review* 79 (2): 18–24.
- Léger, Pierre Thomas. 2011. "Physician Payment Mechanisms: An Overview of Policy Options for Canada." CHSRF Series on Cost Drivers and Health System Efficiency: Paper 3. Ottawa: Canadian Health Services and Research Foundation.

- McGuire, Thomas G. 2011. "Physician Agency and Payment for Primary Medical Care." In *The* Oxford Handbook of Health Economics, edited by Sherry Glied and Peter C. Smith. Oxford: Oxford University Press.
- National Physician Survey 2010. Results of the 2010 National Physician Survey can be found at http://www.nationalphysiciansurvey.ca (Date of Access June 25, 2012).
- Ontario. 2011. Auditor General of Ontario. "Funding Alternatives for Family Physicians." In 2011 Annual Report of the Office of the Auditor General of Ontario. Toronto.
- Picard, André. 2012. "Dragging medicare into the 21st century." Globe and Mail, May 24.
- Pike, Chris. 2011. "An Empirical Analysis of the Effects of GP Competition." Co-operation and Competition Panel: Working Paper Series 1 (2). August. http://www.ccpanel.org.uk/content/100819\_GP%20 paper\_full\_paper.pdf; accessed July 29, 2012.
- Scobie, Andrea, et al. 2009. "The Medical Home in Canada: Patient Perceptions of Quality and Safety." Healthcare Management Forum 22 (1): 47–51.
- Smith, Judith, Nicholas Mays, Jennifer Dixon, Nick Goodwin, Richard Lewis, Siobhan McClelland, High McLeod and Sally Wyke. 2004. "A Review of the Effectiveness of Primary Care-led Commissioning and its Place in the UK NHS" The Health Foundation. London: The Health Foundation. October.
- Van de Ven, Wynand, and Frederik T. Schut. 2011.

  "Guaranteed Access to Affordable Coverage in Individual Health Insurance Markets." In *The Oxford Handbook of Health Economics*, edited by Sherry Glied and Peter C. Smith. Oxford: Oxford University Press.
- Wranik, Dominika W., and Martine Durier-Copp. 2010. "Physician Remuneration Methods for Family Physicians in Canada: Expected Outcomes and Lessons Learned." *Health Care Analysis* 18 (1): 35–59.

Notes:			
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