PRB 01-35E

REMUNERATION OF PRIMARY CARE PHYSICIANS

Michael Holden
Odette Madore
Economics Division

18 March 2002

PARLIAMENTARY RESEARCH BRANCH
DIRECTION DE LA RECHERCHE PARLEMENTAIRE

The Parliamentary Research Branch of the Library of Parliament works exclusively for Parliament, conducting research and providing information for Committees and Members of the Senate and the House of Commons. This service is extended without partisan bias in such forms as Reports, Background Papers and Issue Reviews. Research Officers in the Branch are also available for personal consultation in their respective fields of expertise.

CE DOCUMENT EST AUSSI PUBLIÉ EN FRANÇAIS

Table of Contents

CANADA

LIBRARY OF PARLIAMENT
BIBLIOTHÈQUE DU PARLEMENT

REMUNERATION OF PRIMARY CARE PHYSICIANS

Although there is no single best way to pay physicians in all circumstances, too little use is made of alternatives to fee-for-service as a payment method in Canada. Fee-for-service should be replaced wherever that method of payment aligns poorly with the nature or objective of the service being provided.(1)

INTRODUCTION

Primary care is usually the first point of contact that people have with the health care system. In Canada, primary care is organized predominantly around family physicians and general practitioners working in solo and small-group practices. Approximately one-third of primary care physicians are solo practitioners. Approximately 45% of primary care physicians work in group practices, which average five physicians per group. The vast majority of primary care practices are owned and managed by physicians.(2)

Fee-for-service payment is the dominant form of primary care physician remuneration in Canada. More precisely, 89% of family physicians receive fee-for-service payments, accounting for an average of 88% of their total income. Approximately one-fifth of family physicians receive at least a portion of their income from a salary, deriving an average of 56% of their total income from this source. Less than 2% of family physicians are paid capitation which generates 72% of their total income.(3)

---

(1) M. Barer and G. Stoddart, *Towards Integrated Medical Resource Policies for Canada: Background Document*, Centre for Health Economics and Policy Analysis, McMaster University, Hamilton, Ontario, 1991, pp. 1-10.

(2) College of Family Physicians of Canada, *The CFPC National Family Physician Survey: Summary Report*, Toronto, October 1998 (document available on the CFPC website at http://www.cfpc.ca/).

(3) *Ibid.*

The basic structure of primary care organization, funding and delivery in Canada – private, fee-for-service, solo, and small group practice – has remained intact despite repeated calls for reform at both the national and provincial levels.(4) Modifying the way in which primary care physicians are remunerated is widely recognized as one area where meaningful health care reform can be undertaken. It is believed that, because primary care physicians are the first point of contact for patients and are the "gatekeepers" to the rest of the health care system, changing their mode of remuneration could have the capacity to alter the way the whole system is used.

The purpose of this paper is to describe and compare the options for primary care physician remuneration. Broadly speaking, these fall into three general categories: fee-for-service, salary, and capitation. A fourth category – blended remuneration, which incorporates elements of the first three – is also discussed. Each mode of remuneration is examined in terms of its advantages and disadvantages and its application in selected countries. The paper also provides a brief review of existing literature with respect to the opportunities for alternative remuneration modes for primary care physicians in Canada.

FEE-FOR-SERVICE

Fee-for-service is the most common method of physician remuneration in primary care settings in Canada. Under a fee-for-service payment scheme, physicians bill the provincial health care insurance plan for each service they provide to patients according to a pre-set schedule of tariffs. Physicians' gross annual income is therefore determined by the quantity and type of health services provided, as well as the pre-determined fee.(5)

However, because most primary care physicians in Canada work in privately owned solo or group practices, they are responsible for absorbing the costs associated with

---

(4) National Forum on Health, *Canada Health Action: Building on the Legacy – Final Report*, 1997; Health Services Restructuring Commission (Duncan Sinclair, Chair), *Primary Health Care Strategy*, Ontario, December 1999; Commission d'étude sur les services de santé et les services sociaux (Michel Clair, Chair), *Les Solutions Émergentes*, Quebec, January 2001; Commission on Medicare (Kenneth Fyke, Chair), *Caring for Medicare: Sustaining A Quality System*, Saskatchewan, April 2001; Premier's Advisory Council on Health (Don Mazankowski, Chair), *A Framework for Reform*, Alberta, December 2001.

(5) C. Skedgel, *Alternatives for Physician Payment*, Population Health Research Unit, Dalhousie University, Halifax, 1996, p. 1. Available at www.medicine.dal.ca/phru/reports.htm.

delivering any health service, including administration, supplies and staff. These costs are typically accounted for in the pre-set fee schedule.

Fee-for-service is a relatively simple and transparent payment method. It is also fairly easy to administer and can be applied to a physician practice of any size or type. This in part accounts for its international popularity. A number of countries – including Australia, Japan, Germany and Belgium – operate fee-for-service schemes exclusively, while many other countries – including the United States and Norway – incorporate aspects of fee-for-service in their payment structure.(6)

In the United States, for example, the federal Medicare system – which provides public coverage for health services mainly to the elderly – uses a fee-for-service payment scheme. In some U.S. states, Medicaid – a joint federal-state health care insurance plan for the very poor – also pays primary care physicians on a fee-for-service basis, as do a number of private health care insurers.(7)

A. Advantages to Fee-for-Service

Patients' freedom of choice is often presented as one of the main advantages of a fee-for-service system. This contrasts sharply with a system of capitation payment whereby patients must be assigned to a specific primary care physician or practice. Under fee-for-service, patients not only have complete freedom in choosing their doctors, they are not restricted from changing physicians if they wish, or from seeking a second opinion. Research indicates that this promotes a sense of accountability among primary care physicians because if patients are not satisfied with the level or quality of service they receive, doctors may lose business and therefore income.

On a related vein, some experts believe that because doctors on a fee-for-service scheme are paid according to their workload, they are rewarded for productivity.(8) In this

---

(6) CESifo, "Primary Health Care: Basic Characteristics, 2000," Database for Institutional Comparisons in Europe (DICE), Ifo Institute for Economic Research with the Centre for Economic Studies, Munich, 2000, pp. 1-6. Available at http://www.cesifo.de/pls/portal30/docs/FOLDER/IFO_PORTAL/DICE_DATABASE/DICE_HEALTH/DICE_HEALTH_HEALTH_SYSTEMS/T0801-PHC-BASIC-CHARACT.PDF.

(7) Senate, Standing Committee on Social Affairs, Science and Technology, *The Health of Canadians – Volume Three: Health Care Systems Elsewhere*, Interim Report of the Committee, January 2002, pp. 47-48.

(8) W. McArthur, "Paying the Doctor," *Fraser Forum*, Fraser Institute, Vancouver, July 1998, p. 2. Available at www.fraserinstitute.ca/publications/forum/1998/july/health_care.html.

context, they consider productivity not to refer to patient outcomes, quality of care or any other results-based measure, but simply to the volume of services provided by the physician. The more patients a physician sees, the higher the take-home pay. For this reason, fee-for-service tends to be popular among primary care physicians as it provides them with some degree of control over their net incomes.(9)

As previously mentioned, under most fee-for-service payment schemes, physicians are responsible for absorbing any costs associated with providing health services. This creates a strong incentive for physicians to provide those services as efficiently and cost-effectively as possible.(10) Failure to keep costs down lowers physicians' take-home pay.

B. Disadvantages to Fee-for-Service

Although fee-for-service is a common form of primary physician remuneration, it is not without its disadvantages. A number of experts believe that fee-for-service payments send an inappropriate signal to physicians – to over-provide medical services. The more health services physicians are able to bill to the provincial health care insurance plan, the more income they receive, regardless of the needs of the patient, the outcomes produced or the cost of providing the service. Moreover, because the remuneration is attached to the service, physicians who locate in areas with greater needs receive no financial reward as long as they can satisfy their workload and income expectations by remaining in their preferred locations.(11)

Critics of fee-for-service payment maintain that physicians also have an incentive to over-burden the health care system with unnecessarily expensive procedures because they tend to pay better.(12) In their view, fee-for-service has led to an unwarranted reliance on

---

(9) L. Page, "Capitation at the crossroads: The trend back to fee for service," *American Medical News*, 5 March 2001, pp. 1-5. Available at www.ama-assn.org/sci-pubs/amnews/pick_01/bisa0305.htm.

(10) J. Hurley, B. Hutchison, M. Giacomini, S. Birch, J. Dorland, R. Reid and G. Pizzoferrato, *Policy Considerations in Implementing Capitation for Integrated Health Systems*, Canadian Health Services Research Foundation, Ottawa, 1999, p. 50.

(11) S. Birch, L. Goldsmith and M. Makela, *Paying the Piper and Calling the Tune: Principles and Prospects for Reforming Physician Payment in Canada*, Centre for Health Economics and Policy Analysis, McMaster University, Hamilton, 1994, p. 3.

(12) P. Armstrong and H. Armstrong, *Primary Health Care Reform: A Discussion Paper*, prepared for the Canadian Health Coalition, January 2001, p. 6.

prescriptions, diagnostic tests, and referrals to specialists when less costly or non-billable physician services such as patient consultation would be sufficient.(13)

Because the number of patients seen by a primary care physician and the mix of services they require are variable, total physician spending under fee-for-service is inherently unpredictable. Consequently, in the absence of any explicit budgetary control of physician expenditures, health authorities are unable to reliably contain total medical care spending.(14)

Indeed, efforts to date in restraining health care expenditures by controlling fee levels, limiting the number of physicians able to bill the public health care insurance plan, or by capping total physician remuneration annually, have proven to be difficult to administer and have largely been unsuccessful.(15) For example, experiments in Ontario aimed at controlling fee levels were found to coincide with a rapid increase in the number of services provided per physician. This is possibly a result of physicians increasing the level of billings to achieve their income expectations in the face of fixed fee levels.

Fee-for-service payments are also accused of focusing physicians' efforts on finding short-term solutions to specific ailments rather than promoting long-term patient health. Analysts argue that this volume-based payment plan encourages short, frequent visits and in a sense, penalizes doctors for fulfilling a patient's health care needs – long or infrequent patient visits have a negative effect on physician income.(16) As a result, fee-for-service does not encourage doctors to spend time with their patients to explore potential causes for ill health or to identify longer- term disease prevention or health promotion strategies.(17) For these reasons, many provincial commissions and task forces in Canada have identified fee-for-service as incompatible with promoting the best productive use of the time and skills of primary care physicians.

According to some analysts, fee-for-service encourages inefficient use of medical resources in the delivery of primary care. Because doctors are paid for every service they provide, they have an incentive to bill for treatments that could be provided more cost-effectively

---

(13) *Ibid.*, p. 6. Also, World Health Organization (WHO), *The World Health Report 1999 – Making a Difference*, Geneva, 1999, p. 36. Available at www.who.int/whr/2001/archives/index.htm.

(14) WHO (1999), p. 36. Also Skedgel (1996), p. 1.

(15) Hurley *et al*. (1999), p. 50 and Skedgel (1996), p. 1.

(16) Skedgel (1996), p. 1.

(17) Armstrong and Armstrong (2001), p. 6.

by other health care providers. This has effectively discouraged collaborative and inter-disciplinary practices.(18)

SALARY

Salaried work is perhaps the simplest form of remuneration and is common outside the medical profession. As mentioned above, in Canada approximately 20% of primary care physicians receive a salary. However, these physicians are typically found in a university environment, where doctors perform a mixture of research, teaching and clinical work.(19)

Under salary-based payment, primary care physicians receive a flat annual income regardless of the number of patients they see or the volume of services they perform. Salaries are typically negotiated in advance and, as in any other occupation, can be adjusted in accordance with seniority and promotion.

From an international perspective, salaried physicians are not as common in primary care settings as are those paid on a fee-for-service basis or by some other form of remuneration. However, a number of countries – including Sweden and France, where salaries are the dominant form of remuneration – do employ salary-based physicians. In these two countries, physicians are public employees working in primary care centres which are owned by public health authorities.(20)

A. Advantages to Salary

Because salary payments are flat regardless of the level or type of services provided, physicians have no motivation to over-supply services, prescribe unnecessary treatments, or encourage avoidable visits. In the view of experts, this represents an improvement over the fee-for-service model which tends to reward such behaviour.

At the same time, the salary option also eliminates the financial penalty implicit in longer patient visits under fee-for-service. Doctors are free not only for more thorough patient

(18) *Ibid.*, p. 7.

(19) McArthur (1998), p. 1.

(20) CESifo (2000), pp. 2, 4.

consultations but also to engage in more preventive care and to pursue longer-term health care solutions.

To some degree, salary-based payment appears to induce more efficient use of health care resources. Salaried physicians are commonly associated with larger primary care centres which employ a range of health care providers.(21) In those cases, because doctors would no longer be paid for each service performed, a health centre would have the ability to distribute patients and responsibilities across its employed staff in a more efficient and cost-effective manner.

From the point of view of the physician, one of the chief benefits to salaried labour is the consistency and certainty. A salary is paid regardless of the number of patients or the type of procedures performed. Salaried physicians thus face no financial risk outside of any penalty or incentive mechanisms incorporated into the pay structure.(22)

As a corollary, when primary care physicians are salaried, it becomes much easier for public health care authorities to control aggregate expenditures. This contrasts with the fee-for-service model, where the number of patient visits and the type and quantity of services provided determine overall primary care costs. Because salaries are negotiated in advance, the number of physicians becomes the chief determinant of expenditure at the primary care level.(23)

B. Disadvantages to Salary

From a patient care standpoint, the main drawback to paying physicians by salary is the effect that salaries have on the incentive to provide health services. Under fee-for-service, net incomes are strongly related to the level of service offered. With salary-based payment, remuneration is divorced from the level or quality of service.(24) As such, physicians have little incentive to exceed a basic minimum level of care.(25)

---

(21) This is the case in France and Sweden.

(22) M. Maciekewski, "How are University Employees Affected by Health Plan Payments to Physicians?" School of Public Health, University of Minnesota, prepared for the Health Plan Task Force, State of Minnesota, September 1998, Introduction Section – "How do Health Plans Pay Physicians?"

(23) Birch *et al*. (1994), pp. 8-10. Also, Skedgel (1996), p. 2.

(24) This effect can be offset to some extent by introducing bonus payments or penalties into the salary structure.

(25) Skedgel (1996), p. 2.

Critics of this payment method also point out that salaries eliminate productivity incentives – as measured by volume of services provided.(26) Although a fee-for-service payment scheme rewards doctors for service volume, salaried physicians have little motivation to see many patients. One researcher points out that salaried primary care physicians in Sweden may see as few as 6-10 patients per day, while Canadian doctors routinely see 5 to 6 patients per hour.(27) Because the number of physicians is a significant factor in determining overall health care spending in a salary-based system, a drop in patient visits per physician could lead to the hiring of additional doctors, thus increasing the aggregate costs of primary care delivery.

Research also suggests that salary remuneration may lead to gaps in service where the hours of operation contracted for under a salary agreement might not coincide with the timing of population needs for care. Finally, unlike capitation, salaries provide no incentive for physicians to ensure continuity in their relationship with patients (in terms of prevention, promotion and long-term health outcomes), because these payments are not tied to patient care.(28)

CAPITATION

Capitation is a flat fee-per-patient payment system whereby primary care physicians are paid a pre-determined amount for each patient registered or enrolled in their care. Generally, the pre-set capitation fee is based on current patterns of average annual use of primary care services across the entire population and adjusted according to age and sex. Under a system of capitation, physicians are paid the fee regardless of the health of their patients or the number of patient visits. In exchange, they agree to provide their patients with a set of insured health services for a specified period of time, usually a year, and agree to pay all expenses associated with that care.

In order for a capitation system to work, patients must make a commitment to seek primary care services from a specific doctor or group practice. This commitment, usually

---

(26) W. Savedoff, "Payment Mechanisms: Your Health Depends on It," *Development Policy*, Inter-American Development Bank, July 1997, p. 2. Available at www.iadb.org/oce/news/3231.htm.

(27) McArthur (1998), p. 2.

(28) Birch *et al.* (1994), p. 10.

referred to as "rostering," occurs in one of two ways: either through voluntary patient enrolment; or through proximity-based enrolment where patients are automatically assigned to a practice in their particular region. Typically, this latter geographic rostering is more common in rural and remote areas where no other practice is immediately available.(29)

Italy, the Netherlands and New Zealand all use capitation as their main mode of remuneration for their primary care physicians. However, the United States certainly provides the most numerous case studies within a single jurisdiction. Many private-sector health care providers and state-run Medicaid programs pay their physicians on a capitation scheme. Because of the freedom of health care providers to choose a mode of remuneration, there is a multitude of variations on capitation in the United States.(30)

A. Advantages to Capitation

Capitation addresses the chief drawback of fee-for-service – that doctors have an incentive to over-provide health services. Because capitation pays doctors per patient and not per billable service, patient visits become a source of expense to physicians as opposed to a source of revenue. As such, it is in the doctor's best interest to minimize patient utilization. Physicians bear the cost of providing health services and thus are discouraged from prescribing needlessly complicated or expensive treatments as well as unnecessarily frequent patient visits.

As a corollary, capitation encourages primary care physicians to promote long-term, preventive health care solutions, such as physical fitness and a healthy diet, thus reducing the likelihood of future patient visits.(31) In essence, doctors are rewarded for the positive health outcomes of their patients. But ultimately, this lowers the cost of providing health services and thus increases physicians' take-home pay.

There is, therefore, a strong incentive to promote and maintain patient satisfaction under capitation because financial rewards are based on the number of patients registered. The loss of a dissatisfied patient to another physician or group practice leads directly to the loss of income unless other patients can be attracted by the physician or his/her group practice.

---

(29) Hurley *et al.* (1999), pp. iv, 62.

(30) CESifo (2000), pp. 3, 6; Hurley *et al.* (1999), pp. 7, 9; Senate (January 2002), pp. 50-51.

(31) Skedgel (1996), pp. 2-3.

Experts also suggest that capitation induces a more efficient use of health care resources because physicians bear the cost of providing health services. Under fee-for-service, physicians are paid for each and every service performed, regardless if that service can be more cost-effectively performed by other health care providers such as nurse practitioners.(32) On a capitation payment plan, however, such an action could raise the overall costs of running a primary care practice, resulting in lower net income for the physician.

Another stated advantage of capitation is that overall physician expenditures are easier to control, compared to fee-for-service billing. The driving force of expenditures in a capitation system is the size of the population being served, as opposed to the number of physicians choosing to perform in the system (salary payment mechanism) or the volume of health services provided (fee-for-service remuneration). Once the level of flat fee per person has been set, changes in physician expenditures/incomes are linked to changes in the size and characteristics of the population being served – variables that are largely outside the control of either government or physicians. In the absence of major changes in the prevalence and type of health care needs or population expectations, there is little justification for large increases in spending per person that might be required to maintain or meet the income aspirations of an increasing physician supply.

According to some experts, capitation payment is more effective in large primary care practices which provide a wide range of insured health services and make use of a variety of health care providers. This is the result of a combination of two factors.

- The first relates to the earlier point about the cost-effective utilization of resources. A larger practice can take advantage of shared facilities, areas of expertise, mutual consultation and the use of less-expensive staff to perform non-essential medical services. These all serve to lower the cost of primary health care delivery and increase the income of the practice.
- The second factor is that a group of physicians can work together to share the risks associated with capitation. Because doctors are paid on a per-patient basis, any sudden increase in the number of visitations, such as during a flu epidemic, can have a dramatic negative effect on physician incomes. Working within a larger practice allows physicians to smooth out this type of income volatility.

(32) Senate, Standing Committee on Social Affairs, Science and Technology, *The Health of Canadians – Volume Four: Issues and Options*, Interim Report of the Committee, September 2001, p. 52.

B. Disadvantages to Capitation

A disadvantage often raised in the literature with respect to capitation is the restriction on a patient's freedom of choice. Within a system of capitation payment, patients are assigned to a specific primary care physician or practice. In most models of capitation, they may choose another physician only when the enrolment period is over – usually six months or a year. This contrasts with the fee-for-service remuneration scheme, whereby patients not only have complete freedom in choosing their doctors, but they also are not restricted from changing physicians if they wish, or from seeking a second opinion.

Although capitation eliminates the tendency inherent in fee-for-service to over-provide health services, it replaces it with a new problem – an incentive to under-provide. Because doctors are responsible for the costs of providing health services and are not remunerated accordingly, they may be tempted to provide a sub-optimal level of care. It is argued, however, that this drawback can be counteracted to some extent by medical ethics and voluntary rostering:

> 1. First, under-servicing patients is in conflict with the ethical considerations of the physician even if it offers a net financial gain to the physician. This contrasts with fee-for-service where the financial incentive to do more is compatible with the ethical incentive to do all one can for a particular patient.
>
> 2. Second, under voluntary rostering, patients are free to de-roster themselves if they feel they are receiving unsatisfactory medical care.(33)

Even so, asymmetric information(34) between physicians and their patients may prevent patients from being fully aware of the quality of care they are receiving. The problem of under-providing services is also more significant in the case of geographic rostering. In rural areas with a limited number of physicians, patient choice may not even exist.(35)

"Cream skimming" (or "cherry picking") is another disadvantage to capitation. Cream skimming refers to the fact that physicians have an incentive to exclude specific patients

---

(33) Birch *et al.* (1994), p. 16.

(34) In this context, asymmetric information refers to the fact that patients do not have the same level of information about diagnoses and appropriate treatment options as do physicians.

(35) Hurley *et al.* (1999), p. iv.

or classes of patients from their practice because they may be more needy and therefore more costly. This problem can be minimized to some extent by forbidding primary care practices from selecting, dismissing, recruiting or rejecting patients. Evidence suggests, however, that it is not possible to entirely eliminate cream-skimming.(36)

Even under voluntary enrolment in urban areas, geographic proximity and convenience will be important factors in determining the patient roster. Younger and wealthier individuals tend, on average, to be healthier and to consume fewer health services.(37) As such, primary care practices may avoid locating in poorer areas where more frequent visits will erode the profitability of the practice.

Another drawback to capitation is the possibility of "off-loading" health services. Capitation rates are set to reflect the average cost of providing a specific "bundle" of services. Inappropriate off-loading occurs when a physician chooses not to offer a service which is included in the capitation rate. Primary care physicians have some incentive to increase their incomes by refusing to perform expensive services or instead by referring patients to specialists for those services. If the specialist is paid on a fee-for-service basis, this could also amount to double-billing because both the physician and the specialist would, in essence, be paid for that particular service.(38) This problem of off-loading can be offset if the primary care physician or group is responsible for paying the services of the specialist.

Capitation introduces a significant dose of risk into physicians' net incomes, a characteristic of the payment scheme that has made it unpopular with some U.S. doctors.(39) The "quality" of a patient roster, the number of patient visits, and the nature of the proper diagnoses are all subject to a high degree of uncertainty over any given period of time. As mentioned above, a sudden increase in sick patients in a particular month can substantially erode

---

(36) *Ibid.*, pp. 2-3. Also, Alberta, Ministry of Health and Wellness and Alberta Medical Association, Alternate Payment Plan Subcommittee, *Alternative Payment Plan Handbook*, Alberta Health and Wellness and Alberta Medical Association, September 2000, p. 12.

(37) Senate, Standing Committee on Social Affairs, Science and Technology, *The Health of Canadians – Volume One: The Story so Far*, Interim Report of the Committee, March 2001, p. 87. Data relating age to consumption of health services can be obtained at the Canadian Institute for Health Information (CIHI) website: www.cihi.ca.

(38) Alberta (2000), p. 12.

(39) K. Trespacz, "Don't Let a Fee-for-Service Mind Set Distort Your Approach to Capitation," *Managed Care*, Stezzi Communications, April 1999, pp. 1-5. Also, Page (2001), pp. 1-5.

physicians' net incomes under capitation. By contrast, fee-for-service would have rewarded the increased workload.

The literature suggests that this aspect of capitation makes it ill-suited to small primary care practices, the type most common in Canada today. The cost of one sick patient could exceed the capitation income from many healthy patients.(40) Integrated Health Systems (IHS) or other large primary care group practices are better suited to capitation because the increased risk can be diffused across all physicians belonging to a primary care practice. Estimates suggest that an IHS would require between 2,300 and 2,500 enrollees in Canada in order to generate stable income for primary care physicians.(41)

BLENDED REMUNERATION

The final option for primary care physician payment – blended remuneration – is not so much a specific method of payment as it is a combination of payment types. Most blended remuneration schemes include, or are based on, capitation payments but also incorporate elements of any number of other payment forms. The objective of blended payments is to limit the shortcomings associated with capitation (under-provision of services, cream skimming, and financial risk to primary care physicians), while taking advantages of the benefits of the other remuneration forms.(42)

> Blended funding arrangements provide a potential policy response to the unacceptability of capitation to most primary care physicians and the perverse incentives associated with the available physician payment options. Among the funding streams that could be incorporated into blended funding models are fee-for-service, capitation, infrastructure funding, program funding, performance payments, and benefit packages.(43)

---

(40) Page (2001), p. 3.

(41) Canadian Health Services Research Foundation (CHSRF), *Integrated Health Systems in Canada: Three Policy Syntheses – Questions and Answers*, CHSRF, July 1999, p. 5.

(42) Hurley *et al.* (1999), pp. 20-22.

(43) B. Hutchison, J. Abelson and J. Lavis, "Primary Care in Canada: So Much Innovation, So Little Change," in *Health Affairs*, vol. 20, no. 3, May-June 2001, p. 128.

The ability of blended payment schemes to integrate different funding streams allows public policy objectives to be incorporated into physician remuneration. For example, blended remuneration can be structured to: compensate physicians for the higher costs of setting up a practice in large cities; encourage practices in rural, remote or other chronically under-serviced areas; or provide certain types of services (vaccination, promotion programs, etc.).

The drawback to blended payments is that they dilute the merits of the "pure" remuneration schemes and can in fact introduce the undesirable characteristics of the added payment schemes. Moreover, a system of blended remuneration can require maintaining different payment schedules which may increase administrative costs.

The range of blended payment options is nearly unlimited. As such, it is difficult to discuss this remuneration scheme in terms of detailed merits and drawbacks outside of the broad general statements above. It is perhaps more useful to examine a specific case study to provide an example of the payment options which can be incorporated into a blended remuneration scheme.

In the United Kingdom (UK), the national public health care insurance plan (the "National Health Service" or NHS) pays primary care physicians (general practitioners or GPs) according to a unique formula of blended remuneration that incorporates a combination of capitation fees, allowances, target payments and fee-for-service. Capitation fees, which are differentiated into three age groups, make up about half of GPs' gross income. The allowances provide reimbursement for the costs of setting up and maintaining a practice; these payments vary in size to encourage doctors to locate their practice in rural and remote areas. The targeted payments are designed to encourage physicians to run health promotion and chronic disease management programs. Finally, the fee-for-service payment is directed at certain health services, such as contraception.(44)

The UK experience is of particular interest because public heath authorities have recognized that the mode of remuneration is only one of many factors that influence the behaviour of primary care physicians. The GP Fundholding system was adopted in light of this recognition. More precisely, the system of GP Fundholdings extends the responsibility of the physician to include management and financial accountability for secondary and tertiary care.

(44) CESifo (2000), p. 4; Senate (January 2002), pp. 40-42.

Primary care physicians in the United Kingdom are provided with a budget or "fund" for referrals. This fundholding ensures that physicians retain an interest in, and responsibility for, not only their own provision of medical services, but also for that which is provided subsequent to the referral. In this way, the agency relationship between physician and patient is much more comprehensive.

Such an approach also changes the nature of the relationship between primary care physicians and other health care providers. The GP fundholder is the "customer" for hospitals and medical specialists. The level and nature of payment will depend upon agreements (i.e., contracts) entered into between physicians and hospitals/specialists.

OPPORTUNITIES FOR ALTERNATIVE REMUNERATION MODES FOR PRIMARY CARE PHYSICIANS IN CANADA

Overall, which method of primary care physician remuneration would appear to be the most appropriate? There is no easy answer to this question as each mode of remuneration has its own strengths and weaknesses. In Canada, numerous studies and pilot projects examining how alternative forms of physician payment might be applied to primary care settings have been carried out. Experts in this field have generally concluded that "one size" does not fit all situations:

> Research to date has not identified one funding system as ideal; every model has advantages and disadvantages. Policy makers need to assess their own situation, understand the risks and benefits of each payment model, and decide for themselves what model best addresses the needs of the funders, providers, and the community.(45)

A similar conclusion is reached with respect to the experience gleaned from elsewhere:

> The main lesson from the experience of other jurisdictions is that no one model has been universally adopted or implemented. Each jurisdiction has tailored its policies to suit the needs of the payer, the governing authority and the population being served.

(45) CHSRF (1999), p. 2.

> For example, the UK and many other European countries use a form of capitation payment mostly for primary care services. Both the UK and Denmark have a blended system of capitation payments for core services and fee-for-service payments for other services. Separate funding envelopes are used for special programs and/or for infrastructure support.
>
> In contrast, a number of Health Maintenance Organizations in the United States use capitation funding to pay for the full range of services.(46)

In selecting a mode of remuneration, consideration should be given to a variety of factors, such as:

- physicians' willingness to adopt a new form of payment;
- the impact on patients' health outcomes, including access to and quality of health services, including cost control; and
- compatibility of the remuneration scheme with the overall objective of public health care policy.

A. Physician Perspective

A survey by the Canadian Medical Association reveals that 34.6% of Canadian physicians prefer to be paid on a fee-for-service basis, while 24.4% favour salary and only 1% choose capitation. Approximately 27.4% of Canadian physicians indicated that they would like to obtain some form of blended remuneration for their work.(47)

Although fee-for-service remains the most popular form of remuneration among physicians, its support has declined considerably over the past six years. The same survey in 1995 indicated that, at that time, a full 50% of physicians in Canada preferred fee-for-service. This rapid decline in the popularity of fee-for-service suggests that doctors are becoming more open to considering alternative payment methods.

However, physicians and their professional associations often equate government interest in reforming remuneration with threats both to their overall level of income as well as to their autonomy in determining that level. It would therefore be essential, as many studies

---

(46) *Ibid.*, p. 3.

(47) Canadian Medical Association, "Interest in Alternative Forms of Payment on the Rise: CMA Survey," in *CMA Journal*, 165(5), 2001 (available on the CMA website at http://www.cma.ca/).

suggest, to involve physicians in any attempt to reform their mode of remuneration. Their perspective would be invaluable in identifying the methods of payment that would best help the provincial governments meet their policy objectives while also ensuring the support and cooperation of physicians in implementing those changes.

B. Patient Perspective

Currently, none of the three primary methods of physician remuneration in their usual form relate payment to patients' health outcomes. Moreover, the lack of reliable data makes it particularly difficult to assess the impact of physician remuneration on health outcomes, and the access to and quality of health services. As a result, the empirical evidence relating to physician payment and patient care is remarkably sparse. Hutchison, Abelson and Lavis reviewed the existing literature and concluded:

> As we assess the state of evidence regarding primary care physician payment methods based on the strongest, most relevant studies we have been able to identify, we see the following:
>
> 1) there is suggestive evidence that patients' assessments of overall satisfaction and access/availability are more positive in settings with fee-for-service as opposed to salary or capitation payment;
> 2) there is minimal or conflicting evidence regarding patients' assessment of continuity, comprehensiveness, coordination, technical quality, and interpersonal aspects of care;
> 3) there is minimal evidence regarding practice patterns (for example, frequency of home visits and length of office visits);
> 4) there is suggestive evidence that capitation payment results in higher rates of referrals to specialists;
> 5) there is minimal or conflicting evidence regarding quality, utilization, and costs of care;
> 6) there is minimal evidence regarding differences in use of nonphysician providers in fee-for-service versus capitated practices;
> 7) there is suggestive evidence of better preventive care performance by salaried and capitated physicians than by fee-for-service physicians.(48)

This review of previous studies underscores the need for better information regarding the effect of physician remuneration on health outcomes. In some cases, it casts doubt

(48) Hutchison, Abelson and Lavis (2001), p. 125.

on the theoretically established relationship between payment scheme and the resulting incentives. It highlights the fact that several studies have produced conflicting evidence and also points to an apparent gap between perceived health care quality and actual health outcomes.

The effect on the access to and quality of primary health care is a matter of considerable importance when evaluating alternative forms of physician remuneration. However, measuring health outcomes or perceived quality of care is a challenging task. Given the relative lack of quality information on the subject, improved data collection and more detailed study about the relationship between the mode of physician remuneration and health outcomes would be a prudent first step prior to implementing any new payment type.

C. Public Health Care Policy

It is essential to ensure that the modes of remunerating primary care physicians under consideration are compatible with the stated objectives of public health care policy in Canada. Currently, the delivery of – and public coverage for – primary care services must operate within the parameters of the *Canada Health Act*. The principles of the Act that are important for the consideration of remuneration relate to both patients and physicians. More specifically:

- patients have the right to reasonable access on a prepaid basis to medically necessary physician services; and
- physicians have the right to reasonable compensation for such services.

The current fee-for-service method of paying primary care physicians poses no problems for the *Canada Health Act*. Similarly, a number of experts believe that both capitation and blended remuneration appear to satisfy the principles of the Act.(49) They stress, however, that certain measures could be taken to further ensure that these alternative remuneration schemes do not compromise the basic principles of the Act. For example, to ensure reasonable access, patients rostered with a primary care practice receiving capitation or blended remuneration should have opportunities for exit, either at periodic times or by formal request.

(49) See for example, Birch, Goldsmith and Makela (1994), p. 25; and British Columbia Medical Association, "Canada Health Act," Section 4 of *Evaluation of Rostering Patients*, 2001. Available at http://www.bcma.org/.

Similarly, cream-skimming should be prohibited so that people with health risks are not discriminated against in their access to primary care services. To ensure that physicians receive reasonable compensation, the capitation funding amounts should be adjusted according to the health risks associated with different types of patients.

Overall, the literature suggests that the *Canada Health Act* appears to be flexible enough to accommodate the expansion of the use of other modes of remunerating primary care physicians by provinces that wish to do so. In other words, the introduction of alternative payment schemes for primary care physicians would not be problematic under the Act. The real challenge is to find modes of remuneration which provide the right signals, signals which align the incentives to physicians with the objectives of the publicly funded health care system.

CONCLUSION

In an effort to find this balance, many provinces have already begun experimenting with alternative payment mechanisms for their primary care physicians. Pilot and demonstration projects are flourishing across the country. All ten provinces have primary health care initiatives underway, many of which involve inter-disciplinary primary care teams working together. Physician remuneration in these models varies from salary/contract payment to capitation to blended payments.(50)

It appears, however, that blended remuneration is emerging as the most likely alternative to fee-for-service in Canada. Certainly, the focus on blended payments is increasing. Provincial health care commissions and task forces – including the Sinclair Commission in Ontario, the Clair Commission in Quebec and the Mazankowski Report in Alberta – have all recommended that their provinces further investigate blended remuneration schemes for primary care physicians.

Experts argue that despite the research and evidence available on the subject, as well as the recommendations of these reports, there seems to be little pertinent information to be generated from continued study of pure forms of fee-for-service, capitation and salary.

(50) See Appendix C in Saskatchewan (2001), p. 98.

Instead, such research might be more usefully focused on studying the effects of different blends of payment methods in combination with various settings and physician characteristics.(51)

Far from simplifying future study of primary care physician remuneration, further examination of blended payment mechanisms considerably broadens the research agenda. Given the wide range of factors influencing primary health care in Canada, a considerable amount of research and experimentation may be necessary in order to determine a blended remuneration approach best suited to Canadian primary health care.

In fact, it may prove that no one remuneration type is universally applicable. The optimal situation may be the implementation of a multitude of remuneration schemes, each tailor-made for a specific jurisdiction or region. Fortunately, the capacity for experimentation across the provinces and territories is one of Canada's strengths in this regard. Provided that any alternative payment mechanism abides by the principles of the *Canada Health Act* and considers the needs of physicians and patients alike, research and experimentation with alternative modes of remuneration should be encouraged.

REFERENCES

Alberta. Ministry of Health and Wellness and Alberta Medical Association. Alternate Payment Plan Subcommittee. *Alternative Payment Plan Handbook.* Alberta Health and Wellness and Alberta Medical Association. September 2000.

Armstrong, P. and H. Armstrong. *Primary Health Care Reform: A Discussion Paper.* Prepared for the Canadian Health Coalition. January 2001.

Barer, M. and G. Stoddart. *Toward Integrated Medical Resource Policies for Canada: Background Document.* Centre for Health Economics and Policy Analysis. McMaster University. Hamilton, Ontario, 1991.

Birch, S., L. Goldsmith and M. Makela. *Paying the Piper and Calling the Tune: Principles and Prospects for Reforming Physician Payment in Canada.* Centre for Health Economics and Policy Analysis. McMaster University. Hamilton, 1994.

British Columbia Medical Association. "Canada Health Act." Section 4 of *Evaluation of Rostering Patients*, 2001. Available at http://www.bcma.org/.

Canadian Health Services Research Foundation. *Integrated Health Systems in Canada: Three Policy Syntheses – Questions and Answers.* CHSRF. July 1999.

(51) Birch *et al*. (1994), p. 39.

CESifo. "Primary Health Care: Basic Characteristics, 2000." Database for Institutional Comparisons in Europe (DICE). Ifo Institute for Economic Research with the Centre for Economic Studies. Munich, 2000.

Chesanow, N. "Can Contact Capitation Conquer Costs?" *Medical Economics*, vol. 75, no. 18, September 1998, pp. 110-121.

Commission d'étude sur les services de santé et les services sociaux (Michel Clair, Chair). *Les Solutions Émergentes.* Quebec, January 2001.

Commission on Medicare (Kenneth Fyke, Chair). *Caring for Medicare: Sustaining A Quality System.* Saskatchewan, April 2001.

Health Services Restructuring Commission (Duncan Sinclair, Chair). *Primary Health Care Strategy.* Ontario, December 1999.

Hurley, J., B. Hutchison, M. Giacomini, S. Birch, J. Dorland, R. Reid and G. Pizzoferrato. *Policy Considerations in Implementing Capitation for Integrated Health Systems.* Canadian Health Services Research Foundation. Ottawa, 1999.

Hutchinson, B., J. Abelson and J. Lavis. "Primary Care in Canada: So Much Innovation, So Little Change," *Health Affairs*, vol. 20, no. 3, May/June 2001, pp. 116-131.

Hutchison, B., J. Hurley, R. Reid, J. Dorland, S. Birch, M. Giacomini and G. Pizzoferrato. *Capitation Formulae for Integrated Health Systems: A Policy Synthesis.* Canadian Health Services Research Foundation. Ottawa, 1999.

Korcok, M. "Capitation begins to transform the face of American medicine." *Canadian Medical Association Journal,* vol. 154, 1996, pp. 688-691.

Léger, P. "Quality control mechanisms under capitation payment for medical services." *Canadian Journal of Economics*, vol. 33, no. 2, May 2000.

Maciekewski, M. "How are University Employees Affected by Health Plan Payments to Physicians?" School of Public Health, University of Minnesota. Prepared for the Health Plan Task Force, State of Minnesota. September 1998.

McArthur, W. "Paying the Doctor." *Fraser Forum.* Fraser Institute. Vancouver, July 1998.

Miller Chenier, N. *Health Policy in Canada.* Publication 93-4E. Parliamentary Research Branch, Library of Parliament. Ottawa, 1999.

National Forum on Health. *Canada Health Action: Building on the Legacy – Final Report.* 1997.

Page, L. "Capitation at the crossroads: The trend back to fee for service." *American Medical News*, 5 March 2001.

Premier's Advisory Council on Health (Don Mazankowski, Chair). *A Framework for Reform.* Alberta, December 2001.

Saskatchewan. Commission on Medicare. *Caring for Medicare: Sustaining a Quality System.* Government of Saskatchewan. Regina, April 2001.

Savedoff, W. "Payment Mechanisms: Your Health Depends on It." *Development Policy.* Inter-American Development Bank. July 1997.

Sekhri, N.K. "Managed care: the US experience." *Bulletin of the World Health Organization*, vol. 78, no. 6, 2000, pp. 830-844.

Senate. Standing Committee on Social Affairs, Science and Technology.

- *The Health of Canadians – Volume One: The Story so Far.* Interim Report of the Committee. March 2001.
- *The Health of Canadians – Volume Three: Health Care Systems Elsewhere.* Interim Report of the Committee. January 2002.
- *The Health of Canadians – Volume Four: Issues and Options.* Interim Report of the Committee. September 2001.

Sierra Systems Consultants Inc. *An Evaluation of Rostering Patients for Medical Services.* Prepared for the British Columbia Medical Association. January 1998. Available at www.bcma.org/IssuesPolicy/PolicyPapersReports/.

Skedgel, C. *Alternatives for Physician Payment.* Population Health Research Unit. Dalhousie University. Halifax, 1996.

Trespacz, K. "Don't Let a Fee-for-Service Mind Set Distort Your Approach to Capitation." *Managed Care.* Stezzi Communications. April 1999.

Vayda, E. "Physicians in Health Care Management: 5. Payment of Physicians and Organization of Medical Services." *Canadian Medical Association Journal*, vol. 150, no. 10, 1994, pp. 1583-1588.

World Health Organization (WHO).

- *The World Health Report 2001 – Mental Health: New Understanding, New Hope.* Geneva, October 2001. Available at www.who.int/whr/index.htm.
- *The World Health Report 2000 – Health Systems: Improving Performance.* Geneva, June 2000. Available at www.who.int/whr/2001/archives/index.htm.
- *The World Health Report 1999 – Making a Difference.* Geneva, 1999. Available at www.who.int/whr/2001/archives/index.htm.