

Supplementary physicians' fees: a sustainable system?

PIET CALCOEN*

Department of Health Policy and Management, Erasmus University Rotterdam, The Netherlands

WYNAND P. M. M. VAN DE VEN

Department of Health Policy and Management, Erasmus University Rotterdam, The Netherlands

Abstract: In Belgium and France, physicians can charge a supplementary fee on top of the tariff set by the mandatory basic health insurance scheme. In both countries, the supplementary fee system is under pressure because of financial sustainability concerns and a lack of added value for the patient. Expenditure on supplementary fees is increasing much faster than total health expenditure. So far, measures taken to curb this trend have not been successful. For certain categories of physicians, supplementary fees represent one-third of total income. For patients, however, the added value of supplementary fees is not that clear. Supplementary fees can buy comfort and access to physicians who refuse to treat patients who are not willing to pay supplementary fees. Perceived quality of care plays an important role in patients' willingness to pay supplementary fees. Today, there is no evidence that physicians who charge supplementary fees provide better quality of care than physicians who do not. However, linking supplementary fees to objectively proven quality of care and limiting access to top quality care to patients able and willing to pay supplementary fees might not be socially acceptable in many countries. Our conclusion is that supplementary physicians' fees are not sustainable.

Submitted 27 March 2017; revised 12 October 2017; accepted 7 December 2017

1. Introduction

Driven by the economics of medical practice prior to the spread of health insurance, physicians applied price discrimination by charging patients according to what they thought each patient could afford. The use of sliding fee scales persisted until widespread health insurance drove a standardisation of fees (Hall and Schneider, 2008). Nonetheless, supplementary fee systems continue to exist in countries with universal health insurance.

*Correspondence to: Piet Calcoen, Department of Health Policy and Management, Erasmus University Rotterdam, PO Box 1738, 3000 DR, Rotterdam, The Netherlands. Email: pietcalcoen@hotmail.com

Box 1. Definitions and terminology

A **supplementary fee** is an extra fee charged by health care providers on top of the tariff agreed upon by health insurance. This tariff may include a co-payment or co-insurance to be borne by the patient.

In Belgium, the term ‘**supplementary fee**’ (*‘ereloonsupplement’* [Dutch]/*‘supplément d’honoraires’* [French]) is used for a fee charged on top of the official tariff set by social security.

In France, the term ‘*dépassement d’honoraires*’ is applied.

In North America, the term ‘**extra billing**’ or ‘**balance billing**’ is used.

The goal of this paper is to answer the following questions: How can cost inflation of supplementary fees be contained? What is the added value of supplementary fees? Is a system of supplementary physicians’ fees charged on top of social security tariffs sustainable?

The paper focuses on Belgium and France, and starts with an analysis of the system of supplementary fees in the two countries. Next, possible measures to curb cost inflation of supplementary fees are discussed. Further, the added value of supplementary fees is analysed, in particular the link between supplementary fees and quality of care. The paper concludes with a discussion of the future of supplementary fees in Belgium and France (Box 1).

2. Supplementary fees in Belgium and France

Before the spread of health insurance, physicians applied price discrimination by charging patients according to what they thought each patient could afford. Cross subsidies between the rich and the poor were organised by physicians on a micro level. Mandatory, universal health insurance established cross-subsidisation between the rich and the poor and between the healthy and the sick on a macro level. Health insurance has taken over the role of individual physicians in ensuring access to health care for the poor and the sick. Nonetheless, supplementary fees are still applied today in Belgium and France, two countries that have a long-standing history of universal health insurance.

In the following section, an analysis of the system of supplementary fees in Belgium and France will be presented. First, the regulatory framework for supplementary fees will be described. Second, the current situation will be discussed.

2.1 Belgium

2.1.1 Regulatory framework

The current system of supplementary fees saw the light in 1964, when basic health insurance became a mandatory part of the social security system.

The legal basis for charging supplementary fees can be found in the Health Care Professions Act, which states that practitioners can freely set their fees.¹ The Code of Medical Ethics provides that physicians should be moderate when determining their fees and be willing to explain to their patients why they are charging a certain fee.

As from 1964, an agreement on physicians' fees has been made every two years between the physicians' representative associations and the 'sickness funds' (not-for-profit entities providing mandatory basic health insurance).² Physicians can choose to adhere to the agreement ('conventioned' physicians) or they can choose not to adhere at all ('non-conventioned') or only to partially adhere, that is, for certain well defined days and hours ('partially conventioned'). Partial conventioning is only possible for outpatient care. Conventioned physicians get an annual contribution from the social security system for their pension (4790 EUR in 2017).

Non-conventioned physicians are not bound by official social security tariffs. They are at liberty to charge supplementary fees on top of official tariffs. However, supplementary fees can never be charged for emergency care.

Since 1964, the biannual agreement between physicians and sickness funds has consistently listed situations in which conventioned physicians are at liberty to deviate from the official tariffs set by mandatory basic health insurance, that is, for special demands made by a patient (e.g. a private room in a hospital or a consultation after 9 pm).

The agreement also allows conventioned physicians to charge supplementary fees for households whose taxable income exceeds 67,636 EUR per year (figure for 2017).³ However, since it may be rather awkward to ask patients for proof of their taxable income, physicians have not commonly used this possibility so far.

All hospital physicians, both conventioned and non-conventioned, are allowed to charge supplementary fees to patients who are staying in a private room. As of 1 January 2013, the Belgian authorities have prohibited the charging of supplementary fees for patients staying at least one night in double and common rooms in hospitals.⁴ As of 27 August 2015, supplementary fees have also been prohibited for one-day admissions in double or common rooms. Every hospital has to define a maximum percentage of supplementary fees that can be charged

1 Art. 35 Health Care Professions Act (*Loi coordonnée du 10 mai 2015 relative à l'exercice des professions des soins de santé*), *Moniteur belge*, 18 June 2015, p. 35172.

2 According to article 50 of the Health Insurance Act (*Loi relative à l'assurance obligatoire soins de santé et indemnités coordonnée le 14 juillet 1994*), *Moniteur belge*, 27 August 1994, p. 21524.

3 Para. 11.4 National agreement between physicians and sickness funds 2016–2017 (*Accord national médico-mutualiste 2016–2017*), Institut national d'assurance maladie-invalidité (INAMI). Available at <http://www.inami.fgov.be/fr/professionnels/sante/medecins/soins/Pages/accord-medico-mutualiste>

4 Several associations of physicians filed an appeal in the Belgian Constitutional Court against the prohibition of supplementary fees in double and common rooms. In its judgement of 17 July 2014, the Court stated that the new law respected the equilibrium between equal access to health care and an equitable income for physicians (with the new law allowing physicians to continue to charge supplementary fees in private rooms).

(expressed as a percentage of the official social security tariff). Since there is no limitation by law, hospitals are at liberty to set the maximum percentage of supplementary fees as high as they prefer.

Supplementary fees can be charged to rich and poor patients alike. Supplementary fees can be avoided by choosing a double or common room in a hospital and by consulting a conventioned physician during regular consultation hours for outpatient care.

In Belgium, according to the Patient Rights Act, a patient can freely choose his/her physician. Reciprocally, physicians are free to refuse treatment, except for urgent treatment (Nys, 2001; Vansweevelt and Dewallens, 2014). As a result, patients who refuse to pay supplementary fees may not be treated by the physician of their choice. Upheaval in the press about physicians pushing their patients towards private hospital rooms where they can charge supplementary fees,⁵ eventually led to new legislation, which came into effect on 7 January 2017 and which prohibits hospital physicians from discriminating between patients who pay supplementary fees and those who do not.⁶ Physicians can no longer refuse to treat patients who do not choose a private hospital room (supplementary fees being chargeable only to patients staying in a private room). The new law explicitly forbids hospital physicians to use waiting time to discriminate between patients who pay supplementary fees and those who do not. The law clearly states that every patient is entitled to the same quality of care whether or not he/she is paying supplementary fees.⁷ However, as this new legislation applies to inpatient care alone, physicians can still refuse to treat outpatients who are not willing or not able to pay supplementary fees.

2.1.2 Current situation

Currently, 84% of all physicians adhere to the national agreement between physicians and sickness funds (INAMI, 2016a). For outpatient care, these conventioned physicians can only charge supplementary fees in case of special demands by the patient. For inpatient care, they can charge supplementary fees to patients staying in a private room. Physicians who have opted out of the national agreement between physicians and sickness funds (non-conventioned physicians) are at liberty to set their fees. However, for inpatient care they can only charge

5 For instance, Belgian newspaper article (2016) 'Sonja moest van chirurg eenpersoonskamer nemen of ze werd niet geopereerd' (translation: Sonja had to take a private, one-bed hospital room or her surgeon would not operate), *Het Laatste Nieuws*, 28 November 2016. Available at <http://www.hln.be/hln/nl/957/Binnenland/article/detail/3010975/2016/11/28/Sonja-moest-van-chirurg-eenpersoonskamer-nemen-of-ze-werd-niet-geopereerd.dhtml>

6 Art. 112 Law of 18 December 2016 providing for different measures on health care (*Loi du 18 décembre 2016 portant des dispositions diverses en matière de santé*), *Moniteur belge*, 28 December 2016, p. 89736.

7 Art. 112 Law of 18 December 2016 holding different measures in health care (*Loi du 18 décembre 2016 portant des dispositions diverses en matière de santé*), *Moniteur belge*, 28 December 2016, p. 89736.

Table 1. Average private expenditure for an admission in a Belgian hospital (EUR, 2015)

	Private room	Double or common room
Classic hospital stay (min. 1 night)	1,463	278
Surgical one-day clinic	735	122
Non-surgical one-day clinic	437	25

Source: Mutualité Chrétienne (2016).

supplementary fees to patients staying in a private room. In 2015, 23% of all patients stayed in a private room (Mutualité Chrétienne, 2016).

In hospitals, supplementary fees range between one and three times the official tariff. There is a wide variation in price-setting behaviour, which cannot be explained by observable hospital characteristics (Lecluyse *et al.*, 2009). There are also significant regional differences, with most Flemish hospitals charging 100% of the official tariff, most Walloon hospitals 200% and most Brussels' hospitals 300% (Mutualité Chrétienne, 2016).

Table 1 shows that there is a huge span in private expenditure⁸ between a private room and a double or common hospital room. The span can be explained through supplementary fees and – to a lesser extent – room charges, neither of which may be charged in a double or common room. Room charges for a private room vary between 18 and 164 EUR per day (Mutualité Chrétienne, 2016). In 2015, supplementary fees represented 61% of private expenditure for a classic hospital stay in a private room (Mutualité Chrétienne, 2016).

In 2012, the total amount of supplementary fees charged by physicians in Belgium represented 781 million EUR (381 million EUR for inpatient care and 400 million EUR for outpatient care) (Calcoen *et al.*, 2015).

2.1.3 Cost inflation

The total amount of supplementary fees charged for classic hospital stays in Belgian hospitals (including minimum one night) has increased by 7.1% per year between 1998 and 2010. Over the same period, the total hospital bill for patients has increased by 3.0% (Mutualité Chrétienne, 2011).⁹ After inflation adjustment, supplementary fees have increased by 32% between 2004 and 2015, whereas the total patient bill has decreased by 5% (Mutualité Chrétienne, 2016).

Unfortunately, data on supplementary fees for outpatient care are scarce and do not allow an evaluation of changes over time.

⁸ Private expenditure comprises the health costs that are not covered by mandatory basic health insurance.

⁹ The figures mentioned (7.1% and 3.0%) are compound annual growth rates. The figures are based on an analysis of all hospital bills of the members of the Christian Mutualities. On 31 December 2015, the Christian Mutualities covered 4,574,738 people or 41.2% of the Belgian population (INAMI, 2016b).

2.2 France

2.2.1 Regulatory framework

The current system of supplementary fees was introduced in 1980. At the time, physicians demanded a higher income and the government decided not to increase the public health budget, but instead allowed physicians to charge supplementary fees (*'dépassements d'honoraires'*) (Auguste, 2012).

In France, physicians can either receive a salary or be self-employed. The latter are called 'liberal physicians' (*'des médecins libéraux'*). Salaried physicians cannot charge supplementary fees.

Liberal physicians are divided in three categories or 'sectors' (*'secteurs'*). Sector 1 physicians are bound by the official social security tariffs. Sector 2 physicians are allowed to charge supplementary fees on top of social security tariffs. Sector 3 physicians operate outside the social security system. Their patients are not reimbursed by social security.

Sector 1 physicians need to respect the fees set in the national medical convention, which is concluded between mandatory basic health insurance and the representative associations of liberal physicians.¹⁰ Sector 1 physicians are allowed only to charge supplementary fees in case of 'special demands' made by the patient, for instance, for a consultation outside normal hours.

Liberal physicians need to choose whether they wish to adhere to the convention (sector 1 or 2) or not (sector 3). If they adhere to the convention, they need to choose between sector 1 and 2 when they first start a practice. Only physicians who hold certain titles – for instance, 'chief resident', 'resident' or 'assistant' (both active in hospitals or as a general practitioner) – can opt for sector 2.¹¹

It is not permitted to charge supplementary fees to patients who get subsidies from the government for additional health insurance.¹²

The College of Physicians states that physicians ought to determine their fees with tact and moderation (*'avec tact et mesure'*).¹³ Physicians ought to use four criteria: (1) the financial capacity of the patient; (2) the time needed and complexity of the intervention; (3) the reputation of the physician; (4) particular demands of the patient. Physicians need to give their patients written information for all fees exceeding 70 EUR.

10 National convention between liberal physicians and social security, 27 August 2016. Available at https://www.legifrance.gouv.fr/jo_pdf.do?cidTexte=JPDF2310201600000010&categorieLien=id

11 Art. 38.1.1 National convention between liberal physicians and social security, 27 August 2016.

12 In 2014, 7.4% of those covered by additional health insurance benefited from a public programme providing free coverage to the poorest (*'Couverture Universelle Maladie complémentaire'* [*'CMU-c'*]). Individuals with an income just above the CMU-c ceiling can get a voucher to partially fund the premium for an additional health insurance contract (*'l'Aide au paiement d'une Complémentaire Santé'* [*'ACS'*]).

13 Art. R.4127-53 Public Health Law. Available at <https://www.conseil-national.medecin.fr/article/article-53-tact-et-mesure-277>

In May 2012, the College of Physicians issued a recommendation, providing that a limit of three or four times the official social security tariff should be respected when charging supplementary fees.¹⁴

In France, there are two types of hospitals: public (*'hôpital [public]'*) and private (*'clinique [privée]'*). Charging supplementary fees is a common practice in private hospitals but is also possible in public hospitals. Physicians working in public hospitals are allowed to have a 'private practice' (*'activité privée'*) for a maximum of 20% of their time. However, it is not easy to verify compliance with this 20% limit (Auguste, 2012). Part of the supplementary fees charged in private and public hospitals goes to the hospital in return for using hospital accommodation, equipment and personnel. This is also the case in Belgium.

2.2.2 Current situation

Whereas for Belgium no public data on supplementary fees are available, for France both social security (Sécurité sociale, 2016b) and a public agency providing technical information on hospitals¹⁵ collect data on supplementary fees and make them available to the public.

In total, 59% of all general practitioners and 46% of all specialists work as 'liberal physicians' (Barlet and Marbot, 2016); 25.3% of liberal physicians are sector 2 physicians who are allowed to charge supplementary fees on top of official social security tariffs: 43.4% of all specialists and 9.0% of all general practitioners. The majority of surgeons (79.9%) and gynaecologists (58.9%) work in sector 2. Sector 1 physicians – 73.9% of liberal physicians – are bound by social security tariffs. In total, 912 physicians, representing 0.8% of all liberal physicians, choose to work in sector 3 (Sécurité sociale, 2016a).¹⁶

Whereas only 38% of all hospital beds in France are private,¹⁷ 62% of all surgical interventions in France are performed in private hospitals.¹⁸ Supplementary fees are applied for about half of all surgical procedures in France (Barlet and Marbot, 2016). For instance, supplementary fees are charged for 60% of all cataract operations in private hospitals. For cataract operations, supplementary fees represent on average 79% of the official tariff.¹⁹ In 2014, a total of

14 College of Physicians. Recommendation available at <https://www.conseil-national.medecin.fr/article/acces-aux-soins-recommandations-du-cnom-1185>

15 Agence technique de l'information sur l'hospitalisation. Information available at <http://www.atih.sante.fr/depassesments-d-honoraires>

16 All figures for 2014 (situation on 31 December 2014).

17 Association of hospitals. Information available at <https://www.hopital.fr/Nos-Missions/L-hopital-au-sein-de-l-organisation-generale-de-la-sante/Les-etablissements-publics-de-sante>

18 Federation of private hospitals. Information available at http://www.fhp-lr.com/Federation-Hospitalisation-Privee/Les-cliniques-privées/Le-secteur-MCO/Le-Secteur-MCO-fer-de-lance-de-l-hospitalisation-privée_47_.html

19 Figure retrieved from <http://www.66millionsdimpatients.org/depassesments-dhonoraires-en-cliniques-restes-a-charge-au-menu/>

805 million EUR of supplementary fees was charged in private hospitals.²⁰ In public hospitals, this figure was 69 million EUR (Clavreul, 2014).

In 2014, supplementary fees amounted to 2.8 billion EUR in France. The bulk of supplementary fees, 2.5 billion EUR was charged by specialists, whereas only 300 million EUR was charged by general practitioners (Sécurité sociale, 2016b).

2.2.3 *Cost inflation*

The percentage of liberal physicians working in sector 2, who are authorised to charge supplementary fees, has slightly increased from 24.7% in 2000 to 25.3% in 2014. While the percentage of general practitioners working in sector 2 has decreased from 13.9 to 9.0%, the percentage of specialists working in sector 2 has increased from 37.1 to 43.4% (Sécurité sociale, 2016b). Today, 59% of all new medical specialists choose to work in sector 2 (Barlet and Marbot, 2016).

Average supplementary fees in sector 2 have risen from 25% of official tariffs in 1990 to 54% in 2010 (Léchenet, 2012).

Between 2011 and 2015, the total amount of supplementary fees in private hospitals has risen from 676 million EUR to 867 million EUR (+28%).

In 2014, total supplementary fees charged by physicians amounted to 2.8 billion EUR (Sécurité sociale, 2016b), while in 2011 the figure was 2.4 billion EUR (Auguste, 2012).

2.3 *Additional health insurance*

In Belgium, additional health insurance mainly covers hospital costs. Therefore, the term ‘hospitalisation insurance’ is used. About 75% of Belgians have such hospitalisation insurance. The bulk of supplementary fees in hospitals is covered by hospitalisation insurance. About 95% of the French have an additional health insurance, covering a broad range of inpatient and outpatient health care services. In France, additional health insurance reimburses both inpatient and outpatient supplementary fees.

Cost inflation of supplementary fees leads to higher premiums for additional health insurance. In Belgium, for instance, as a result of recent increases in supplementary fees, two insurers have applied premium rate increases for their additional hospitalisation insurance products of 16 and 47%, respectively (Sury, 2016).

Additional insurance can also have an inflationary effect on supplementary fees. People holding additional health insurance may be less price sensitive. Knowing that a patient is additionally insured may lead health care providers to charge higher fees. Dormont and Péron (2016) showed that the average amount of supplementary fees charged for a consultation to patients holding additional health insurance contracts covering supplementary fees increased by 32%.

²⁰ Figures on private hospitals (*‘cliniques’*), retrieved from <http://www.66millionsdimpatients.org/depassements-dhonoraires-en-clinique-les-chiffres-de-laugmentation/> and from <http://www.66millionsdimpatients.org/depassements-dhonoraires-en-cliniques-restes-a-charge-au-menu/>

Insurance also led to an increase of 9% in the number of consultations with specialists who charge supplementary fee. Feldstein (1970) was one of the first to note that widespread health insurance can lead to an increase in the price of health care, which undermines the value of insurance and decreases consumer welfare.

2.4 Belgium vs. France

In Belgium, proportionally more supplementary fees are charged compared with France (see Table 2).

Table 3 shows that the most important differences between Belgium and France are related to the 'convention' status of the physician – that is, whether the physician has signed the national agreement between physicians and mandatory basic health insurance – and the possibility for the physician to refuse to treat patients who are not willing or not able to pay supplementary fees.

3. Measures to curb cost inflation

Both in Belgium and in France, there is much concern about the financial sustainability of the supplementary fee system. Expenditure on supplementary fees

Table 2. Supplementary fees in Belgium and France (2012)

	Belgium		France	
	Total	Average per inhabitant	Total	Average per inhabitant
Supplementary fees charged for outpatient care	€400 million	€36	€1851 million	€28
Supplementary fees charged in hospitals	€381 million	€34	€793 million	€12
Total supplementary fees	€781 million	€70	€2644 million	€40

Sources: Calcoen *et al.* (2015); DREES; Eurostat.

Table 3. Regulatory framework for supplementary fees in Belgium and France

	Belgium	France
Are supplementary fees linked to the 'convention' status of the physician?	Yes, but only for outpatient care	Yes, for outpatient and inpatient care
Are supplementary fees for inpatient care linked to a private room in a hospital?	Yes	No
Do physicians need to be moderate when determining supplementary fees (College of Physicians)?	Yes	Yes
Are persons with low incomes exempt from supplementary fees?	No	Yes
Can physicians refuse to treat patients who refuse to pay supplementary fees?	Outpatient care: yes; inpatient care: no	Yes

Table 4. Measures to curb cost inflation of supplementary fees

	Belgium	France
Initiated by the authorities		
Prohibiting supplementary fees	✓ ^a	✓ ^a
Setting indicative/reference tariffs for supplementary fees	–	✓
Introducing supply-side restrictions	–	✓
Capping supplementary fees	–	–
Capping reimbursement of supplementary fees by additional health insurance	–	✓
Restricting differences in quality of care	✓ ^b	–
Initiated by insurers		
Capping reimbursement of supplementary fees	✓	✓
Negotiating supplementary fees	–	–
Applying deductibles	✓	–
Applying co-insurance	–	–
Taking legal action against excessive supplementary fees	– ^c	– ^c

^aBoth in Belgium and in France, supplementary fees have only been prohibited for limited groups (e.g. people who get subsidies to buy additional health insurance) or in certain circumstances (e.g. emergency care).

^bSince January 2017, physicians may no longer discriminate between patients who pay supplementary fees and those who do not. This legislation applies to inpatient care alone. The new rules are not well known by the public. So far, they have not been enforced.

^cLegal action has only been taken by individuals in isolated cases. There are only judgements from lower courts.

increases at a pace that exceeds the rate at which total expenditure on health care is increasing. Both in Belgium and in France, the bulk of supplementary fees is covered by additional health insurance. Sustained rapid growth of supplementary fees leads to sharp increases in premiums for additional coverage. Several measures can be taken to reverse this trend. In this section, we will give an overview of measures to curb cost inflation of supplementary fees (see Table 4). Some measures involve regulation by the authorities. Other measures – that is, 3.6, 3.7, 3.8 (and 3.4) – are initiatives which can be taken by additional health insurance providers.

3.1 *Prohibiting supplementary fees*

As from 1 January 2013, supplementary fees can no longer be charged in double and common rooms in Belgian hospitals. However, this has not led to a reduction of supplementary fees, since more supplementary fees have been charged in private rooms. Between 2013 and 2015, supplementary fees have increased by 9.7% (Mutualité Chrétienne, 2016).

Physicians wish to maintain their income. Therefore, when a particular source of revenue is no longer available, other sources are likely to be increasingly exploited. For instance, if supplementary fees were to be completely forbidden in hospitals, there might be a shift towards the outpatient sector.

An alternative to supplementary fees is an increase in fees paid by mandatory basic health insurance. This has been implemented in the Netherlands. During several decades of fee regulation by the Dutch government, supplementary fees gradually converged to 0, without seriously reducing the income of medical specialists. In 2012, Dutch medical specialists earned more than their colleagues in neighbouring countries, such as Belgium, Denmark and Germany (Kok *et al.*, 2015).

3.2 *Setting indicative/reference tariffs for supplementary fees*

On 25 October 2012, an agreement on supplementary fees was signed by the professional association of additional health insurers, the representative associations of liberal physicians and mandatory basic health insurance in France.²¹ Under this agreement, the total amount of supplementary fees charged by a physician during one year should not exceed 150% of the total social security tariffs charged in that same year. The 150% mark is an average over a whole year, meaning that a physician can continue to charge high supplementary fees, for example, 400%, as long as at the end of the year the average is close to 150%. However, sanctions for exceeding the 150% reference have not been defined and have not been applied.²² So far, this measure has not resulted in a reduction of supplementary fees.

In Belgium, the current national agreement between the physicians' representative associations and the sickness funds stipulates that a mechanism of indicative tariffs for supplementary fees is to be studied.²³

3.3 *Introducing supply-side restrictions*

On 25 October 2012, an agreement on supplementary fees was signed in France by the professional association of additional health insurers, the physicians' representative associations and mandatory basic health insurance (see above). In addition to the 150% reference for supplementary fees, the agreement introduced the 'access to care contract' (*'contrat d'accès aux soins'*).²⁴ A sector 2 physician who signs this contract agrees not to increase supplementary fees above the average supplementary fees he/she charged in 2012 (with a limit of 100% of social

21 Cf. annex no. 8 to the national agreement signed on 26 July 2011 by the liberal physicians and health insurance (*Avenant n° 8 à la convention nationale organisant les rapports entre les médecins libéraux et l'assurance maladie signée le 26 juillet 2011*), Paris, 25 October 2012. Available at https://fr.wikipedia.org/wiki/Avenant_n%C2%B08_%C3%A0_la_convention_m%C3%A9dicale

22 Roucous, D. La vérité sur les honoraires des médecins et leur remboursement. *L'Humanité*. 11 February 2016. Available at <https://www.humanite.fr/la-verite-sur-les-honoraires-des-medecins-et-leur-remboursement-598348>

23 Para. 4.3 National agreement between physicians and sickness funds 2016–2017 (*Accord national médico-mutualiste 2016–2017*), Institut national d'assurance maladie-invalidité (INAMI). Available at <http://www.inami.fgov.be/fr/professionnels/sante/medecins/soins/Pages/accord-medico-mutualiste>

24 As from 1 January 2017, the 'access to care contract' has been renamed: 'l'option pratique tarifaire maîtrisée' (OPTAM).

security tariffs). He/she also guarantees not to decrease the part of his/her activity where no supplementary fees are charged. In return, part of the social security contributions of the participating physician is paid by the government. Additional health insurers promised to improve the mechanisms for reimbursing supplementary fees charged by physicians who have signed the contract. The parties to the 2012 agreement stated that social security tariffs ought to be increased in order to decrease the need to charge supplementary fees.

Unfortunately, the introduction of the ‘access to care contract’ has not led to a containment of supplementary fees. The total amount of supplementary fees has increased by 6.6% between 2012 and 2014 (Béguin, 2015). Supplementary fees in private hospitals have increased from 724 million EUR in 2012 to 866 million EUR in 2015 (+19.7%).²⁵ Physicians who wish to continue to charge high supplementary fees stay out of the contract. Physicians who sign the contract carry on with their current practice. As the number of medical specialists choosing to work in sector 2 is increasing, so is total amount of supplementary fees.²⁶ In addition, sector 1 chief residents have been allowed to sign the contract as well, which creates additional cost inflation (UFC, 2013). Only 27% of all physicians – and 23% of medical specialists – working in sector 2 have signed the ‘access to care contract’. Of the sector 2 ophthalmologists and surgeons, 10 and 15%, respectively, adhere to the ‘access to care contract’.²⁷ From these figures, it is clear that the ‘access to care contract’ has not been a success so far.

3.4 *Capping supplementary fees*

In neither Belgium nor France has a maximum limit for supplementary fees been defined by law. Physicians are free to charge supplementary fees, which can be as high as 500% or more of social security tariffs.

In Belgium, every hospital must define a maximum limit for supplementary fees, to be respected by all physicians working in that hospital. However, this maximum limit can be easily adapted, by a simple decision of hospital management.

A legal cap on supplementary fees might be an effective measure, since there is no escape route (apart from increasing the frequency of charging supplementary fees). In October 2016, an agreement was reached in Belgium by physicians and sickness funds, limiting supplementary fees for breast reconstruction to 100% of social security tariffs. This measure has been beneficial to breast cancer patients, that is, those who do not enjoy additional health insurance.

²⁵ Figures retrieved from <http://www.66millionsdimpatients.org/depassesments-dhonoraires-en-cliniques-restes-a-charge-au-menu/>

²⁶ Average supplementary fees charged by their specialty in their region is the reference for new entrants.

²⁷ Mercer (2016). <https://www.mercer.fr/content/dam/mercer/attachments/private/nurture-cycle/fr-2016-barometre-sante-bilan-acces-soins-hb-mercer.PDF>

In France, the system of 'access to care contracts' (see above) has far-reaching consequences for the reimbursement of supplementary fees by additional health insurance. Most additional health insurance contracts in France are so-called 'solidarity contracts'. Solidarity contracts are exempted from a 7% solidarity tax on additional health insurance contracts. Since 1 January 2016, employers have been obliged to offer an additional health insurance contract ('*complémentaire santé*') to their employees. For solidarity contracts, no social taxes ('*charges sociales*') are due on the part of the premium paid by the employer and the part paid by the employee is tax deductible. Contracts which do not qualify as 'solidarity contracts' are more expensive for both the employer and the employee. Solidarity contracts aim at reducing supplementary fees charged by sector 2 physicians who have not signed the 'access to care contract'. Reimbursement of supplementary fees by a solidarity contract is limited to 100% of social security tariffs. This is the same limit to be respected by physicians who have signed the 'access to care contract'.

So far, solidarity contracts have not succeeded in reducing total amount of supplementary fees charged. This is due to the limited number of physicians who have signed the 'access to care contract'. In addition, the 100% limit for supplementary fees can be circumvented by buying a 'supplementary' additional health insurance contract ('*surcomplémentaire santé*'). Such 'supplementary' additional health insurance provides coverage for supplementary fees that exceed the 100% limit of 'solidarity' contracts. A '*surcomplémentaire santé*' can be bought by an individual as an add-on to his or her additional health insurance or by the employer as an employee benefit.

Additional health insurers can also decide on their own initiative to cap reimbursement of supplementary fees. In Flanders – the northern, Dutch speaking region of Belgium – for instance, reimbursement of supplementary fees has been capped at 100% by the Christian Mutuality, one of the largest providers of additional health insurance.

3.5 Restricting differences in quality of care

Perceived quality of care has an important effect on willingness to pay supplementary fees. Due to this effect, regulating (i.e. limiting) physicians' ability to provide better quality of care for patients who pay supplementary fees could help to curb cost inflation. On 7 January 2017, new legislation came into force in Belgium, providing that, in hospitals, every patient is entitled to the same quality of care irrespective of supplementary fees being paid or not. However, the success of these regulations will depend on their enforceability. So far, there has been little or no effect on the supplementary fee system in Belgium.

3.6 Negotiating supplementary fees by additional health insurance

Social security tariffs are the result of negotiations on a national level between health insurers and physicians' representative associations. This is not the case for

supplementary fees, which are charged on top of social security tariffs. In theory, the patient could discuss prices with his or her physician. However, in practice, this is not likely to be very successful because of the asymmetrical relationship between patient and physician. When additional health insurance reimburses supplementary fees, additional health insurers could negotiate supplementary fees with the physicians' representative associations. Clout would increase if additional health insurers would join forces.

3.7 Counteracting moral hazard by additional health insurance

Insurance providing coverage for supplementary fees creates moral hazard. Insurance that makes all care free of out-of-pocket spending leads to nearly 50% greater spending (Pauly, 2007). Moral hazard can be reduced by cost-sharing arrangements such as deductibles and co-insurance and by managed care (e.g. negotiating supplementary fees, see above). Recently, 150–175 EUR deductibles have been applied in Belgium. Co-insurance has not yet been introduced. However, substantial co-insurance, for example, 25%, could be particularly effective in fighting excessive supplementary fees. Probably the most effective means of combatting excessive prices is for the insured to be required to retain a sufficiently large share of the risk that it is in his immediate interest to resist outrageous prices (Berliner, 1982).

3.8 Taking legal action against excessive supplementary fees

Patients can go to court to fight excessive supplementary fees. In Belgium and France, legal action can be based on the deontological code which states that physicians should be 'moderate' when determining their fees. In both countries, civil actions are possible based on the good faith principle in contractual relationships and the prohibition on abuse of a dominant position (*'la lésion qualifiée'*). There may also be a role there for the insurer. If amounts are claimed under insurance policies which are excessive, the insurer should not shy away from legal action. Judgements of higher courts, that is, supreme court judgements, could have an important effect on the supplementary fee system.

3.9 Conclusion

Several measures to curb cost inflation of supplementary fees can be implemented by both the authorities and the insurers. In Belgium and France, several measures have not yet been implemented or only to a limited extent (see Table 4). In France, more measures have been implemented than in Belgium. So far, measures that have been implemented in these countries have not yet resulted in a stabilisation or a reduction of supplementary fees.

Table 5. Supplementary fees as a percentage of gross income of sector 2 physicians (France)/self-employed physicians (Belgium) providing inpatient care in 2010

Specialism	France	Belgium
	% of gross income	% of gross income
Stomatology	45.6	15.9
Surgery	31.9	34.7
Gynaecology	29.5	34.9
Ophthalmology	25.3	10.1
Oto-rhino-laryngology	20.8	12.3
Anaesthesia	16.7	31.5
Paediatrics	16.7	21.1
Psychiatry	16.6	4.2
Gastro-enterology	11.6	11.5
Radiology	4.0	13.4
Cardiology	4.0	15.0
Pneumology	4.0	5.8

Source: DREES (2012), Swartenbroekx *et al.* (2012).

4. Added value of supplementary fees

Historically, both in Belgium and in France, the system of supplementary fees was introduced to allow physicians to increase their revenue. Hence, the added value of supplementary fees for the physician is clear: a source of (extra) income. However, the added value for the patient is not clear.

In the 1990s, the Belgian courts already dealt with the issue of whether the system of supplementary fees linked to the use of a private hospital room could be justified from a legal standpoint. Two courts – in 1993 and in 1997, respectively – ruled that supplementary fees are not acceptable unless additional health services are provided by the physician (*‘qu’il existe un “supplément” de prestations en contrepartie du “suppléments d’honoraires”*).²⁸ The judges stated that extra services needed to be provided for the extra money paid in order for the supplementary fees to be justified (*‘quid pro quo’*). Since the two courts ruled at first instance, the judgements only had a limited impact.

4.1 Added value for the physician: extra income

For certain categories of self-employed medical specialists, supplementary fees constitute a substantial part of their income (see Table 5). Supplementary fees represent, respectively, 35 and 32% of the total income of Belgian and French surgeons.

²⁸ Court of first instance Antwerp 27 May 1993 (*Rechtbank van eerste aanleg Antwerpen*), DCCR 1994, 762. Court of first instance Liège 12 November 1997 (*Tribunal de première instance Liège*), JLMB, 1999, 277.

Both in Belgium and France, hospitals also benefit from supplementary fees. In most hospitals, physicians have to cede a certain percentage of their supplementary fees to the hospital to help finance overhead costs.

4.2 Added value for the patient?

Whereas the added value for the physician is clear, this is not the case as far as the patient is concerned.

4.2.1 Comfort and access

Patients willing to pay supplementary fees may be offered convenient consultation hours late at night or comfortable private rooms in hospitals. However, while it is understandable that a patient might have to pay extra to the hospital for the use of a luxurious private room, it is difficult to understand why he/she should pay extra to the physician for staying in a private room.

In France, a physician can refuse to treat a patient if he/she is not willing to pay the supplementary fees charged by that physician. Dormont and Péron (2016) found that French patients might choose to consult sector 2 specialists, who can charge supplementary fees, because they have difficulties in gaining access to other physicians, that is, sector 1 specialists who do not charge supplementary fees. If, in a certain region, there are fewer sector 1 specialists, patients face search costs, waiting time and transportation costs in order to consult a specialist who does not charge more than the regulated fee.

4.2.2 Quality of care: pay for performance

In a theoretical study (Glazer and McGuire, 1993), it has been argued that restrictions on supplementary fees come at a price as physicians have an incentive to reduce the quality of their services. A physician can be regarded as making two choices to maximise profit: the price for the price-paying patients (patients willing to pay extra), and the quality for the fee-only patients (patients not willing to pay extra). Physicians' equilibrium choice of quality and price depends on the level of fee set by the regulator. When the fee is low enough, no patient will be taken at the fee only. When the fee is high enough, no patient will be charged extra. When the fee is set in the range between these two fee levels, some patients are served for the fee, but the quality to the fee-only patients is less than or equal to the quality for the price-paying patient. Kifmann and Scheuer (2011) applied the findings of Glazer and McGuire to Medicare in the United States. They studied the effects of 'balance billing', that is, allowing physicians to charge a fee from patients in addition to the fee paid by Medicare. In contrast to Glazer and McGuire (1993), they found that allowing balance billing generally is not superior as balance billing allows physicians to increase their rents. An empirical study of the effects of Medicare restrictions on extra billing in the late 1980s and early 1990s was performed by McKnight (2007). She found that these restrictions reduced

out-of-pocket medical expenditure of Medicare beneficiaries by 9%. With the exception of a significant fall in the number of follow-up telephone calls, her study showed little evidence that physicians changed their behaviour in response to the extra billing restrictions.

In Belgian hospitals, supplementary fees are linked to the use of a private room. A review of the literature found that private rooms have a moderate effect on patient satisfaction with care, noise and quality of sleep, and the experience of privacy and dignity (van de Glind *et al.*, 2007). Conflicting results were found for hospital infection rates. In addition, there was no evidence on recovery rates and patient safety. In France, the thriving of sector 2 medical specialists, who can charge supplementary fees, may be due to patients believing that these physicians provide better quality of care (Dormont and Péron, 2016). The idea that an expensive physician must be an excellent physician might play a role. Value might also be attributed to supplementary fees by patients believing that extra payments for physicians motivate them to go the extra mile.

Today, quality of care is high up on the political agenda. Donabedian's (1997) structure-process-outcome model for quality of care is widely accepted. Information technology enables and facilitates the collection and the use of data to measure and to follow-up on quality of care. For instance, in the United States, the Core Quality Measure Collaborative, led by public health plans, commercial insurers, providers and consumers, is trying to reach consensus on core performance measures (CMS, 2016).

Pay-for-quality or pay-for-performance payment methods were introduced several years ago (e.g. Epstein *et al.*, 2004). The pay-for-performance model offers financial incentives to providers to improve quality and efficiency. Typically, incentives are paid on top of the standard fee-for-service compensation if the provider meets or exceeds certain pre-established metrics of performance. For instance, the 'physician value modifier program' rewards physicians with bonus payments when their performance attains specified measures of quality and cost (Baird, 2016).

The question is whether supplementary fees could play a role in the implementation of a pay-for-performance model? In the past, patients had little objective data at their disposal on the quality of health care services provided by an individual physician. Today, such data are being made available. Processing such data can provide objective information on the quality of care provided by an individual physician. As long as there is no transparency on the quality of care provided by physicians, physicians can charge supplementary fees even if the quality of care they provide is substandard. With more transparency being created on the quality of care provided, it is likely that the value of supplementary fees will increasingly be questioned in the future. It can be expected that patients will only be willing to pay supplementary fees for physicians who effectively provide above standard quality of care. But then another problem will arise. If supplementary fees are to be linked to objectively and transparently demonstrated top quality,

a problem of equal access to care will arise. Limiting access to top quality care to patients who are able to pay supplementary fees is in contradiction with the principle of equal access to care. Equal access to health care is at the core of equity in health which implies that ideally everyone should have a fair opportunity to attain their full health potential and, more pragmatically, that no one should be at a disadvantage in achieving this potential, if it can be avoided (Whitehead, 1992).

A two-tiered system, with better quality only available to those who are able and willing to pay extra, is considered to be socially undesirable in many countries.

4.2.3 *Conclusion*

Patients who pay extra money expect extra value. Convenient consultation hours late at night may represent added value. Location can also play a role in patients' willingness to pay supplementary fees. Patients face search costs, waiting time and transportation costs to consult with a physician who does not engage in extra billing in regions where physicians who stick to social security tariffs are scarce.

Perceived quality of care plays an important role in patients' willingness to pay supplementary fees. Growing availability of objective data on quality of care might well be a game changer. In future, physicians will increasingly need to justify why they charge a higher price. Limiting access to objectively proven top quality care to patients able and willing to pay supplementary fees may not be socially acceptable in many countries. In these countries, it is unlikely that governments will choose for supplementary fees to be used as an incentive for physicians to provide better quality of care.

5. Conclusion

In some countries, such as Belgium and France, physicians can charge a supplementary fee on top of the tariff set by basic health insurance.

Both in Belgium and in France, there is much concern about the financial sustainability of the system of supplementary fees. Expenditure on supplementary fees is increasing at a pace that exceeds the rate at which total expenditure on health care is increasing. Both in Belgium and in France, the bulk of supplementary fees is covered by additional health insurance. Sustained rapid growth of supplementary fees leads to sharp increases in premiums for additional coverage.

In section 3, we discussed measures to contain cost inflation of supplementary fees. Supplementary fees can be prohibited for certain categories of patients (e.g. persons with low incomes) and in certain situations (e.g. emergency care). Reference tariffs can be set and supplementary fees can be capped. Supply-side restrictions can be introduced and differences in quality of care can be limited. Insurers providing coverage for supplementary fees also have an important role to play. Coverage of supplementary fees can lead to both patient-induced and

physician-induced moral hazard. Therefore, insurers ought to effectively counteract moral hazard by implementing measures such as co-insurance, deductibles and managed care. Insurers should not shy away from legal action against excessive supplementary fees.

The added value of supplementary fees for the physician is clear: extra income. However, for the patient added value of supplementary fees is not clear. Supplementary fees can buy comfort, for example, convenient consultation hours. Physicians can refuse to treat patients who are not willing or able to pay supplementary fees. However, there is no evidence that physicians who charge supplementary fees provide a higher quality of care than physicians who do not.

Today, supplementary fees are not based on hard, publicly available data on quality of care. With information on differences in quality of care offered by individual physicians becoming more readily available, more transparency on the added value of supplementary fees will be created. Physicians will have to prove that they are 'worth the extra money'. However, limiting access to – objectively proven – top quality physicians to patients who can afford to pay supplementary fees, is in contradiction with the principle of accessibility of care. To do so would be to create a two-tiered health care system where only those who can pay supplementary fees out-of-pocket or take out private additional health insurance to cover supplementary fees have access to the best physicians. In many countries, this is considered to be socially unacceptable.

Our conclusion is that supplementary physicians' fees are not sustainable.

Since supplementary fees constitute an important source of revenue for certain medical specialists and physicians are a strong lobby group, a policy gradually restricting supplementary fees might be preferable. Today, both in Belgium and in France, the first steps in limiting supplementary fees have already been set. With the lack of added value for the patient becoming more apparent, this process is likely to continue over the next few years.

Acknowledgements

The authors gratefully acknowledge the comments made by the anonymous reviewers. The authors thank Richard Burton for his corrections and suggestions.

Financial Support

No funding was received for the manuscript.

References

- Auguste, O. (2012), 'Dépassements d'honoraires: 7 questions pour comprendre', *Le Figaro*, 19 October 2012. <http://www.lefigaro.fr/conjoncture/2012/10/19/20002-20121019ARTFIG00316-depassements-d-honoraires-7-questions-pour-comprendre.php> [10 October 2017].

- Baird, C. (2016), 'Top health care stories for 2016: pay-for-performance', Committee for Economic Development, 8 May 2016. <https://www.ced.org/blog/entry/top-healthcare-stories-for-2016-pay-for-performance> [10 October 2017].
- Barlet, M. and C. Marbot (2016), 'Portrait des professionnels de santé – édition 2016', Ministère des affaires sociales et de la santé, Direction de la recherche, des études, de l'évaluation et des statistiques (DREES): Panoramas de la DREES Santé.
- Béguin, F. (2015), 'Les dépassements d'honoraires continuent d'augmenter', *Le Monde*, 21 May 2015. http://www.lemonde.fr/sante/article/2015/05/21/le-montant-total-des-depassements-d-honoraires-continue-d-augmenter_4637297_1651302.html [10 October 2017].
- Berliner, B. (1982), *Limits of Insurability of Risks*, Englewood Cliffs: Prentice-Hall.
- Calcoen, P., W. P. M. M. van de Ven and P. Verlinden (2015), 'Suppléments d'honoraires dans les services de santé: interdire, réglementer ou laisser-faire?', *Revue Belge de Sécurité Sociale*, 2015(3): 535–560.
- Clavreul, L. (2014), 'Dépassements d'honoraires à l'hôpital: agacement des patients et du secteur privé', *Le Monde*, 15 September 2014. http://www.lemonde.fr/societe/article/2014/09/15/depassements-d-honoraires-a-l-hopital-agacement-des-patients-et-du-secteur-prive_4487478_3224.html [10 October 2017].
- CMS (Centers for Medicare and Medicaid Services) (2016), *Core Quality Measures*, 16 February 2016. <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/Core-Measures.html> [10 October 2017].
- Donabedian, A. (1997), 'The quality of care. How can it be assessed?', *JAMA*, 260(12): 1743–1748.
- Dormont, B. and M. Péron (2016), 'Does health insurance encourage the rise in medical prices? A test on balance billing in France', *Health Economics*, 25(9): 1073–1089.
- DREES (Direction de la recherche, des études, de l'évaluation et des statistiques) (2012), 'Comptes nationaux de la santé 2011'. Paris: Ministère des affaires sociales et de la santé. <http://drees.social-sante.gouv.fr/etudes-et-statistiques/publications/documents-de-travail/serie-statistiques/article/comptes-nationaux-de-la-sante-2011> [10 October 2017].
- Epstein, A. M., H. L. Lee and M. B. Hamel (2004), 'Paying physicians for high-quality care', *New England Journal of Medicine*, 350(4): 406–410.
- Feldstein, M. S. (1970), 'The rising price of physician's services', *The Review of Economics and Statistics*, 52(2): 121–133.
- Glazer, J. and T. McGuire (1993), 'Should physicians be permitted to "balance bill" patients?', *Journal of Health Economics*, 11(2): 239–258.
- Hall, M. A. and C. E. Schneider (2008), 'Learning from the legal history of billing for medical fees', *Journal of General Internal Medicine*, 23(8): 1257–1260.
- INAMI (Institut national d'assurance maladie-invalidité) (2016a), 'Adhésion à l'accord médico-mutualiste 2016-2017'. <http://www.inami.fgov.be/fr/professionnels/sante/medecins/soins/Pages/adhesion-accord-medico-mutualiste-2016-2017> [10 October 2017].
- INAMI (Institut national de l'assurance maladie-invalidité) (2016b), 'Statistiques sur les personnes affiliées à une mutualité', 8 June 2016. <http://www.inami.fgov.be/fr/programmes-web/Pages/programme-web-statistiques-personnes-affiliees-mutualite.aspx#.WEqt8IzXwo> [10 October 2017].
- Kifmann, M. and F. Scheuer (2011), 'Balance billing: the patients' perspective', *Health Economics Review*, 1(1): 14.
- Kok, L., S. Boyle, M. Lammers and C. Tempelman (2015), 'Remuneration of medical specialists. Drivers of the differences between six European countries', *Health Policy*, 119(9): 1188–1196.

- Léchenet, A. (2012), 'Les revenus des chirurgiens en hausse grâce aux dépassements', *Le Monde*, 12 November 2012. http://www.lemonde.fr/sante/article/2012/11/12/les-revenus-des-chirurgiens-en-hausse-grace-aux-depassements_1789217_1651302.html [10 October 2017].
- Lecluyse, A., C. Van de Voorde, D. De Graeve, E. Schokkaert and T. Van Ourti (2009), 'Hospital supplements in Belgium: price variation and regulation', *Health Policy*, **92**(2-3): 276–287.
- McKnight, R. (2007), 'Medicare balance billing restrictions: impacts on physicians and beneficiaries', *Journal of Health Economics*, **26**(2): 326–341.
- Mutualité Chrétienne (2011), '7e Baromètre MC de la facture hospitalière', 1 December 2011. https://www.mc.be/actualite/communiqué-presse/2011/barometre_hospi_2010.jsp [10 October 2017].
- Mutualité Chrétienne (2016), '12e Baromètre MC de la facture hospitalière', 21 November 2016. https://www.mc.be/actualite/communiqué-presse/2016/barometre_hospitalier_2016.jsp [10 October 2017].
- Nys, H. (2001), 'De rechten van de patiënt. Gids voor patiënten en zorgverleners die in deze Eis-tijd voor een vertrouwensrelatie kiezen'. Leuven: Universitaire Pers Leuven.
- Pauly, M. V. (2007), 'Insights on demand for private voluntary health insurance in less developed countries', in A. S. Preker, R. M. Scheffler and M. C. Bassett (eds), *Private Voluntary Health Insurance in Development. Friend or Foe*, Washington: The World Bank, 25–54.
- Sécurité sociale, l'assurance maladie en ligne (2016a), 'Données statistiques sur la démographie des professionnels de santé libéraux', 10 February 2016. <http://www.ameli.fr/l-assurance-maladie/statistiques-et-publications/donnees-statistiques/professionnels-de-sante-liberaux/demographie/secteur-conventionnel.php> [10 October 2017].
- Sécurité sociale, l'assurance maladie en ligne (2016b), 'Données statistiques sur les honoraires des professionnels de santé libéraux', 9 February 2016. <http://www.ameli.fr/l-assurance-maladie/statistiques-et-publications/donnees-statistiques/professionnels-de-sante-liberaux/honoraires/honoraires-totaux-et-moyens.php> [10 October 2017].
- Sury, C. (2016), 'Jusqu'à 15 pour cent d'augmentation pour les assurances hospitalisation en 2017', *L'Echo*, 25 November 2016. http://www.lecho.be/monargent/budget/Jusqu_a_15_d_augmentation_pour_les_assurances_hospitalisation_en_2017.9835197-1783.art?ckc=1&ts=1481292534 [10 October 2017].
- Swartenbroekx, N., C. Obyn, P. Guillaume, M. Lona and I. Cleemput (2012), *Manual for cost-based pricing of hospital interventions*. Health Technology Assessment (HTA). Brussels: Belgian Health Care Knowledge Centre (KCE). KCE Report 178C.
- UFC (Union fédérale des consommateurs) (2013), 'Honoraires des médecins spécialistes en 2013. Les bornes sont dépassées', September 2013. <https://www.quechoisir.org/action-ufc-que-choisir-honoraires-des-medecins-specialistes-en-2013-les-bornes-sont-depassees-n13895/> [10 October 2017].
- van de Glind, I., S. de Roode and A. Goossens (2007), 'Do patients in hospitals benefit from single rooms? A literature review', *Health Policy*, **84**(2–3): 153–161.
- Vansweevelt, T. and F. Dewallens (2014), *Handboek gezondheidsrecht*, Antwerpen: Intersentia.
- Whitehead, M. (1992), 'The concepts and principles of equity and health', *International Journal of Health Services*, **22**(3): 429–445.