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Health Teams and Primary Care Reform in Ontario: Staying the Course

*Rather than abandon its experiments with an enrolment-based approach – using capitation
– for paying primary care physicians, Ontario should continue and extend its efforts.*

Åke Blomqvist and Rosalie Wyonch

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A handwritten signature in black ink that reads 'Daniel Schwanen'.

Daniel Schwanen
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THE STUDY IN BRIEF

Attempts to reform primary care and introduce new compensation methods for providers have a long history in Canada. Although standard fee-for-service models remain dominant in most provinces, new models based partly on the principle known as “capitation” have been used in recent years in both Alberta and Ontario. This *Commentary* reviews the arguments in favour of an enrolment-based approach – using the principle of capitation – as an alternative to fee for service as a method for paying primary care doctors, and describes the way elements of this approach have been introduced in Ontario over the past two decades.

Unlike fee for service, which pays for services after they have been provided, capitation is a prospective payment method – the amount paid for a patient is determined in advance, before any services have been performed. In a pure capitation system, the doctor’s compensation is then completely determined in advance, based on the agreed-on capitation payments for patients in different categories and the number of people in each category that are enrolled in his or her practice. In the Ontario models, there are elements of capitation, but all contracts are based on a “blended” model in which fee for service continues to be a major element in the doctor’s income.

Supporters of primary care reform involving new payment methods argue that, if properly implemented, such methods could improve both access to and quality of care and also save costs, both within the primary care sector and elsewhere in the system. The evidence so far, however, with respect to the effect of the Ontario reforms on total healthcare costs is mixed at best.

Our analysis suggests that the high cost and relatively limited effects on patterns of care can be explained at least partially by the many safeguards and loopholes in the options that doctors were offered when they had to decide whether or not to opt for capitation under the new models. As a result, the favourable incentive effects that supporters of capitation typically point to have been present only to a relatively limited extent in Ontario. In our view, the province, rather than abandon the attempt to reform payment methods, instead should take it further and offer patients and doctors an alternative model that incorporates these incentives more fully, and that more closely resembles the capitation models that have been used with greater success elsewhere in the world. This could be done in a way that would complement and reinforce the role envisaged for the Ontario Health Teams that the current provincial government plans to create.

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In recent years, there have been frequent suggestions that Canada’s medicare system is getting “long in the tooth” and in need of reform (Busby 2018; Lazar et al. 2013; Naylor 2015).

The objective of “ending hallway medicine” was prominent in the 2018 election campaign in Ontario, and the Ford government’s plans to form “Ontario Health Teams” are proceeding apace: more than 150 groups of “hospital leaders, doctors, home care providers, and others” have responded to the government’s call for proposals to form such teams (Grant 2019).

Attempts to organize delivery systems that would improve the integration of care supplied by different providers have been made in other countries – for example, in the form of Accountable Care Organizations in the United States (McGuire 2012; Peckham et al. 2018b) and Clinical Commissioning Groups (CCGs) in the United Kingdom (Blomqvist and Busby 2012a). The Ontario government’s call for proposals was somewhat short on specific requirements, and it is not yet clear exactly how future Ontario Health Teams will be organized and operate. Under the UK model, each CCG is responsible for all the patients enrolled in the GP practices that make up the group, and each has a population-based budget from which it pays for most of the health services and drugs its patients receive. If Ontario Health Teams were organized along those lines, they could build on the progress Ontario already has made over the past several decades to create an enrolment-based primary care system in which each patient is formally attached to a specific family doctor or other primary care provider.

A key element in accomplishing this enrolment-based primary care system has been the introduction of new methods of compensating primary care providers. In this *Commentary*, we argue that Ontario’s experimentation with enrolment-based approaches to paying primary care doctors should continue and be extended, not just because they can be useful in themselves, but also because they fit well with a model of team-based care.

Attempts to reform primary care and introduce new compensation methods for providers have a long history in Canada. Although standard fee-for-service models remain dominant in most provinces, new models based partly on the principle known as “capitation” have been used in recent years in both Alberta and Ontario. The *Commentary* reviews the arguments in favour of capitation as an alternative to fee for service as a method for paying primary-care doctors, and describes the way elements of this approach have been introduced in Ontario over the past two decades.

Data on the cost of physician services in Ontario in recent years suggest that the new payment methods have been quite costly. While they have resulted in changes in some of the variables commonly used to assess the primary care sector’s performance, these changes have not been particularly impressive, leading us to conclude that, so far, the experiment cannot be considered successful.¹ A recent arbitration panel ruling in the dispute between the Ontario Medical

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1 In an analysis of data available some years ago, Glazier et al. (2012) reach a similar conclusion.

Association (OMA) and the Ontario government (Kaplan, Smith, and Pink 2019) stated that the Ministry of Health and Long-Term Care considers the capitation model “broken”, suggesting that its future is uncertain. Under the ruling, reforms to primary care models, particularly the Family Health Organizations (FHOs), will be considered by a working group with representatives from the ministry and the OMA.²

Nevertheless, we believe that abandoning the experiments³ would be a serious mistake. Our analysis suggests that the high cost and relatively limited effects on patterns of care can be explained at least partially by the many safeguards and loopholes in the options that doctors were offered when they had to decide whether or not to opt for capitation under the new models. As a result, the favourable incentive effects that supporters of capitation typically point to have been present only to a relatively limited extent in Ontario. In our view, the province, rather than abandon the attempt to reform payment methods, instead should take it further and offer patients and doctors an alternative model that incorporates these incentives more fully, and that more closely resembles the capitation models that have been used with greater success elsewhere in the world. Again, this could be done in a way that would complement and reinforce the role envisaged for the Ontario Health Teams that the Progressive Conservative government plans to create.

COMPENSATING PRIMARY CARE DOCTORS: FEE FOR SERVICE

Under fee for service, the method used to pay for most primary care services in North America,

physicians typically operate independent practices, whose revenue consists of the fees they charge their patients, or their patients’ insurance plans, for each item of service they perform. For the doctors who own and operate them, the practices’ net revenue after expenses is the income they earn as compensation for the time and effort they put into them. Doctors in solo practices who charge fees for the services they provide have a financial incentive to be productive in the sense of supplying a large volume of services, since doing so raises their income. Thus, to the extent they can practise in such a way as to produce a large amount of services per unit of time, or have flexibility with respect to the number of hours they work per week, they have a greater incentive to be productive than under a straight salary contract with fixed hours.

Potential Problems with Fee for Service

Fee for service, however, has potential problems and shortcomings. When people wish to see a doctor, they typically are not looking just for specific health services or drugs, but also for information and advice. When a new health problem arises, patients often do not understand the nature of their illness, whether it is serious, or what drugs and treatments are available to deal with it. The health services patients ultimately end up getting from doctors will, to a large extent, reflect the advice they received from those same doctors. What this means, however, is that, in the market for physician services, doctors who supply them can have a significant influence on patients’ demand for, and selection of, medical services.

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- 2 The OMA acknowledged the need for change, but made proposals contingent on the government allowing an increase in the number of FHO physicians. The working group is expected to deliver its recommendations in June 2020.
 - 3 A reviewer suggests that it is misleading to refer to the payment reforms as “experiments.” We have kept the terminology, however, as we think it was widely understood when the reforms began that there could be additional changes as evidence accumulated on their effects.

Since the income of doctors who are paid via fee for service increases with the volume of services these doctors produce, their ability to influence patients' demand for their services might lead toward "overtreatment": the production and use of more physician services than can be justified strictly by the expected health benefits.⁴ Overtreatment obviously tends to raise total spending on physician services, but it does not produce better health outcomes; by definition, it represents inefficient use of medical resources.

Provincial governments can try to offset the likely effect of this on aggregate healthcare costs by reducing the fees physicians are paid per unit of service, but doctors' ability to influence patients' demand for their services also can lead to other problems. In particular, it is likely to contribute to the tendency for physician services to be more readily available in major urban centres than in less populated areas, a problem that afflicts provincial healthcare systems across the country (Pong and Pitblado 2005). If doctors can control the average amount of services they supply per patient, those practising in urban areas with many doctors per capita – that is, with relatively few patients per doctor – still might be able to earn incomes similar to those practising in rural areas with many patients per doctor. If doctors and their families prefer to live in major cities, the result is likely to be an uneven distribution of physicians, with relatively large numbers of doctors per capita in urban areas and shortages elsewhere.⁵

More generally, the geographic distribution problem reflects the fact that doctors who are

paid by fee for service and are able to influence the average amount of services they supply each patient do not have a strong incentive to move to places where there is a shortage of doctors. It also reduces incentives for such doctors to take on new patients – for example, people who have moved to a new city. This is one reason why, in the 1990s, people frequently complained about the difficulty of finding a family doctor who was willing to see them – doctors who were busy with the patients they already had were not willing to take on new ones. Indeed, the experiments with compensating family doctors through capitation were started partly as a response to this issue.

PAYING DOCTORS VIA CAPITATION

Unlike fee for service, which pays for services after they have been provided, capitation is a prospective payment method. That is, the amount paid for a patient is determined in advance, before any services have been performed. The core of a capitation system is a contract that specifies what services the physician must supply if and when patients need them, and a list of patients for whom the doctor has agreed to supply these services. In a pure capitation system, the doctor's compensation is then completely determined in advance, based on the agreed-on capitation payments for patients in different categories and the number of people in each category that appear on this list.

The capitation payment for each patient on the list is made regardless of what services the patient has received during the month; it is made

4 In health economics textbooks, the concept of overtreatment is usually discussed under the rubric "Supplier-Induced Demand" – see, for example, Folland, Goodman, and Stano (2013), chap. 15.

5 The method of remuneration is one of many factors that could affect physicians' choices about where to practise. In addition to personal lifestyle preference, evidence shows that family physicians in rural areas generally perform a broader scope of medical services. For example, about 20 percent of family physicians in urban centres with more than one million inhabitants provide cancer care. In more remote rural communities, 40 percent of physicians provide such care. Similar patterns can be found for psychotherapy, pre- and post-natal care, geriatrics and pediatrics (Pong and Pitblado 2005).

even for patients who have not seen the doctor at all. Although the doctor's income is fixed once the list of capitated patients has been established, a capitation contract exposes the doctor to uncertainty with respect to workload. If a doctor is lucky, few patients on the list will be sick and require services during the month; if unlucky, many patients will need services, and the doctor will have to put in many more hours for the same amount of money.⁶ Capitation implies a very different set of incentives than fee for service – specifically, it favours a strategy of taking on many patients, but supplying each with as small a volume of services as possible. Capitation, therefore, can avoid the access and overtreatment problems that might arise under fee for service.

Potential Problems with Capitation

A capitation-based system, however, can generate its own set of problems. While payment via fee for service might imply an incentive for doctors to overtreat patients, a pure capitation model implies a financial incentive to undertreat – to provide fewer or less advanced services than justified by their expected health benefits for patients with given health problems. Although doing so would be incompatible with a contract specifying the provider's obligation to supply services in accordance with good medical practice, patients typically are not in a position to tell what treatment their condition warrants, and monitoring their condition and treatment is costly for the patients' insurance plans.

Capitation's potential problem of undertreatment might be less significant, however, than that of fee for service's overtreatment, for several reasons. First, significant undertreatment is incompatible

with physicians' professional responsibility to their patients. Second, undertreatment increases the likelihood of adverse health outcomes, which might hurt a doctor's professional reputation and lead to increased demands for services later on; a seriously adverse outcome also increases the risk of a patient's suing the doctor in court. Taken together, these factors constitute a strong disincentive against undertreatment. Moreover, few of the many studies that have compared the cost and quality of care under fee for service and capitation find evidence that the latter has led to worse outcomes.⁷

Capitation and Patient Selection

Compared with fee for service, a pure capitation system creates a better-defined relationship between individual patients and their primary care doctors: When they need primary care, patients are expected to go to the provider on whose list (or "roster") they appear, not to anyone else. Under fee for service, they are typically free to go to any licensed provider. In strict versions of the capitation model, insurance does not cover primary care services from any other provider; if patients choose to go to an "outside" provider and can find one who is willing to see them, they have to pay the entire cost out of pocket. Patients in capitated systems typically have some choice among several providers with whom they can sign up, but may be allowed to switch their registration only on specific dates during the year.

A serious problem with a strict capitation model is the possibility that it will adversely affect individuals who are at high risk of illness. Typically, only a minority of people in a given population will experience serious illness episodes that require large amounts of healthcare resources at any time. An often-cited statistic on healthcare costs is that

6 As a reviewer reminded us, doctors paid via capitation also have a clear incentive to supply preventive services, since doing so is not only likely to benefit their patients, but also might imply a net reduction in the doctors' workload.

7 For a careful review on the evidence from earlier studies, see Christiansen and Conrad (2011).

the 5 percent of the population most seriously ill in a given year usually accounts for about half of total costs (Breyer, Bundorf, and Pauly 2012). On average, therefore, each person among the 5 percent in the costliest category will require almost 20 times as many resources, by value, as the average in the rest of the population. Even if this degree of inequality refers to total healthcare costs, not to the costs of primary care specifically, there are large differences among patients in the amount of primary care resources they will require in a given year as well.

The variation in healthcare needs among individuals is due, to a large extent, to chance: even if every individual were subject to the same risk of various kinds of illness, the variation in annual healthcare costs would be large. But there are large and predictable differences in illness risks among individuals, and hence in their expected healthcare costs. For example, such costs are very likely to be higher, on average, for older people and for those who begin the year in ill health because they have had health problems in previous years. In a pure capitation system, where primary care doctors are paid the same annual amount for every patient on their list, doctors would have a strong incentive to try not to enrol persons who were at high risk of illness and likely to need a lot of the practice's time and resources. In such a system, young and healthy individuals would have no trouble finding a doctor eager to sign them up; older people with past health problems might not find it as easy.

The tendency toward selective enrolment that would arise in an unregulated model with the same capitation amount for every patient is obviously an issue that must be taken into account if capitation is to be used in a publicly funded health insurance plan: Mitigating this tendency is necessary for both efficiency and equity reasons. Typically, it is addressed through a combination of regulation – for example, requiring providers to enrol anyone who wants to sign up – and through modifying the incentives to engage in patient selection inherent in the features of the payment mechanism. We return to this issue below.

The desire to help all patients get access to primary care – that is, to find a family doctor willing to see them – was probably the most important reason the Ontario government began experimenting with capitation in the early 2000s. But another reason was growing awareness of the need for patients in a contemporary healthcare system to have what is often referred to as a “medical home.”

HEALTH TECHNOLOGY, SPECIALIZATION AND THE NEED FOR COORDINATION

In an earlier era when medical technology was simpler, most of the cost of healthcare was accounted for by services supplied by general practitioners (GPs), often in patients' own homes. Today, the services supplied by the primary care providers who have taken the GPs' place account for only a relatively small fraction of total healthcare spending. In recent statistics, hospitals have been the largest cost item, with large amounts also spent on specialist care, pharmaceuticals and various diagnostic tests performed not just in doctors' offices, but also in laboratories and imaging clinics.

Although healthcare today uses a wide range of services from specialized providers, these services cannot be used efficiently unless they are well coordinated. Failure to do so is likely not only to increase costs – for example, through duplication of diagnostic tests or as patients waste time and effort trying to find the best path through the system – but also to reduce the likelihood that patients' health problems will be dealt with successfully. In the United States, attempts to attain better coordination among providers have been undertaken by Medicare, which has experimented with financing innovations such as “bundled payments” and Accountable Care Organizations, under which hospitals and providers of various outpatient services are encouraged jointly to manage patients with certain conditions, and are funded jointly (Peckham et al. 2018b). In Canada,

there has been active discussion of the need for patients to have a “medical home” that maintains detailed and complete records of their health history and medications, refers them to outside providers, and ensures that information is shared among all providers who are part of their treatment path. The Ontario government’s plans to create a set of Ontario Health Teams with responsibility for “integrating” the care patients receive from different providers and giving them “help in navigating the public health care system 24/7” can be interpreted as a response to this issue as well (Ontario 2019).

Patients who already have a stable relationship with a primary care provider – their “family doctor,” nurse practitioner or primary care health team – presumably would choose that provider to be the coordinator of the services they receive from other providers in the system. As the patient’s medical home, that provider would also be responsible for storing and sharing the patient’s (and the patient’s family’s) medical history.⁸ The potential for a primary care provider to act in this capacity is an important argument in favour of creating and strengthening such a relationship between patient and provider. In the United Kingdom, the role of care manager has been formalized in the sense that the GP with whom the patient is registered also acts as “gatekeeper” whose referral is required before the patient can see a specialist or be hospitalized, and who prescribes and supervises the patient’s medications and diagnostic tests. Many managed care plans in the United States also employ a gatekeeping system under which patients must have authorization from their designated primary care provider before they can access drugs or other services under the plans. To the extent the Ontario experiments are successful in making primary care practices play the roles of their patients’ medical

home and care managers, they are following these examples.

Care Management, Costs and Incentives

In principle, primary care providers can be assigned the role of patients’ medical home whether they are compensated via fee for service, capitation or salary. In practice, the role aligns most naturally with a capitation model since, under that model, patients must choose a single provider who has responsibility for their primary care.

At the same time, however, by itself a pure capitation system might give primary care providers an incentive to use their roles as gatekeeper and care manager in a way that is inefficient from the viewpoint of the system as a whole. Specifically, capitation contains an incentive for primary care providers to shift the burden of care away from their own practices to other providers or payers: the fewer of their own services they use to keep their patients healthy, the larger the number of patients they can take on and the higher their net revenue. This cost-shifting effect can take many forms, such as always prescribing the newest and most advanced drug available, regardless of cost; ordering the most complete and extensive battery of diagnostic tests; or referring patients to specialists even in cases where simple treatment in a primary care clinic might be sufficient.

Various strategies have been used to address the cost-shifting problem. One approach, taken in the Ontario experiments (as we discuss further below), is a modified “blended” compensation model that combines capitation and fee for service, thereby reducing the strength of the cost-shifting incentive. Another strategy is to introduce elements in the financing model that give primary care providers a stake in the costs that the system incurs as a

8 The College of Family Physicians of Canada maintains a website on which they argue for this arrangement; see <https://patientsmedicalhome.ca/>.

result of their ordering tests, prescribing medicines or referring their patients to specialists. Variants of this method, which can be interpreted as a form of extended capitation, have been present at various times in the UK National Health Service (NHS), in the US managed care plans that have employed gatekeeping primary care providers paid via capitation (Blomqvist and Busby 2012a, b) and in the Accountable Care Organizations that have operated under the US Medicare system (McGuire 2012; Peckham et al. 2018b). Different designs are possible, but the general principle is that, in addition to regular capitation payments, providers also would receive budgets that establish the expected costs for things such as prescription drugs, diagnostic tests and specialist care for the patients on their roster. At the end of each accounting period, data on the actual costs would be compared with the budgeted amounts for their patient populations. If actual costs were below budget, the provider would keep all or part of the difference as a bonus; if actual costs were over budget, the practice might be responsible for part of the excess.

THE ONTARIO EXPERIMENTS

The idea that the fee-for-service method of paying doctors might be more costly and lead to inefficient patterns of healthcare has a long standing in health economics, and alternative models such as capitation have often been held up as potentially better choices. When it became clear in the second half of the 1990s that the Ontario government was preparing to experiment with new compensation methods for doctors in primary care, many health economists advocated capitation as a main component in the new system, and were looking forward to the evidence that the experiments would generate.

The new payment methods were introduced as new options that primary care doctors could choose as to how they were to be paid under the Ontario Health Insurance Plan (OHIP). Although the new options included a capitation element of some form, these elements vary substantially, with some being fairly small and none having gone very far in the direction of a fully prospective and comprehensive capitation model of the kind used in the United Kingdom. There, GPs who supply primary care derive essentially all their income from capitation payments that depend on the number of patients in different categories that are enrolled in their practices. In the Ontario experiments, in contrast, all contracts are based on a “blended” model in which fee for service continues to be a major element in the doctor’s income.⁹

The most important conceptual difference between the new payment models from which primary care practitioners can choose in Ontario and those in the United Kingdom is that the Ontario models require doctors to supply only a set of specified “core services” in return for the capitation payments they receive. If a doctor supplies services that are not on the list of core services, he or she can bill and be paid for these services at the same rates as are paid to doctors who remain in the traditional fee-for-service system.

Non-capitated Patient Enrolment Models

One model that became popular in the early stages of reform was the Family Health Group (FHG), introduced in 2003. An FHG consists of a group of three or more doctors who practise together and are willing to offer after-hours care for their regular patients. Doctors who choose this model continue to derive most of their income by billing for the services they supply at the regular rates under

9 For detailed descriptions and discussions of the Ontario models, see Glazier et al. (2012); Marchildon and Hutchison (2016); and Sweetman and Buckley (2014).

OHIP. However, in contrast to those who are paid under the traditional fee-for-service model, they also receive small premiums and capitation amounts for each person they sign up as an “enrolled” patient who will receive certain prescribed preventive services and early-detection tests (“comprehensive care”).

Fee for service remains the main payment method in the FHG model, as well as in the Comprehensive Care Model, which has similar service requirements and payment methods but does not require doctors to practise in a group (Table 1). In the literature, these are sometimes referred to as “enhanced” fee-for-service or “non-capitated” models, even though the doctors who practise in them receive certain monthly capitation payments for each enrolled patient. The models are also referred to as a form of Patient Enrolment Model, since their capitation and pay-for-performance elements encourage doctors to produce a list of enrolled patients; this list could later be used if the doctor wanted to switch to a contract that made more substantial use of capitation, such as in the Family Health Network (FHN) model that was introduced in 2002 but that relatively few doctors chose during the early years.

Capitated Models

In the FHN model, and even more so in the FHOs that were introduced several years later, capitation payments for enrolled patients are a much larger portion of each doctor’s total income than in the FHG model. Even so, the FHN and FHO models did not go nearly as far toward a purely prospective system of compensating doctors as, for example, the capitation model used to pay primary care doctors in the United Kingdom, partly because the capitation portion only applied to a subset (a “basket”) of the services that family doctors supply (the “core services”) and partly because, even for the core services in the basket, providers would still receive a portion (15 percent) of the amount in the regular fee schedule.

Fee-for-service revenue also continues to be a substantial component of total income even for doctors who have chosen one of the new models for another very important reason: doctors in FHNs/FHOs who receive capitation payments for enrolled patients are still allowed to bill and get paid at the regular rate for any services they provide people who are not on the practice’s list of enrolled (“rostered”) patients (Table 1).

In Ontario, the majority of people now have established a formal primary-care connection by signing up with a doctor who is compensated through one of the new schemes or with an institution such as a Community Health Centre. Doing so, however, is not compulsory, and patients still are entitled to receive care not only from doctors who continue to practise under traditional fee for service, but also from doctors who are compensated under one of the new schemes but are willing also to see non-enrolled patients. That is, enrolment in a primary care provider’s practice is entirely voluntary, even for patients whose regular doctor has chosen one of the new models. In practice, most patients who have formally enrolled in a practice have done so at the initiative of the doctor, who must put the patient on the practice’s list in order to receive the contractual capitation payments. As we discuss further below, however, doctors sometimes might prefer to be compensated via the traditional fee-for-service model for the services they supply to specific patient categories, and they often might be able to accomplish this simply by not asking these patients to sign the enrolment agreement.

Capitation and Patients

The capitation models in the Ontario experiments also differed from the stricter versions that have been used elsewhere in another important way: they did not go nearly as far in encouraging rostered patients always to use their regular provider in the first instance before seeking care from another one.

Table 1: Average Payments per Primary Care Physician by Source and Type, Ontario, Fiscal Year 2017/18

Model		Payment Type		
		Number of Physicians	Fee-for-service (\$)	Capitation, Salary, Benefits (\$)
Non-Capitated models	Comprehensive Care Model	392	260,380	44,191
	Traditional Fee for Service	3,513	173,860	33,182
	Family Health Group	2,771	266,947	44,284
Capitated models	Family Health Network	236	69,717	216,024
	Family Health Organization	5,494	61,728	262,717
All Ontario		14,066	131,220	161,788

Note: "All Ontario" includes primary care physicians practising under the Rural and Northern Physician Group Agreement and other primary care.
Source: Schultz et al. 2019.

In the United Kingdom, for example, although patients are allowed to seek care from any primary care doctor who will see them, if they go to a different one than the GP on whose roster they appear, they must pay the entire cost out of their own pocket. Similar rules apply in some US private managed care insurance plans in which primary care is supplied under a capitation contract; in others, insured persons are allowed to seek care from another provider, but must then pay a share of the cost out of pocket.

In the Ontario models, patients who sign an enrolment contract agree to seek care first from the practice with which they are rostered, but there is no penalty for receiving care from another provider: The provincial plan will pay for such care at the regular fee-for-service rate, and patients are not required to pay anything out of pocket. Clearly, the province would want to discourage patients

from doing this for patients in the FHN and FHO models to avoid essentially paying twice for the same service – first to the regular practice that was supposed to supply the service at a deep discount in return for the capitation payment, and again to the (different) provider from whom the patient chose to seek care.¹⁰

The partial remedy to this problem that the FHN and FHO models offer is to put the burden of enforcement on doctors by reducing the capitation revenue they receive when patients on their list receive “core services” from another provider. Under a provision known as the “access bonus,” doctors with rostered patients periodically receive a bonus consisting of a percentage of the regular capitation payment, less the costs billed to the provincial insurance plan for core services rendered by other providers to these doctors’ rostered patients. The rostering doctors’ losses are

10 Comments in the recently released ruling by the panel engaged in arbitration to end the dispute between the OMA and the Ontario government suggest that this does indeed happen to a significant extent in the current system; see Kaplan, Smith, and Pink (2019, 20–2). A recent paper by Glazier et al. (2019) confirms that this pattern persists.

Box 1: The Access Bonus and After-Hours Care

Some years ago, Glazier et al. (2012) drew attention to two questionable features of the access bonus system as it was originally designed. First, although capitated providers were supposed to ensure that their patients had access to care after hours and on weekends, the bonus amount was not reduced if a rostered patient received care, even for a core service, in a hospital emergency department. Second, there was no explicit provision under which primary care groups could collaborate and take turns supplying after-hours care to one another's patients without incurring a reduction in the access bonus.

The requirement that capitated providers arrange for after-hours and weekend care for their enrolled patients clearly was intended to reduce pressure on Ontario's overcrowded hospital emergency rooms. While not wanting to discourage patients from seeking service in an emergency, the government's exempting emergency department services from the access bonus calculation reduced the incentive for practices to live up to their after-hours service obligations. Moreover, the cost of fulfilling these obligations was higher if capitated practices could not do so through collaborative arrangements with other providers – the system, in effect, gave them an incentive to steer their patients toward emergency departments for after-hours care.

With little evidence that the government had made serious efforts to monitor and enforce the after-hours requirements (Ontario 2011), it is not surprising that Glazier et al. (2012) also did not find much evidence that emergency room overcrowding had diminished. Despite these findings and critique by Ontario's auditor general, these features of the system remain. A recent follow-up study by Glazier et al. reveals that, paradoxically, the practices that received the highest proportion of the possible access bonus for which they were eligible actually provided the least after-hours care, and their patients had the highest rate of emergency department visits (2019, 5). Although other factors contributed to this pattern, the incentive for capitated practices to recommend their patients seek after-hours care in emergency departments, rather than in lower-cost walk-in clinics, might be part of the explanation.

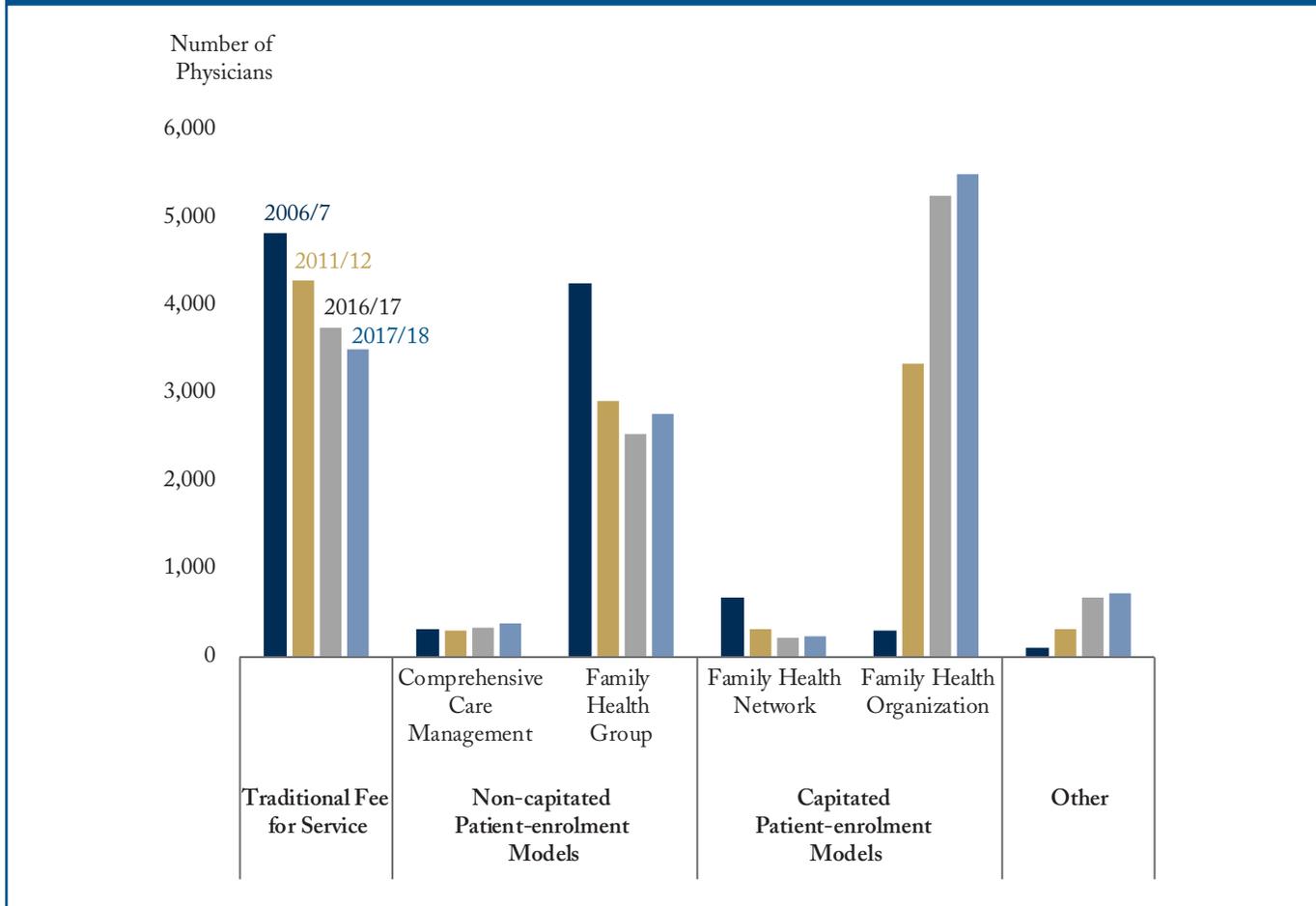
limited, since the minimum access bonus is zero – but even so, doctors under these contracts have a financial incentive to discourage their patients from seeking care from other providers. (It has not been very effective, however, in reducing the use of hospital emergency departments; see Box 1.)

THE OUTCOMES SO FAR

The new payment models have changed primary care in Ontario in important dimensions in the past fifteen years. At the turn of the century, 98 percent of the province's primary care doctors were in the traditional fee-for-service model (Buckley, McLeod,

and Sweetman 2016). By fiscal year 2006/07, this share had fallen to 45 percent (Figure 1). Of those who practised in one of the new patient enrolment models in that year, however, most belonged to one in which payment continued to be mostly via fee for service – the Comprehensive Care and FHG models, the “enhanced fee-for-service models” – with less than 10 percent having opted for one of the two models (FHN and FHO) in which payment is mostly by capitation. By 2017/18, the picture had changed dramatically. Only a quarter belonged to the traditional fee-for-service model, and most of those who practised in one of the Patient Enrolment Models by then had chosen one

Figure 1: Primary Care Physicians by Payment Model, Ontario, Selected Fiscal Years 2006/07–2017/18



Source: Schultz et al. 2019.

of the capitated options; 41 percent of Ontario’s primary care doctors were practising in one of those models.

Outcomes: Access

The reforms have had a major effect on access to primary healthcare. Today, most Ontarians are enrolled in a primary care practice, and hence have a family doctor (or nurse practitioner) who is willing

to see them when they need care. In 2000, only an estimated 250,000 people (out of a total population of 11.7 million) were covered by such agreements; by 2013, the number of enrollees had risen to 10.3 million (out of a population of 13.6 million). In a survey taken around that time, 92.5 percent of Ontarians reported having a “regular primary health care provider”; in Canada as a whole the figure was 85 percent (Peckham et al. 2018a, 6).¹¹

11 As of early 2019, approximately 11 million Ontarians were rostered in a comprehensive payment model (Kaplan, Smith, and Pink 2019).

Registration with a family doctor or other primary care provider does not, of course, guarantee that patients have *timely* access to care. They might still have to wait some time for an appointment, and after-hours access to care might be difficult, even if the enrolment contract stipulates that the provider is expected to arrange for its availability. Surveys suggest, however, that the Ontario healthcare system's performance remains relatively good even when access is measured in ways that take these factors into account. For example, in a 2015 survey, 41.4 percent of respondents in Ontario said they were able to "get a same-day or next-day appointment to see a doctor or a nurse" versus 39.2 percent in Canada as a whole. In the same survey, 49.5 percent of Ontario respondents (but 55.3 percent in Canada as a whole) said they had a difficult time getting medical care on weekends or in the evenings (Peckham et al. 2018a, 6).

These findings are encouraging if one believes that access problems in Ontario were more significant than elsewhere in the country before the reforms. Given the scope of the reforms, however, the results might be somewhat disappointing in that the differences between Ontario and the rest of Canada remain fairly small.¹² And although the majority of Ontarians now might be formally enrolled in a primary care practice, many of the rest appear to be individuals with above-average healthcare needs. Laberge et al. (2017) find clear evidence that, on average, total healthcare costs – including not just primary care, but also specialist and hospital care, drugs and long-term care – for individuals not formally enrolled were substantially higher than for those who were. This finding

might partly reflect a deliberate decision by some primary care doctors not to enrol patients with high expected care needs but to continue getting paid for their services to these patients via fee for service.¹³

Outcomes: Costs

Supporters of primary care reform involving new payment methods argue that, if properly implemented, such methods could improve both access to and quality of care and also save costs, both within the primary care sector and elsewhere in the system. The evidence so far, however, with respect to the effect of the Ontario reforms on total healthcare costs is mixed at best.

The aggregate cost of primary care in the province grew rapidly in the first few years after the reforms, and has continued to do so. For example, as Figure 2 shows, in the decade from 2006 to 2016, Ontario government payments to primary care doctors grew by 55 percent, while total healthcare costs increased by 45 percent. In part, these increases can be explained by population growth and general price inflation, but the population grew over this period only by about 10 percent, while prices (as measured by the consumer price index) increased by some 18 percent; the two together explain an increase of a little more than 30 percent. Meanwhile, the number of primary care doctors grew by 27 percent and average payments per doctor by 23 percent over the decade. Arithmetically, the latter increase reflects the fact that average revenue per doctor in the capitated FHN and FHO models has been consistently higher than in either the traditional or enhanced

12 The early study by Glazier et al. (2012) came to the same conclusion, and the picture does not appear to have changed substantially in the intervening years.

13 As Laberge et al. suggest, the lower cost for enrolled patients also might reflect providers' efforts to prevent or manage illness better under a capitation system. The effects of this factor are difficult to separate, however, from those of patient selection, and we believe the methodology used in the study might have underestimated the latter effects to some extent.

fee-for-service models, so that, as more and more doctors have shifted to the capitated models, the overall average has risen.

The gradual shift away from the fee-for-service options is also evident in the decline in the share of total primary care physicians' revenue paid as fee for service. In fiscal year 2005/06, fee-for-service payments accounted for 82 percent of primary care physicians' revenue; by 2013/14, this share had declined to 46 percent, and it was stable through to 2017/18 (Schultz et al. 2019).¹⁴ Although doctors who practise in the FHN and FHO models continue to derive some fee-for-service income – for services rendered to non-enrolled patients, or for non-core services that are not part of the capitation basket – this accounts for a relatively small share, averaging around 17–20 percent, of their total income. Hence the fact that these are the options that yield the highest average revenue per doctor largely reflects the relatively high capitation rates that are paid under them.

As noted, those who support capitation in primary care do so not just because it implies an incentive for doctors to take on more patients, but also because it tends to foster more stable relationships in which primary care doctors have an active role as managers of the care their patients receive on their advice and referral and the drugs they prescribe. In principle, this should lead to care that is better coordinated and more cost effective. So far, however, there is no clear evidence the Ontario reforms have led to either lower costs

or better quality of care. Although aggregate healthcare costs have not increased as fast as the costs of primary care, they have continued to grow at rates that are much higher than might have been expected based on population growth and general price inflation or on past trends. Moreover, there is some evidence that the reforms have led to at least some tendency toward cost shifting by capitated doctors. Sarma et al. (2018), for example, find that the cost of referrals to specialists in the capitated models was some 7–9 percent higher over the 2005–13 period than in the enhanced fee-for-service models; moreover, primary care doctors who switched from fee for service to capitation over that period increased their referrals to specialists by an average of 5–7 percent.

On balance, therefore, the reform experiments appear to have led to some improvements in access, but at considerable cost. Although the more stable doctor-patient relationships created by the enrolment models might have led to potentially cost-effective changes in patterns of care, there is not much evidence of improved care quality,¹⁵ and the data on aggregate healthcare costs so far are not encouraging. In view of these results, should Ontario continue the experiments? If so, how?

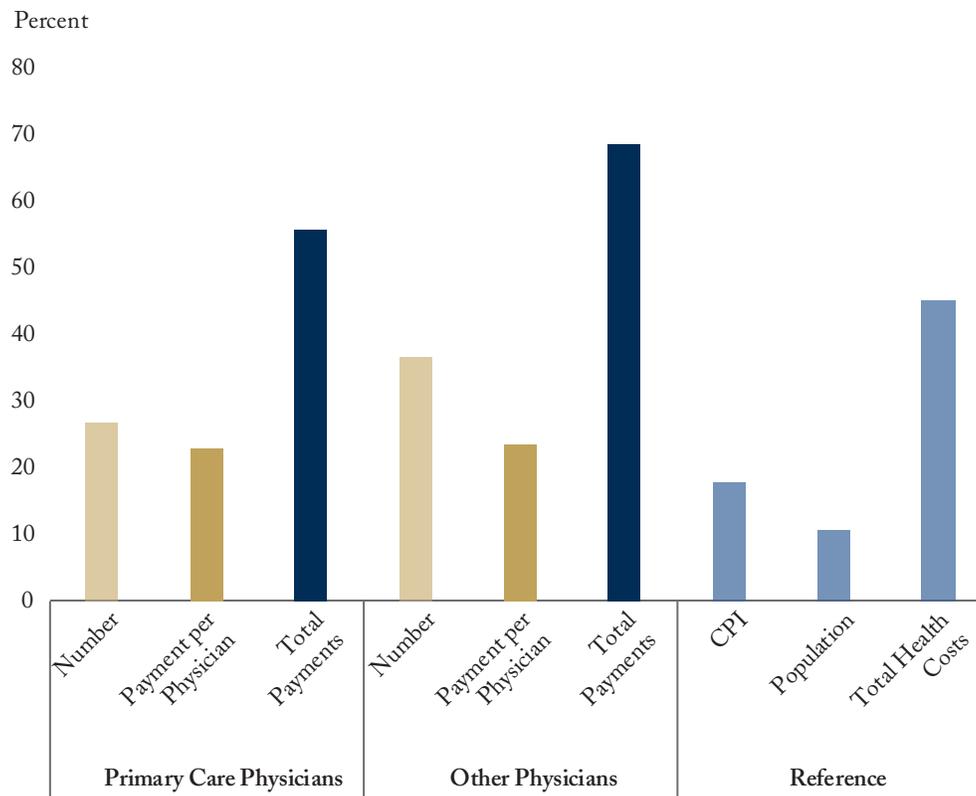
SHOULD THE EXPERIMENTS CONTINUE?

When considering the experience so far with Ontario's payment reforms, one must keep in mind that fundamental change to a country's healthcare

14 Since February 2015, the Ministry of Health and Long-Term Care has limited the number of new doctors who can join the FHO and FHN models of compensation through Managed Entry. Under this process, twenty new physicians will be eligible to join FHO and FHN compensation models in "areas of high physician need only" (Ontario 2017). In addition, growth in total expenditures on physician compensation was moderated by a 0.5 percent fee cut in the 2012 Physician Services Agreement and the implementation in 2015 of a 3.95 percent discount applied to fee-for-service billing codes and a 2.65 percent discount applied to non-fee-for-service billings (Golding and MacRae 2019). These discounts ended on April 1, 2019.

15 Some studies, however, show capitation and performance incentives to have a positive effect on certain kinds of preventive care; see, for example, Kantarevic and Kralj (2013) on management of diabetic patients.

Figure 2: Changes in the Number of, and Payments to, Physicians, Ontario, 2006–16



Sources: CIHI 2018; Schultz et al. 2019; Statistics Canada, CANSIM database, table 18-10-0005-01; and authors' calculations.

system necessarily is a slow and gradual process. Even though Ontario's experiments have been in progress for over 15 years, the most significant change, the increase in the percentage of primary care practitioners who now are paid mostly by capitation, is of relatively recent origin. Given this, it is perhaps not surprising that data on the cost and quality of healthcare do not yet give clear and convincing evidence of the kinds of improvement the new models ultimately are expected to yield. Moreover, the effects have also been muted by the fact that features of the new "blended" models have moderated the effects that would be predicted on the basis of experience from other systems where more complete versions of prospective payments mechanisms have been used. However, now that

many doctors have opted for capitation and a majority of Ontarians have established a formal relationship with a family practice or other provider, we think the stage is set for future reforms to exploit more completely the potential gains in cost-effectiveness that theory and evidence suggest are possible. What approaches should be taken to bring this about?

Extended Capitation

An important argument in favour of patient enrolment models is that a stable relationship between patient and primary care provider is consistent with the idea that a healthcare system likely functions better when each patient has a

“medical home,” with a provider who is familiar with his or her medical history and who not only supplies primary care services, but also acts, formally or informally, as the patient’s advisor and manager of the overall care the patient receives. Paying primary care providers by capitation is consistent with such an objective. As noted, however, capitation contracts that cover only primary care services in a specified basket do not, other things being equal, imply any incentive for providers to be conservative with respect to the cost of things such as lab tests, pharmaceuticals, or the services of other providers that their patients use on their recommendation. Instead, through a degree of cost shifting, capitation has led to somewhat higher costs for these items.

To counteract the cost-shifting incentive, the Ontario government should consider a model that gives primary care providers some degree of financial stake in the overall costs to the system of the patients who are enrolled in their practices. A first step in that direction would be to inform providers who have assumed the role of care managers about those costs and how they compare with established benchmarks. Collecting and supplying such information also should be a natural element in the government’s encouragement of the new Ontario Health Teams. If these are to be modelled on the Accountable Care Organizations in the United States, comparisons of actual healthcare costs with those in a predetermined budget would be an essential element in efforts to make them produce more cost-effective patterns of care.

Ontario also could consider following the example of many US managed care plans or that of the United Kingdom’s NHS in the 1980s and introduce separate financial incentives for primary care providers whose enrolled patients have incurred costs that are below budgeted amounts. Elsewhere, we have referred to such incentives as a form of “extended capitation” (Blomqvist and Busby 2012a, b).

Increase Patients’ Responsibility for Adhering to Enrolment Contracts

The role of the primary care provider as care manager could also be enhanced by clearer and more explicit rules for patients who have signed an enrolment contract with a practice. In the current models, patients agree in general terms that they will turn first to the practice in which they are enrolled, but they can still seek care from any other provider who is willing to see them. In the capitated models, providers have an incentive (under “access bonus” provisions) to discourage their patients from seeing another provider, but patients incur no penalty for doing so. Similarly, even though patients are encouraged to seek specialist care only after referral from their primary care provider, treatment by a specialist is still covered by the provincial insurance plan even if it is given without referral. The regular provider’s care management role could be strengthened through formal gatekeeping rules to create additional incentives for patients to eschew seeking outside care or specialist care without referral.

In other countries, this is sometimes accomplished through monetary incentives. In the United Kingdom, where patients must be enrolled in a GP practice in order to be covered by the NHS at all, those who go to another primary care doctor or visit a specialist without referral from their GP must pay the entire cost out of pocket. In some US managed care plans under which patients must have a designated family doctor who is paid at least partly through capitation, patients also might be covered for visits to other providers, but then must pay a share of the cost out of pocket.

In principle, there is no reason similar measures could not be used in Canada. Enrolled patients could be required to reimburse the provincial insurance plan for all or part of the cost if they use another primary care provider than the one with whom they were enrolled (except in emergencies) or received specialist care without a referral. Alternatively (and less controversially), the current

Ontario model, under which specialist doctors are paid by OHIP at a lower rate for seeing a patient who has not been referred to them, could be extended to all doctors, so that primary care providers who treat patients who are enrolled in another practice would also be paid at a discounted fee-for-service rate.

Measures to discourage enrolled patients from seeing other primary care providers would have to be supplemented with rules specifying what patients are expected to do in emergencies or in cases where their regular provider is not available (for example, because arrangements have not been made to ensure access on weekends or after hours).¹⁶ Provisions of this kind already exist in the current patient enrolment models, but could be strengthened and be given more emphasis at the time patients sign their enrolment contract.

More generally, the fact that primary care doctors have options with respect to the way they are compensated should be made clearer to patients. There is no reason patients should not be aware of the way a given doctor is paid when they choose among different providers, and what obligations different providers have when they accept responsibility for a patient.

Make Enrolment Universal

The move toward more use of capitation can be interpreted in part as an attempt to address the problems that many people once had in accessing primary care, but also in part by the objective of ensuring that every patient in Ontario has a medical home – namely, a primary care provider with responsibility for keeping a record of the patient’s medical history and for advising on and monitoring the care the patient receives from other providers. Although the access problem now appears to have

receded into the background and the majority of Ontarians now have a medical home, in the sense of being formally enrolled in a primary care practice, a substantial minority still does not.

Making enrolment universal was the key recommendation in the Price-Baker report on further primary care reform in Ontario (Price et al. 2015). That report suggested this could be accomplished through the Local Health Integration Networks (LHINs, 14 in number) that were established in 2006 with a mandate to “plan, fund, and integrate health services at the local level.” The government at that time did not act on the report’s recommendation, opting instead to reorganize the LHINs’ role with respect to long-term care. Under the current government’s recent proposals, LHINs would be replaced by a single, central administration (the Ontario Health Agency) and smaller Ontario Health Teams whose role also would be to coordinate the care patients receive from different providers, including primary care doctors. We think the logic of a system in which everyone has a clearly defined medical home/care manager is compelling, and that Ontario should consider a model under which family doctors paid by capitation make up the backbone of these teams. Such a model would follow the examples of the UK healthcare system and some private managed care plans in the United States.

The most straightforward way of ensuring universal enrolment of patients under this model would be to make enrolment a condition for receiving care, while also requiring primary care providers to accept the enrolment of any eligible patient who asks for it. Following the Price-Baker recommendations, eligibility could be defined by the person’s having an address somewhere in the vicinity of the practice, the principle followed in the United Kingdom.

16 Tighter and more consistent rules for enforcement of capitated practices’ obligation to offer after-hours and weekend care for their patients also would help control costs and the use of emergency department services.

A compulsory enrolment requirement would have very different effects on primary care providers in the compensation models currently in use. If all patients were enrolled and subject to contracts under which they were expected to get all their primary care services from their regular doctor except in emergencies, the traditional fee-for-service model would no longer be viable, so doctors who currently remain in that model would have to switch to one of the enrolment models.

Among providers who currently practise within an enrolment model, those in the non-capitated models (Comprehensive Care or FHG) would be the least affected. Even if many of their currently non-enrolled patients were relatively heavy users of services, the services they receive would continue to be paid for via fee for service even if they were to become enrolled. That is, if such providers kept the same patients and provided the same services as before, their revenue would not change a great deal.

For providers currently practising in one of the capitated models (FHN or FHO), the effect would be quite different. In these practices, core services supplied to enrolled patients are largely paid for via capitation, while those supplied to non-enrolled patients are paid for via fee for service. If non-enrolled patients tend to use above-average amounts of services, the revenue the practice currently earns per non-enrolled patient is likely to be larger than what it would earn if these patients were enrolled and their services largely paid for via capitation. Switching these patients to enrolled status therefore could reduce the practice's revenue substantially. A variety of measures could be used to mitigate this problem. One approach would be to allow practices to switch to regular fee-for-service compensation for individual patients once their use of services in a given year exceeded a certain threshold; in

the health economics literature, such patients are sometimes referred to as "outliers." The capitation option could also be made more attractive by having a schedule of capitation rates differentiated not only by patient age and sex, but also by other factors that can be used to predict heavy future service use – such as having been diagnosed with certain chronic illnesses or having used a large volume of services in past years.

WHAT ONTARIO SHOULD DO NEXT

To us, the case for paying Canadian primary care doctors through methods other than traditional fee for service, is compelling. Calls for payment reforms go back a long time, and successive Ontario governments should be commended for experimenting with new options.

The experiment with patient enrolment models and capitation appears to have been successful in the sense that doctors who have opted to participate now prefer to continue practising under the new models, rather than return to traditional fee for service. The experiment, however, has been costly to the government, and has yielded only modest improvements for patients. We think this largely reflects that the new models have been implemented in ways that greatly weakened the incentives for more cost-effective care that could have been created through less cautious and more complete versions. In our view, the right course of action would be to continue toward more complete versions of the models and to expand them to include elements of extended capitation.¹⁷

In making this recommendation, we recognize that attempts to strengthen and expand the reforms might be politically difficult. Until now, they have not met with particularly active resistance, whether from patients or doctors. In part, this is probably

17 We also think there is a strong case for trying new approaches to compensation of hospital-based specialists; see Blomqvist and Busby (2013).

because the reforms have been introduced with many escape clauses and loopholes – as a range of options that primary care doctors have been free to accept or not – and with almost no restrictions on patients’ freedom of choice. More complete and radical approaches – for example, requiring all primary care doctors to accept a single capitation-based model as a condition for being compensated by OHIP, and restricting patients’ right to seek care from a provider other than the one in whose practice they are rostered – clearly would have been more controversial.¹⁸

Indeed, it is reasonable to argue that the main reason the reforms haven’t been more radical is that had they been, they would have led to increasingly sharp conflict with the medical profession, something that the government at the time was not prepared to confront. In Canada’s single-payer healthcare system, significant changes can only occur through a political process in which the medical profession is an active and influential participant. Given this, any payment reforms that are viewed by any major group of doctors as a threat

to their economic interests will be very difficult politically. Extending and deepening the existing reforms, therefore, is going to be a very challenging task. Still, we think the case for doing so is compelling enough so the government should try.

The upcoming debate about the role of the new Ontario Health Teams offers an opportunity to give the reform process more publicity and to promote greater awareness among patients about the various ways primary care doctors are paid for their services and about what is expected of patients when they sign an enrolment contract with a capitated practice. Without better public understanding and support, Ontario’s ability to undertake serious health policy reform will remain limited and its healthcare system will fall further behind those in other countries. Over the past several decades, Ontario has quietly taken the lead among Canadian provinces in trying new approaches to primary care. It should now seek broader public understanding and support for going further with these initiatives, and incorporate them as key elements in the construction of a system of Ontario Health Teams.

18 In an elegant contribution, Kantarevic and Kralj (2016) show that, if there are unobservable differences among doctors in the way they like to practise medicine, it is theoretically possible to improve economic efficiency by designing, and allowing doctors to choose from, a menu of contracts with differing blends of capitation and fee for service. In practice, getting the government and the medical profession to agree on the menu might be difficult, however.

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