



General practitioners remuneration methods: what consequences?

Olivier Saint-Lary^{1,2}, Carine Franc², Thibault Raginel^{3,4}, Thomas Cartier^{5,6,7}, Marc Vanmeerbeek⁸, Daniel Widmer⁹, Yannick Ruelle⁵

exercer ;119:52-61 .

Olivier.saint-lary@uvsq.fr

Introduction. *The health reform law crystallizes the tensions between the different health system players. Besides the specific issue of third-party payment, which will be addressed in an upcoming article, some professional organizations wish to strengthen fee for services while others call for more mixed forms of remuneration. Many economic analyses were conducted to study the benefits and limits of each mode of physician compensation.*

This article offers a synthesis of the literature about these modes: fee for service, capitation, payment performance and wage labor.

Method. *Collaborative literature analysis between doctors and health economist. The databases searched were MEDLINE, the Cochrane Library and CAIRN.*

Results. *Each mode has specific benefits and limits for the financier, the physicians and the patients. Fee for services increases physician productivity but may increase health spending. Capitation and salary decrease care supply but might help to control health spending and to develop preventive activities. The effectiveness of pay for performance is now being questioned. The current trend is to promote mixed forms of remuneration, hoping to combine the advantages and limit the share of defects of each modality. The complexity of such systems makes it difficult to compare from one country to another.*

Discussion. *The choice of a mode by the financier must take into account both the possible combinations of different payment methods and the developments or societal aspirations to meet population health needs.*

Bonds of interest: The authors have no conflict of interests to declare concerning the information published in this article. You will find the key-words at the end of the text.

Introduction

Under discussion in the French parliament in spring 2015, the proposed legislation known as "modernization of our health system"¹ would modify the terms of remuneration for certain health care professionals, including general practitioners, by establishing an integral and generalized third party payment system. The project has highlighted tensions between different professional organizations. While some would like to reinforce the role of fee for service, which is depicted as the cornerstone of private medical practice, others wish to mix or blend the different terms of remuneration. The objective of this article is to produce a situational analysis of today's scientific knowledge pertaining to the different effects of various terms of remuneration. In another article, we will deal more specifically with the issue of third party payment and the absence of cash advance in primary care.

Terms of remuneration for general practitioners in France: the past and the present

Historically in France, the 1927 charter adopted during a medical trade union congress laid down the foundations of private medical practice. The charter consisted in seven founding principles:

1. the free choice by the patient of his physician;
2. respect for professional secrecy;
3. freedom to prescribe;

4. freedom of establishment;
5. the right to honoraria for each treated patient and direct payment by the patient based on the principle of freely agreed-upon fees;
6. monitoring of patients by the national medical funding organ and of physicians by the doctors' union and the medical arbitration committee;
7. representation of the medical doctors' union in the funding organs.

The 5th point led to the development of fee for service as the main means of remunerating general practitioners (GPs) in France.

Any medical, intellectual or technical action performed by a physician on a patient shall be subject to a precise predefined fee, and the sum total of the different actions performed during a consultation shall constitute its overall price.

In 1960, the French *Assurance maladie* (health insurance) introduced convention agreements for physicians: provided that the professionals' fees for services remain capped and enforceable, patients are reimbursed accordingly². In 1980, the 3rd convention introduced two conventional sectors; in exchange for advantages pertaining to their personal social-security contributions³, practitioners in the first sector are obliged not to go over the limit as concerns conventional tariffs.

1. Département de médecine générale, UFR Paris-Ouest Versailles St-Quentin

2. CESP Inserm UMR 1018 Equipe 1 Economie de la santé, recherche sur les services de santé.

3. Département de médecine générale, UFR Caen.

4. U1086 Inserm-UCBN « Cancers & préventions », Normandie Université

5. Département universitaire de médecine générale, UFR Paris-13 Nord Bobigny

6. Laboratoire Éducatif et pratiques de santé, EA 3412, UFR Paris-13 Nord Bobigny

7. Institut de recherche et de documentation en économie de la Santé (IRDES), Paris

8. Département universitaire de médecine générale, université de Liège

9. Médecine interne générale FMH, médecine psychosomatique et psychosociale ASMPP, IUMG PMU UNIL, Lausanne.

Key words

Fee-for-service plans

Capitation fee

Salary

Pay for performance



In 2013, 89% of French practitioners exercised in the framework of this first sector⁴. This year (2015), conventional tariffs have been described in the general nomenclature of professional actions (NGAP)⁵, principally with regard to intellectual actions, and in the common classification of medical actions (CCAM)⁶. For example, in 2015 the conventional tariff for an adult's general medicine consultation, without any additional technical action, is 23€, while a prick test as a means of allergy detection is quoted at 28.80€.

In 1998, signature of an agreement between the medical funding organs and the MG France syndicate introduced a degree of capitation by putting into place the optional scheme known as "referring physician"⁷. Materialized by signature of a contract between a patient and "his" GP, this option allowed the latter to collect from French health insurance a yearly flat-rate allowance of 150 francs (approximately 23€) per patient, while the patient benefited from conventional tariffs and was exonerated from advance payment to cover expenses.

The 2004 health insurance law and the 2005 medical convention put a definitive end to this scheme, which was replaced by the notion of "treating physician". From January 2015 onwards, GPs in private practice have collected different capitations in addition to fee-for-service, particularly a "treating physician" charge of 5€ per year and per registered patient and an "ALD" charge of €40 per year and per patient suffering from a long-duration disease (ALD).

In 2009, pay for performance came into being on a voluntary basis in the framework of the French contract for improvement of individual practices (CAPI). This modality was generalized in 2011 during the national medical convention through definition of "remuneration based on public health objectives (ROSP)⁸. According to a report by the French court of auditors, in 2013 flat rate and performance-based remuneration averaged about 12.3% of GP revenues⁹.

Remuneration in France and in foreign countries

The terms of remuneration for GPs vary from one country to the next, generally combining characteristics derived from four principal mechanisms:

- capitation, in which a physician collects a lump sum per patient registered in his office, independently of the volume of medical care he provides; whether or not he actually sees the patient, the physician is paid;
- fee for service, which depends on the number of (intellectual or technical) acts actually carried out by the physician;

- pay for performance (P4P), which corresponds to remuneration according to achievement of the objectives targeted by all or some of the patients having declared themselves to be under the care of a given physician;
- salaried status, in which an employment contract is established with an employer (regional authority, association, mutual, etc.). For GPs, the remuneration offered by this scheme corresponds to a flat-rate or lump-sum payment for a given working period, independently of the intensity of the activity (number of patients seen and acts performed). That said, at times the salary can be indexed on the number of acts carried out.

Numerous studies of economic analysis have been conducted in view of examining the advantages and drawbacks of each remuneration method for physicians^{10,11}. Generally speaking, the analyses are aimed at estimating the effects of the different mechanisms on medical practice in terms of quality and accessibility.

In this article, we intend to draw up a synthesis of data concerning the different ways of remunerating physicians: fee-for-service, capitation, pay for performance and salaried status.

Method and positioning

Economic analysis premises its approach on the hypothesized rationality of economic actors. The hypothesis synthesizes the idea that economic actors are lucid, calculating and enlightened in their behavior and that they utilize as effectively as possible the available means in order to attain a given objective, which is maximization of satisfaction. This objective not only covers the idea of simple satisfaction of needs, but also implies that individuals are capable of classifying their choices in order of preference. So it is that while the consumer maximizes his well-being, the producer maximizes his profit. Concretely, it is a question of taking into account the strategic behaviors of economic actors on a market of goods and services. In the most frequent of cases, which occurs when the market does not function perfectly from an economic standpoint, a regulator has got to take into account these strategic behaviors so as to optimally mitigate market failures and reestablish an economic situation considered to be socially desirable. In the neoclassical economic model, the regulator is the actor who most frequently espouses as an objective the maximization of social well-being, that is to say the group-based or collective standpoint. In line with these concepts, any economic evaluation of a treatment, a scheme or a mode of organization of health care supply and delivery, for example, requires a preliminary definition of the applicable frame of reference.



And In its methodological evaluation guide¹², for instance, the French *Haute autorité de santé* (official health authority) called for "an overall social perspective, broad enough to encompass and take into account the different stakeholders concerned by the interventions contemplated in the context of the French health care system".

These objectives are similar to those of our work, of which the goal was to shed light on the effects on social well-being of the different means of remunerating GPs. We particularly wished to consider the consequences of these payments from the broadest possible perspective, for example by taking into account what are known as opportunity costs, that is to say the costs entailed by an economic action or decision precluding alternative actions or decisions.

In view of optimally detailing and explaining the effects of the above-mentioned remuneration methods, analysis of the literature has been carried out using the MEDLINE data base, the Cochrane library and CAIRN. Physicians and economists collaborated on this study.

Results

Classification of the remuneration methods

There are several ways of approaching and studying the different remuneration methods. From the funder's standpoint, the modes of remuneration can be classified according to whether the expenditure is defined *a priori* (capitation, employee) or *a posteriori* (fee for service, P4P). From the health care provider's standpoint, all remuneration methods contain some degree of flat-rate transaction, which corresponds to a lump sum remitted for each act (fee for service), for each patient (capitation) or for a given number of work hours and a function (salary).

Fee for service, a fixed sum of money for each act

Fee for service depends on the degree of activity and consequently on the number of acts carried about by a physician (consultations, visits, technical procedures, etc.). So as to mitigate the problems posed by uniform fees for highly heterogeneous service, customized fees have been added on. They can depend on type of patient (surcharges in France for consultations with children under 6 years of age), type of act (the CCAM classification applied in France) or duration of the act (Tarmed in Switzerland, box 1). This remuneration method is predominant in France and in systems based on Bismarckian principles. If they wish to be better remunerated, it is in the interest of physicians to increase their volume of activity by increasing the number of acts, the number of patients seen and/or their work hours.

In fee for service systems, physicians tend to work longer and undertake more procedures; their heightened productivity has been described in several studies, particularly in Norway¹³, where physicians employed by municipalities and physicians receiving fees for services coexist. The corollary consists in the fact that patients more widely avail themselves of doctors' services when the latter are remunerated on a fee-for-service basis¹⁴. A heightened offer of out-patient services consequently facilitates access to and continuity of health care, which can be of pronounced interest in a situation characterized by service supply shortages.

As regards demand, fee for service would appear to be associated with enhanced patient satisfaction. In an American study¹⁵, patients suffering from the most severe pathologies tended to preferentially address themselves to fee-for-service physicians; they associated fee for services with better quality of care.

That much said, a number of studies have associated fee for service with a phenomenon of "induced demand"; a physician may use his discretionary authority to increase the volume or intensity of his activity. A French study¹⁶ has shown that when new physicians open a practice in a given geographic area, their presence does not entail diminution of the activities of their previously established colleagues. Quite on the contrary, the number of acts per patient goes up. In accordance with the same intuition, the freezing or lowering of fees was associated with a heightened number of acts¹⁷.

As regards the intensity of their activity, fee-for-service physicians appear to have less of a tendency to refer their patients to a specialist, and to be more inclined to perform a greater number of acts themselves. In Norway, shifting from fixed remuneration (salary) to variable remuneration (fee for service) has indeed had as an effect the diminishment of referrals to fellow physicians¹⁸. In the United States, patients whose doctors received fees for services were likewise less inclined to address themselves to specialists than patients using the capitation system¹⁹.

The phenomenon of induced demand is a major determinant of the inflationist nature of fee for service, *a fortiori* in countries with health insurance systems in which patients' expenditures of doctors are relatively well-reimbursed.

To conclude, comparison of the different remuneration systems (see Table 1) shows that the countries in which fee for service is predominant display the highest percentages of health-related expenses.



Capitation, a flat rate for each patient

Remuneration by capitation corresponds to remittance of a per-patient lump sum. The amount of the charge may take into account the characteristics of a given patient (age, sex, pathologies, socio-economic aspects) in view of avoiding patient selection behaviors by physicians. In point of fact, once the lump sum is received by the doctor, his remuneration does not depend on the volume or intensity of the health care he provides for his patients. This means of payment is predominant in the United Kingdom and in systems based on the Beveridgian model; it is also applied in the Netherlands, Spain and Belgium.

This system does not give the physician an incentive to perform more acts, and it allows the funder to anticipate and control health expenses. Study of the data provided by the Organization for Economic Cooperation and Development (OECD) has shown that capitation may diminish health care expenses by as much as 20%²⁰. In the United States the same observation has been put forward; costs are significantly lower in areas where capitation is predominant²¹.

More generally speaking, the capitation system would appear to favor therapeutic education and

prevention; a Canadian study²² has shown that remuneration by capitation was associated with more effective treatment and with higher control rates for arterial hypertension.

That much said, the capitation system may give doctors an incentive to enlarge their customer base, and this type of incentive can lead to increased competition between practitioners dealing with a population of unchanging size. The main excess studied in the literature involves the selection of patients. An American study²³ has shown that when physicians were remunerated by capitation, patients more frequently switched from one to another. This phenomenon has been interpreted as a form of patient selection favoring the patients with the least severe diseases. Other studies, one of them Canadian²⁴, have found no such link. In fact, this phenomenon would appear to be counteracted once corrected coefficients pertaining to the overall health condition of a given population are taken into account when calculating the capitation fee. It should be added that, as is case in Great Britain, capitation is generally associated with limitation to the freedom of patients to choose their doctors, limitation that also tends to prevent doctors from being selective with regard to their patients.

Capitation has also been associated with shorter and less frequent consultations. According to an

Box 1 – The situation in Switzerland

In 2004, after fifteen years of negotiations between partners, Switzerland introduced a new medical fee, Tarmed, which replaced the 26 previously applied cantonal fees. It is applicable to 4300 services, each of which is defined by a number of points corresponding first to equipment costs and overhead, and second to the time required to provide a service. The value of a point was established in one canton after another; the fee was intended to be the most detailed in the world. Its introduction meant that most medical offices had to be computerized and that physicians had to be trained. The expected advantages consisted in ensuring transparency on actual costs and in privileging the medical as opposed to the technical act. Since its adoption, a GP is paid for the time he devotes to a patient in his presence or in his absence, which means that the administrative time necessary to health care coordination is remunerated. Possible induced demand is counteracted by establishment of a mean "per case" cost; any physician exceeding the mean "per specialty" cost by more than

130% has got to provide justifications, and even, where relevant, to remit retrocession fees. The problem is of particular importance to GPs whose activities vary according to the structure of their clientele; while their per-case cost distribution is reflected by a staggered Gaussian shape, specialists' distribution is more compact. Numerous GPs exceeded the 130% ceiling, especially those many of whose patients suffered from polymorbidities. This was described as an way for insurers to select "good" risks⁴⁵.

The proposed introduction of a system of "managed care" based on "care networks" with gatekeeping and a budgetary envelope involving capitation payment has been under discussion; feedback has varied from one canton to the next⁴⁶. When put to a referendum, the 2011 law on "managed care" was overwhelmingly rejected (76%)⁴⁷.

Switzerland has retained the Tarmed version of fee for service, which takes "medical time" into account. Recently, the federal government has been confronted with protesting GPs who

have been demanding that the value of a consultation be increased by 10 points. Given the existence of the so-called "cost neutrality" rule, which stipulates that the country's health care budget remain in conformity with preestablished standards, the additional revues for the generalists have had to be drawn from those of the specialists, who have not failed to react.

With Tarmed, Switzerland is now a leading European country in terms of the mean duration of a consultation. Lemon and Smith have shown that it is not duration *per se*, but rather the contents of a consultation that yield patient satisfaction and health care quality⁴⁸. The approach of a psychosocial problem areas, treatment of comorbidities and sharing of decision-making responsibilities necessitate time as well as skills. A remuneration system such as Tarmed, which recognizes a physician's dedicated time, has definitely contributed in Switzerland to the creation of complementary training programs.

Dr Daniel Widmer



| Main means of payment | Fee for service | | Mixed remuneration | | Salaried or capitation | |
|-----------------------|-----------------------------------|----------------------|------------------------------------------------|----------------------|----------------------------------------|----------------------|
| | Country | Health ex-penses/GDP | Country | Health ex-penses/GDP | Country | Health ex-penses/GDP |
| Above average | Austria, Belgium, France, Germany | 9.4% | Denmark | 8.8% | Greece, Italy, Slovakia, Spain, Sweden | 7.8% |
| Below average | Canada | 9.2% | Australia, New Zealand, Japan, Ireland, Norway | 7.7% | United Kingdom | 7.3% |

Table 1. Physician remuneration and health expenses (2000)
Source : OECD, human resources for health care project and OECD health data 2003

American study²⁵, doctors spend less time with patients remunerating them by capitation. However, this observation has not been confirmed for doctors all of whose patients were remunerating them by capitation.

Finally, in the United States capitation has appeared to be associated with more frequent referral to specialists. However, there was no difference when capitation was applied to all patients, as is the case in the United Kingdom²⁶.

Salaried status, a salary for a function

Salaried status for a doctor entails monthly, contractual, lump sum remuneration by a public or private employer. In France, it is the mode of remuneration applied for GPs exercising their profession in medical centers or in structures for professional practice (companies formed by self-employed practitioners). It is the principal mode of remuneration in Portugal, Sweden, and some central and eastern European countries.

Salaried status is associated with longer consultations and a lower number of acts by patient and patients by doctor. If consultation time length is considered as a marker of health care quality, then salaried status should tend to improve the latter. A Canadian study highlighted the fact that salaried physicians dedicate more time than fee-for-service physicians to care coordination or teaching²⁸. It has also been shown that they were more inclined to implement generic substitution²⁹.

Salaried status is not reputed for favoring physician productivity. However, one study has shown that a shift to salaried status has not diminished the productivity of doctors in the United Kingdom³⁰. It also showed that degree of referral to specialists had not been modified by the shift. Finally, salaried status has been associated with enhanced physician satisfaction in terms of work hours, stress, remuneration and recognition for their activity³¹. This observation may be

related to more favorable working conditions (working hours, social protection).

Discussion

A difficult analysis of the different terms of remuneration

Each method of remuneration or compensation presents advantages and drawbacks for the funder as well as physicians and patients. The choice of funder has got to take into account the historical development of a national health care system, the budgetary constraints, the possible combinations of different remuneration methods, societal aspirations (levels of compensation, young physicians' aspirations, patient expectations, health care quality demands).

Analysis can be rendered additionally difficult by the existing dichotomy between the methods of financing primary care structures and the methods of compensating the professionals who practice within them. In France, health care centers are financed by fee for service

(*a posteriori* financing), while professionals are salaried (*a priori* remuneration). The efficiency of these structures is consequently difficult to analyze and to compare with the similar structures existing in other countries (in the United Kingdom, equivalent structures are financed *a priori* by capitation). A report by the French inspector general of social affairs (IGAS) focused on this difficulty and recommended a reform in the financing of health care centers³².

A present-day consensus encouraging blended payment

Blended payment consists in intermixing the different remuneration methods for physicians in view of mitigating the drawbacks of each. The OCED and the World Health Organization (WHO) are favorable to this mode of functioning³³.



The theoretical models of blended payment are generally based on a fixed prospective portion, by capitation or salary, and a variable portion by fee for service or payment for performance³⁴. The system is aimed at associating the respective advantages of each remuneration method, and consequently bringing about a simultaneously quantitative and qualitative improvement of health care. The complexity of a blended system renders comparison between countries highly problematic.

In France fee for service, which is largely predominant, has been blended with individualized (permanent care, coordinated or "bundled" payment for LDD patients) or collective flat fees in the experimentation with new remuneration methods (NMR) that has been taking place since 2009 and involves inter-professional cooperation and therapeutic patient education. Evaluation of the ongoing tests has shown that the NMRs are likely to favor the construction of primary care teams and to generate savings on health-related expenses³⁵.

Some questioning on pay for performance (P4P)

It is in the framework of blended payment that pay for performance (P4P) has gradually established itself in numerous health care systems. That said, it has always applied in conjunction with another remuneration method; more often than not, P4P is aimed at supplementing the initial remuneration of health care professionals subsequent to attainment of contractually predefined objectives. Recourse to these complementary schemes is justified in the economic literature dealing with the impact of information asymmetries and on contract theory. As it is impossible to measure the results of medical activity and to observe the degree of effort provided by a physician, it is correspondingly impossible to build a remuneration system based on physician productivity, whence the problems entailed by each and every one of the systems (induced demand, patient selection, etc.). Establishment of an economic incentive system, which would imply the introduction of monetary mechanisms, is but one of the means of alleviating information asymmetry by conceding to the professional an informational rent. Anglo-Saxon countries are the first to have developed P4P. For example, the United Kingdom has set up a scheme making reference to the internationally recognized *Quality and outcome framework* (QOF)³⁶. Several reviews of the literature have attempted to synthesize the results of these works so as to better understand the effects of P4P implementation^{37,38}. Taken as a whole, randomized controlled trials pertaining to P4P have shown mixed results.

The evidence did not suffice to provide support for P4P as concerns improvement in the quality of preventive and chronic care. As for non-randomized trials on P4P, they found only a modestly positive effect. All in all, the levels of evidence were considered weak, and the authors of the reviews encouraged health authorities to contemplate the evaluation of P4P programs as soon as they are set up, thereby avoiding the pitfalls of before/after studies in which the biases inherent to the method render it difficult to extrapolate from the results.

What is more, P4P raises ethical questions and may reinforce some physicians' paternalistic tendencies³⁹.

Taking remuneration levels into account

Physicians' remuneration levels constitute a key issue with regard to the equilibrium of these systems. Given the degree of social financing (64.7% in 2013)⁴⁰, society has a right to monitor the relevant information. At the same time, effective functioning of a compensation system depends not only on close coordination between professionals, funders and patients, but also on the equally indispensable trust and satisfaction of the different parties involved.

One study has compared the remuneration levels of GPs and their evolution in several European countries from 1975 to 2005⁴¹. Following establishment of the QOF, in 2004 English physicians were the most highly remunerated, but the authors were not able to show the existence of a link between method and level of remuneration. Other factors seemed to have had more influence: medical density, access of patients to the health care system ("*gatekeeping*" heightens GP remuneration), level and method of defraying patients' medical expenses, thereby contributing to their continued solvency and helping to ensure GP remuneration. In France, in spite of the introduction of remunerations supplementing fee for service payment, the remuneration level of GPs remained lower than that of organ specialists and increased far less rapidly (2% vs. 11% from 2005 to 2011)⁴².

The different aspirations of young physicians

In a context marked by abiding tensions and by ongoing transformations of the health care offer (feminization of the profession, modification of the aspirations of young physicians), it is incumbent on public policymakers to take into consideration all possible remuneration mechanisms in view of upgrading the attractiveness of the profession, physician satisfaction, and adequacy of the health care offer in relation to demand throughout the territory.



A nationwide study showed that only 38.5 of general medicine interns were planning to set up private practice, and that service for fee payment was the main impediment to independent professional activity⁴³.

The motivations of young doctors can likewise influence their involvement in certain general medicine fields. In a study on physicians' motivations concerning preventive action, the authors showed that for the youngest ones, intrinsic motivations were of greater importance than the extrinsic motivations associated with economic incentives⁴⁴. They concluded that in view of improving their preventive efforts, capitation and salaried practice were of greater interest than payment for performance.

Conclusion

Fee for service payment increases physician productivity but heightens health expenses.

Capitation and salaried status decrease productivity but facilitate the monitoring of health-related expenses and the development of non-curative activities with major bearing on today's societal issues.

Remuneration methods represent only one of the determinants of health care quality or mastery of health-related expenditures. They cannot be dissociated from other influencing factors such as the organizational arrangements of care pathways, medical density, and health insurance coverage. Absence of scientific proof on the superiority of any given remuneration method goes hand in hand in France with an absence of consensus within the profession that may be explained by ideological reasons or generational differences. That said, France has already established complementary remuneration methods.

These observations may be conducive to development, as has occurred in Belgium (box 2), of alternative remuneration methods.

Box 2 – The situation in Belgium

Seven though most Belgian GPs receive fee-for-service payment, with or without third-party payment, some of them work for a flat rate, availing themselves of a possibility that has existed for thirty years. While the proportion of physicians using the second option has steadily grown and now involves 5% of practitioners, it has remained an essentially urban phenomenon.

The guiding principle is simple: A three-way contract, tacitly renewable from one month to the next, binds a patient, his mutual and a caregiver or a group of caregivers. Double exclusivity consequently prevents the caregivers from addressing themselves to social security, and also prevents patients from being reimbursed for acts performed outside of the group in which they are registered (except for any specialized care).

While the principle of flat rate payment for consultations was enshrined by the national health ministry in 1963 legislation, it was not applied prior to 1982. Following a 1969 medical strike, a group of left-leaning practitioners demanded its implementation for multidisciplinary primary care teams; medical houses were consequently created. They targeted affordability and the decoupling of revenues and the number of acts carried out. Due to the initial politicized aspect, for a sizable length of time application of the flat rate was confined to a limited number of medical houses. However, a recent

general medicine thesis showed that for some young doctors, a choice is often made not between flat rate and fee for service, but rather between group and individual practice⁴⁹.

The flat rate appears particularly suitable to multidisciplinary practice; it enables a group to finance times of coordination, of prevention, of therapeutic education and of administrative tasks. It provides caregivers with stable revenues throughout the year, and may even allow some physicians to work as salaried employees of their own association. At present, a flat rate can be applied to general practitioners, nurses and physiotherapists. Various adjustments of the calculation mode have rendered the amounts of money involved progressively more attractive. Today, the flat rate is calculated for each group of caregivers by means of forty indicators associating the socioeconomic profiles of the patients with the pathologies treated. The monthly lump-sum payments for a GP or a nurse are about 16 euros, while those of a physiotherapist come to 7 euros. Initial fears of payment delays by the mutual societies soon proved to be unfounded. All told, the system has been functioning quite satisfactorily. As for the fear of overuse of care, it likewise turned out to be largely unfounded. The patients registered in the medical houses on a flat-rate basis are, on average, younger and poorer than a reference population.

Quality of care in the fee-for-service and flat-rate systems was compared in a 3-year follow-up study of 25000 patients⁵⁰. As regards the quality indicators taken into account, the flat-rate groups achieved better results concerning prescription of antibiotics, mammography and influenza vaccination; effectiveness was likewise higher in treatment of arterial hypertension and follow-up care for diabetic persons. As for the overall costs incurred by the insured parties, it was identical in the two systems, but within the global envelope, use of the flat rate led to the doubling of first-line financial resources, while at the same time reducing expenses for prescriptions and specialized medicine (laboratories, hospitalizations, consultations).

Mixed or "blended" revenues are presently being established, along with other "à la carte" packages, on behalf of all general practitioners, whether they apply flat-rate or fee-for-service payment terms (retirement insurance, support for the commitment of the administrative staff, management of patient files, etc.); they may be helping to progressively modify the way physicians perceive the methods by which their revenues are constituted.

Pr Marc Vanmeerbeek



Références

- République française. Projet de loi de modernisation de notre système de santé. NOR: AFSX1418355L. Texte adopté n° 505. Disponible sur : <http://www.assemblee-nationale.fr/14/ta/ta0505.asp> [consulté le 25 avril 2015].
- Décret n° 60-452 du 12 mai 1960 relatif à l'organisation et au fonctionnement de la Sécurité sociale. Disponible sur : <http://legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000313767> [consulté le 25 avril 2015].
- Arrêté du 5 juin 1980 portant approbation de la convention conclue entre, d'une part, la Caisse nationale de l'assurance maladie des travailleurs salariés et conjointement la Caisse centrale de secours mutuels agricoles et la Caisse nationale d'assurance maladie et maternité des travailleurs non salariés des professions non agricoles et, d'autre part, la Fédération des médecins de France. Disponible sur : <http://legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000678090&fastPos=15&fastReqId=120125077&categorieLien=id&oldAction=rechTexte> [consulté le 25 avril 2015].
- Données du Système national inter-régimes. Disponible sur : <http://www.ecosante.fr/>.
- Nomenclature générale des actes professionnels. Disponible sur : http://www.ameli.fr/fileadmin/user_upload/documents/NGAP.pdf [consulté le 25 avril 2015].
- Classification commune des actes médicaux. Disponible sur : <http://ccam.ameli.fr/>.
- Arrêté du 4 décembre 1998 portant approbation de la convention nationale des médecins généralistes. Disponible sur : <http://www.legifrance.gouv.fr/affichTexte.do?dateTexte=&cidTexte=JORFTEXT000000574203&fastPos=19&fastReqId=635489240&oldAction=rechExpTexteJorf> [consulté le 25 avril 2015].
- Arrêté du 22 septembre 2011 portant approbation de la convention nationale des médecins généralistes et spécialistes. Disponible sur : <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000024803740&fastPos=19&fastReqId=1732192161&categorieLien=id&oldAction=rechTexte> [consulté le 25 avril 2015].
- Les relations conventionnelles entre l'Assurance maladie et les professions libérales de santé. Cour des comptes, 2014. Disponible sur : <http://www.ccomptes.fr/Publications/Publications/Les-relations-conventionnelles-entre-l-assurance-maladie-et-les-professions-liberales-de-sante> [consulté le 25 avril 2015].
- Albouy V, Deprez M. Mode de rémunération des médecins. Direction générale du Trésor et de la Politique économique, 2008. Disponible sur : <https://www.tresor.economie.gouv.fr/file/326885> [consulté le 25 avril 2015].
- Peckham S, Gousia K. GP payment schemes review. Policy Research Unit in Commissioning and the Healthcare System, 2014. Disponible sur : <http://www.kent.ac.uk/chss/docs/GP-payment-schemes-review-Final.pdf> [consulté le 25 avril 2015].
- Haute autorité de santé. Choix méthodologiques pour l'évaluation économique à la HAS. Saint-Denis : HAS, 2011. Disponible sur : http://www.has-sante.fr/portail/upload/docs/application/pdf/2011-11/guide_methodo_vf.pdf [consulté le 25 avril 2015].
- Sørensen RJ, Grytten J. Service production and contract choice in primary physicians services. *Health Policy Amst Neth* 2003;66:73-93.
- Marton J, Yelowitz A, Talbert JC. A tale of two cities? The heterogeneous impact of medicaid managed care. *J Health Econ* 2014;36:47-68.
- Cutler DM, Reber SJ. Paying for Health Insurance: The Trade-Off between Competition and Adverse Selection. *Q J Econ* 1998;113:433-66.
- Delattre E, Dormont B. Fixed fees and physician-induced demand: a panel data study on French physicians. *Health Econ* 2003;12:741-54.
- Nguyen NX, Derrick FW. Physician behavioral response to a Medicare price reduction. *Health Serv Res* 1997;32:283-98.
- Iversen T, Lurås H. The effect of capitation on GPs' referral decisions. *Health Econ* 2000;9:199-210.
- Shen J, Andersen R, Brook R, Kominski G, Albert PS, Wen-ger N. The effects of payment method on clinical decision-making: physician responses to clinical scenarios. *Med Care* 2004;42:297-302.
- Gerdtham UG, Jönsson B, MacFarlan M, Oxley H. The determinants of health expenditure in the OECD countries: a pooled data analysis. *Dev Health Econ Public Policy* 1998;6:113-34.
- Catalano R, Libby A, Snowden L, Cuellar AE. The effect of capitated financing on mental health services for children and youth: the Colorado experience. *Am J Public Health* 2000;90:1861-5.
- Tu K, Cauch-Dudek K, Chen Z. Comparison of primary care physician payment models in the management of hypertension. *Can Fam Physician* 2009;55:719-27.
- Sorbero ME, Dick AW, Zwanziger J, Mukamel D, Weyl N. The effect of capitation on switching primary care physicians. *Health Serv Res* 2003;38:191-209.
- Kantarevic J, Kralj B. Risk selection and cost shifting in a prospective physician payment system: evidence from Ontario. *Health Policy Amst Neth* 2014;115:249-57.
- Melichar L. The effect of reimbursement on medical decision making: do physicians alter treatment in response to a managed care incentive? *J Health Econ* 2009;28:902-7.
- Gosden T, Forland F, Kristiansen IS, et al. Impact of payment method on behaviour of primary care physicians: a systematic review. *J Health Serv Res Policy* 2001;6:44-55.
- Gosden T, Pedersen L, Torgerson D. How should we pay doctors? A systematic review of salary payments and their effect on doctor behaviour. *QJM* 1999;92:47-55.
- Sarma S, Devlin RA, Belhadji B, Thind A. Does the way physicians are paid influence the way they practice? The case of Canadian family physicians' work activity. *Health Policy Amst Neth* 2010;98:203-17.
- Granlund D. Are private physicians more likely to veto generic substitution of prescribed pharmaceuticals? *Soc Sci Med* 1982 2009;69:1643-50.
- Gosden T, Sibbald B, Williams J, Petchey R, Leese B. Paying doctors by salary: a controlled study of general practitioner behaviour in England. *Health Policy Amst Neth* 2003;64:415-23.
- Gosden T, Williams J, Petchey R, Leese B, Sibbald B. Salaried contracts in UK general practice: a study of job satisfaction and stress. *J Health Serv Res Policy* 2002;7:26-33.
- Georges P, Waquet C, Part J. Les centres de santé : situation économique et place dans l'offre de soins de demain. Inspection générale des affaires sociales, 2013. Disponible sur : http://www.igas.gouv.fr/IMG/pdf/RM2013-119P-Centres_de_sante.pdf [consulté le 25 avril 2015].
- Vers des systèmes de santé plus performants. Organisation de coopération et de développement économiques, 2004. Disponible sur : <http://www.oecd.org/fr/els/systemes-sante/versdessystemesdesanteplusperformantssetudesthematiques.htm> [consulté le 25 avril 2015].
- Simoens S, Giuffrida A. The impact of physician payment methods on raising the efficiency of the healthcare system: an international comparison. *Appl Health Econ Health Policy* 2004;3:39-46.



35. Mousquès J, Bourgueil Y, Afrite A, et al. L'évaluation de la performance des maisons, pôles et centres de santé dans le cadre des expérimentations des nouveaux modes de rémunération (ENMR) sur la période 2009-2012. Institut de recherche et documentation en économie de la santé, 2014. Disponible sur : <http://www.irdes.fr/recherche/rapports/559-l-evaluation-de-la-performance-des-maisons-poles-et-centres-de-sante-dans-le-cadre-des-enmr.pdf> [consulté le 25 avril 2015].
36. Doran T, Fullwood C, Gravelle H, et al. Pay-for-performance programs in family practices in the United Kingdom. *N Engl J Med* 2006;355:375-84.
37. Scott A, Sivey P, Ait Ouakrim D, et al. The effect of financial incentives on the quality of health care provided by primary care physicians. *Cochrane Database Syst Rev* 2011;CD008451.
38. Eijkenaar F, Emmert M, Scheppach M, Schöffski O. Effects of pay for performance in health care: a systematic review of systematic reviews. *Health Policy Amst Neth* 2013;110:115-30.
39. Saint-Lary O, Plu I, Naiditch M. Ethical issues raised by the introduction of payment for performance in France. *J Med Ethics* 2012;38:449-50.
40. Zaidman C, Roussel R, Solard J, Mikou M, Le Garrec M-A, Bouvet M. Comptes nationaux de la santé 2013. Direction de la recherche, des études, de l'évaluation et des statistiques, 2014. Disponible sur : http://www.drees.sante.gouv.fr/IMG/pdf/comptes_sante_2013_edition_2014.pdf [consulté le 25 avril 2015].
41. Kroneman MW, Van der Zee J, Groot W. Income development of General Practitioners in eight European countries from 1975 to 2005. *BMC Health Serv Res* 2009;9:26.
42. Pla A, Mikol F. Les revenus d'activité des médecins libéraux récemment installés : évolutions récentes et contrastes avec leurs aînés. Direction de la recherche, des études, de l'évaluation et des statistiques, 2015. Disponible sur : http://www.insee.fr/fr/ffc/docs_ffc/REVAIND15_c_D2_sante.pdf [consulté le 25 avril 2015].
35. Baude N, Flacher A, Bosson J-L, Marchand O. Soins primaires : crise et dynamique d'avenir. Les attentes des internes de troisième cycle de médecine générale. *Médecine* 2008;4:135-40.
36. Videau Y, Batifoulier P, Arrighi Y, Gadreau M, Ventelou B. The life cycle of general practitioners' professional motivations: the case of prevention. *Rev Epidemiol Sante Publique* 2010;58:301-11.
37. Widmer D. Discrimination indirecte des populations vulnérables. *Rev Med Suisse* 2008;172:2070.
38. Widmer D, Bischoff T. Médecine de premier recours et développement des réseaux dans le canton de Vaud. Service de la santé publique de l'état de Vaud, 2010. Disponible sur : http://www.serda-ankers.ch/useruploads/files/reseaux_soins/rapport_medecine_premier_recours_widmer_13042010.pdf [consulté le 25 avril 2015].
39. Loi fédérale sur l'assurance maladie (LAMal) (Réseaux de soins). Modification du 30 septembre 2011. Disponible sur : <http://www.admin.ch/opc/fr/federal-gazette/2011/6849.pdf> [consulté le 25 avril 2015].
40. Lemon TI, Smith RH. Consultation content not consultation length improves patient satisfaction. *J Fam Med Prim Care* 2014;3:333-9.
41. Garnier M. Paiement à l'acte ou au forfait : analyse qualitative des facteurs déterminants du choix des médecins généralistes belges entre ces deux systèmes. Thèse de médecine : université de Lille, 2014.
42. Annemans L, Closon JP, Closon MC, et al. Comparaison du coût et de la qualité de deux systèmes de financement des soins de première ligne en Belgique. Bruxelles : Centre fédéral d'expertise des soins de santé (KCE), 2008.