

## Conclusion and discussion



## 7.1. CONCLUSION

In this section, we will answer the research questions (see Chapter 1). The answers are based on the papers included in the previous chapters.

### 7.1.1. Reliability of OECD Health Statistics

#### Research question 1:

*In how far are OECD Health Statistics on private expenditure on health for Belgium reliable?*

We have compared -for the year 2010- the official estimates of private health expenditure for Belgium (as published in the OECD Health Statistics<sup>210</sup>) with estimates based on alternative sources and calculations. As alternative sources, we have used both publicly available information and billing data from professional associations and private companies. We have applied the methodology of the International Classification of Health Accounts: sources of funding (HF)<sup>211</sup> and providers of health care services and goods (HP)<sup>212</sup> giving an insight in where the money comes from (HF) and where the money goes to (HP).

Table 1 shows the results of this comparison. The most significant differences between the official estimates and alternative calculations can be found in the following sectors: (1) general hospitals, (2) nursing care facilities (homes for the elderly), (3) community care facilities for the elderly, (4) all other residential care facilities (residential care for the disabled), (5) offices of other health practitioners (such as physiotherapists and psychologists) and (6) vision products.

Our conclusion is that official estimates of private expenditure on health for Belgium are not reliable. For instance, according to OECD Health Statistics, private expenditure on hospitals in Belgium amounts to 3.1 billion EUR, while according to our alternative calculations these expenses represent only 1.1 billion EUR. Total private expenditure on health differs only slightly (9.4 billion EUR [alternative calculations] versus 9.3 billion EUR [OECD]), but this is a mere coincidence.

Dirk Moens, who is responsible with the Belgian Federal Service Social Security for producing the official estimates of health expenditure for Belgium, co-authored the

210 Formerly 'OECD Health Data'. Official estimates on health expenditure are produced by the Belgian Federal Public Service Social Security. The estimates are collected, validated and published in a joint effort by OECD, WHO and Eurostat.

211 HF: 'health financing', expenditure on health by source of funding.

212 HP: 'health provider', expenditure on health by provider.

paper on this subject. The publication of the paper has led to a revision of some of the official estimates. For instance, for 2010, private expenditure on inpatient long-term nursing care (homes for the elderly) has been revised from 420 million EUR (OECD Health Statistics 2011) to 950 million EUR (OECD Health Statistics 2017). Private expenditure on therapeutic appliances (i.e., glasses and other vision products and hearing aids) has also been revised: from a mere 22 million EUR (OECD Health Statistics 2011) to 395 million EUR (OECD Health Statistics 2017).

### **Research question 2:**

*What are the major obstacles to a correct estimation of private expenditure on health?*

We distinguish four potential sources of problems: (1) the interpretation of definitions, (2) the formulation of assumptions, (3) missing or incomplete data and (4) incorrect data.

#### (1) Interpretation of definitions

A narrow or broad interpretation of the definitions listed in the OECD Manual 'A System of Health Accounts' (SHA) can give totally different results for private expenditure on health. The definitions used in relation to private expenditure on homes for the elderly can illustrate this problem. In Belgium, there are two types of homes for the elderly: homes for individuals requiring extended nursing care ('nursing homes')<sup>213</sup> and homes for individuals requiring limited care ('rest homes').<sup>214</sup> For the calculation of the Belgian official estimates, the choice has been made to include private expenditure for the first type of homes but not for the second type. There are two problems with this approach. First, although the scope of the SHA category 'nursing care facilities' is indeed limited to 'individuals requiring nursing care', private expenditure on rest homes could be allocated to the SHA category 'community care facilities for the elderly'. This category addresses 'persons unable to fully care for themselves and/or unwilling to live independently'. Second, in the OECD Health Statistics for Belgium, public expenditure on both types of homes for the elderly has been taken into account. However, as far as private expenditure is concerned, only nursing homes have been taken into account. The question can be raised whether including only public expenditure on rest homes and not private expenditure does not result in an inconsistency between public and private expenditure on health.

213 'Maisons de repos et de soins' (MRS)/'Rust- en verzorgingstehuizen'(RVT).

214 'Maisons de repos pour personnes âgées' (MRPA)/'Rustoordn voor bejaarden' (ROB).

**Table 1.** Expenditure on health by provider and source of funding: OECD Health Data versus alternative calculations (Belgium 2010) (million €).

	<b>General government expenditure (OECD)</b>	<b>Private sector expenditure (OECD)</b>	<b>Private sector expenditure (alternative calculations)</b>
<b>Hospitals</b>	<b>8612</b>	<b>3139</b>	<b>1073</b>
General hospitals	7332	2436	966
Mental health and substance abuse hospitals	1188	451	95
Specialty (other than mental health and substance abuse hospitals)	92	252	12
<b>Nursing and residential care facilities</b>	<b>4238</b>	<b>397</b>	<b>1991</b>
Nursing care facilities ( <i>homes for the elderly</i> )	2344	378	1136
Residential mental retardation, mental health and substance abuse facilities	109	18	18*
Community care facilities for the elderly	0***	0	610
All other residential care facilities	1784	0	227
<b>Providers of ambulatory health care</b>	<b>8766</b>	<b>2991</b>	<b>3420</b>
Offices of physicians	3240	1537	1243
Offices of dentists	770	584	592
Offices of other health practitioners	987	182	717
Out-patient care centres	278	1	1*
Medical and diagnostic laboratories	1471	184	293
Providers of home health care	1242	10	82
Other providers of ambulatory health care	778	492	492*
<b>Retail Sale and other providers of medical goods</b>	<b>3764</b>	<b>2459</b>	<b>2627</b>
Dispensing chemists (pharmacies)	3731	2434	2248
(Pharmaceutical and other medical non-durables - HC.5.1)	(3735)**	(2317)**	(2248)**
Retail sale and other suppliers of optical glasses and other vision products	23	3	357
Retail sale and other suppliers of hearing aids (Hearing aids - HC.5.2.3)	0 (45)**	20 (56)**	20* (60)**
Retail sale and other suppliers of medical appliances (other than optical goods and hearing aids)	10	2	2*
All other miscellaneous sale and other suppliers of pharmaceuticals and medical goods			
<b>Provision and administration of public health programs</b>	<b>874</b>		
<b>General health administration and insurance</b>	<b>1501</b>	<b>331</b>	<b>331</b>
<b>Other industries (occupational health care / private households)</b>	<b>333</b>	<b>0</b>	<b>0</b>
<b>Total general government expenditure / Total private sector expenditure</b>	<b>28088</b>	<b>9316</b>	<b>9442</b>
Total expenditure		37404	37530
<b>Total private sector expenditure (% of total expenditure)</b>		24.9%	25.2%

\* When no alternative data are available, OECD figures for private expenditure are being used.

\*\* Figures for HC.5.1 and HC.5.2.3 have not been used to calculate total expenditure.

\*\*\* General government expenditure on community care facilities for the elderly is comprised in general government expenditure on nursing care facilities (*homes for the elderly*).

## (2) Formulation of assumptions

Certain assumptions are being made for the allocation of total private expenditure on health to the different (sub)sectors of health care providers. Transparency in relation to these assumptions is crucial to allow for data on private expenditure to be criticised and improved. In this respect, we have had an excellent working relationship with the Belgian Federal Public Service Social Security which is responsible for producing the Belgian figures for the OECD Health Statistics. A critical assumption, for instance, is that statutory user charges can be used as a distribution key to allocate private expenditure to the different (sub)sectors of health care providers. Criticism of this assumption can be illustrated by supplementary fees, since there is not always a proportional relationship between user charges and supplementary fees. Certain (sub)sectors have substantial user charges and low supplementary fees while other (sub)sectors are characterised by significant supplementary fees and (almost) no user charges.

## (3) Missing or incomplete data

Examples of missing data in the Belgian market are the figures on private expenditure for psychologists and dietitians. No aggregate data are available. The professional associations have made an estimate based on the number of providers, the average number of sessions and the average fee charged. According to this methodology, we arrive at a total of 230 million EUR private expenditure on self-employed, registered clinical psychologists and 60 million EUR on self-employed dietitians in Belgium. Incomplete data can also be a source of error. An example from the Belgian market are vision products. OECD Health Statistics list 3 million EUR for private expenditure on vision products (see Table 1). This figure pertains solely to co-payments for vision products that are reimbursed by mandatory basic health insurance.<sup>215</sup> Figures on total turnover in the market of vision products are not publicly available. Information from the industry shows that total turnover amounts to 475 million EUR. This example shows how lack of information can result in completely distorted results.

## (4) Incorrect data

Incorrect data can be the result of the use of outdated information. For instance, for the production of the Belgian data on private expenditure on homes for the elderly, a ratio of 40 per cent nursing home beds and 60 per cent rest home beds has been used. However, in 2010, nursing home beds represented 49.4 per cent of total beds. Since only private expenditure on nursing homes has been included in the official Belgian figures, the 40:60 ratio applied results in an underestimation of private expenditure on homes for the elderly.

<sup>215</sup> Reimbursement of vision products by mandatory basic health insurance totals 23 million EUR.

### 7.1.2. Supplementary physicians' fees

#### Research question 3:

*What is the cost (evolution) of supplementary physicians' fees in Belgium and France?*

In Belgium, more supplementary fees are charged per inhabitant than in France (see Table 2). For outpatient care, the difference between the two neighbouring countries is limited. However, for inpatient care, supplementary fees per inhabitant are almost three times higher in Belgium than in France.

In 2012, supplementary physicians' fees represented 8.9 per cent and 6.3 per cent of total private expenditure on health in Belgium and France respectively.

**Table 2.** Supplementary physicians' fees in Belgium and France (2012)<sup>216</sup>

	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 <sup>216</sup>	€381 million	€34	€793 million	€12
Total supplementary fees	€781 million	€70	€2644 million	€40

Sources: authors' calculations; DREES; Eurostat

In Belgian hospitals, both 'conventioned' and 'non-conventioned' physicians can charge supplementary fees for private rooms. For outpatient care, only 'non-conventioned' physicians are allowed to do so.<sup>217</sup> Between 2011 and 2017, the percentage of 'non-conventioned' general practitioners and medical specialists has dropped from 12.3 to 10.6 per cent and from 20.0 to 16.7 per cent respectively (INAMI, 2016a).

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

<sup>216</sup> For 2015, figures are 531 million EUR and 937 million EUR for Belgium and France respectively (sources: INAMI, DOC CNMM 2017/34. Available at [http://ima-aim.be/IMG/pdf/ima-rapport\\_ereoonsupplementen.pdf](http://ima-aim.be/IMG/pdf/ima-rapport_ereoonsupplementen.pdf); Fierla A.: Toujours plus de dépassements d'honoraires dans les cliniques privées. Le Figaro, 27 December 2016. Available at <http://www.lefigaro.fr/conjoncture/2016/12/27/20002-20161227ARTFIG00087-les-depassements-d-honoraires-des-cliniques-privees-ont-augmente-de-30.php> (2016)).

<sup>217</sup> 'Conventioned' physicians can only charge supplementary fees in case of 'special demands' made by the patient (e.g., a late-night consultation).

The total amount of supplementary fees charged for classic hospital stays in Belgian hospitals (including minimum one-night) has increased by 7.1 per cent per year between 1998 and 2010. Over the same period, the total hospital bill for patients has increased by 3.0 per cent (Mutualité Chrétienne, 2011).<sup>218</sup> After adjustment for inflation, supplementary fees have increased by 32 per cent between 2004 and 2015, whereas the total patient bill has decreased by 5 per cent (Mutualité Chrétienne, 2016).

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

In France, average supplementary fees in sector 2 have risen from 25 per cent of official tariffs in 1990 to 54 per cent 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 per cent). 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).

While about three-quarters of the Belgian population has taken out complementary health insurance covering inpatient supplementary fees, less than five per cent is covered for outpatient supplementary fees. This may be explained by both supply and demand factors. Isolated outpatient bills tend to be relatively small while hospital stays may result in catastrophic medical expenses. Taking out health insurance to cover catastrophic expenses is more appealing. However, patients suffering from (multiple) chronic diseases can be confronted with significant outpatient bills. Processing small outpatient bills entails disproportionately large administrative costs for health insurers. As long as the majority of outpatient bills are on paper, health insurers will not be likely to promote complementary health insurance covering outpatient costs.

#### **Research question 4:**

*How can cost inflation of supplementary physicians' fees be contained?*

Several measures to curb cost inflation of supplementary fees can be implemented both by authorities and insurers. 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

<sup>218</sup> The figures mentioned (7.1 per cent and 3.0 per cent) 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 per cent of the Belgian population (INAMI, 2016b).

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.

Both in Belgium and France, several measures have not yet been implemented or only to a limited extent (see Table 3). So far, the measures that have been implemented in these countries have not yet resulted in a stabilisation or a reduction of supplementary fees.

**Table 3.** Measures to curb cost inflation of supplementary fees

<b>Initiated by the authorities</b>	<b>Belgium</b>	<b>France</b>
Prohibiting supplementary fees	✓ <sup>a</sup>	✓ <sup>a</sup>
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	✓ <sup>b</sup>	-
<b>Initiated by insurers</b>	<b>Belgium</b>	<b>France</b>
Capping reimbursement of supplementary fees	✓	✓
Negotiating supplementary fees	-	-
Applying deductibles	✓	-
Applying co-insurance	-	-
Taking legal action against excessive supplementary fees	- <sup>c</sup>	- <sup>c</sup>

<sup>a</sup> Both 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)

<sup>b</sup> Since 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.

<sup>c</sup> Legal action has only been taken by individuals in isolated cases. There are only judgments from lower courts.

### Research question 5:

*What is the added value of supplementary physicians' 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"*).<sup>219</sup> 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 judgments had only a limited impact.

For certain categories of self-employed medical specialists, supplementary fees constitute a substantial part of their income. Supplementary fees represent 35 per cent and 32 per cent of the total income of Belgian and French surgeons respectively.

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

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.

A physician can refuse to treat a patient if the patient is not willing to pay the supplementary fees charged by the 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, i.e., 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.

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.

<sup>219</sup> 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.

The thriving in France 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.

In short, the added value of supplementary fees for the physician is clear: extra revenue. Hospitals may also benefit from supplementary fees for they may receive part of the supplementary fees charged. Patients who are able and willing to pay supplementary fees can buy comfort such as convenient consultation hours late at night or private rooms in hospitals. Since physicians can refuse to treat patients who do not pay supplementary fees, willingness to pay supplementary physicians' fees guarantees a patient's free choice of physician.

#### **Research question 6:**

*Is a system of supplementary physicians' fees charged on top of social security tariffs sustainable?*

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 high 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 care only available to those who are able and willing to pay extra, is considered to be socially unacceptable 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.

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.

A short answer to the research question is: no, the current system of supplementary physicians' fees in Belgium and France is not sustainable. In the short run, cost inflation is putting serious pressure on the viability of the system. In the long run, lack of evidence that physicians charging supplementary fees provide better quality of care is likely to undermine patients' willingness to pay supplementary fees. Patients, like all consumers, want 'quid pro quo'. Moreover, if supplementary fees were to effectively depend on the quality of care provided, a problem of equal access to care would arise since only patients able to pay supplementary fees would have access to top quality physicians.

### **7.1.3. Access to new health technologies**

#### **Research question 7:**

*Are new health technologies equally accessible for patients in Belgium and the Netherlands?*

Contrary to the Netherlands, out-of-pocket payments for new health technology are widely accepted and practiced in Belgium. This difference is largely the result of different regulatory environments. A major difference is the way in which entitlements to care are described: closed and explicit in Belgium versus open and non-explicit in the Netherlands. In Belgium, there is a closed, enumerative list of medical goods and services covered by mandatory basic health insurance. As a consequence, there is transparency about which treatments are not covered. In the Netherlands, there is no such list. Dutch law stipulates that care that meets the criteria of 'current scientific knowledge and practice' is to be covered by mandatory health insurance. However, unless the National Health Care Institute has assessed a certain treatment, insurers and hospitals do not necessarily all have the same approach towards that treatment. This may cause a less transparent situation for the patient in the Netherlands. The existence of in-kind health insurance policies in the Netherlands, as opposed to Belgium, may also help explain differences in access to new health technologies. With in-kind policies, patients' choice is limited to the care contracted by the health insurer.

It is not always clear for the Dutch patient which insurers and which hospitals offer a specific new health technology. In principle, the patient can check the website of the insurer or enquire with the insurer by telephone. Insurers are obliged to give a detailed answer to such questions. However, in practice this possibility is not often used. Recently, concerns have been raised in the press about Dutch hospitals -for financial reasons- not always or not immediately providing the patient with the best treatment available. For example, bevacizumab (Avastin) might not be given to all patients with colon carcinoma because some hospitals prefer not to pay for this expensive treatment.<sup>220</sup>

In Belgian hospitals lists are available for the patient containing well-defined health technologies which need to be paid for out-of-pocket (e.g., certain types of hip implants and intraocular lenses and materials for fracture fixation) (Christian Mutuality, 2017).

Whereas the Belgian approach may do better in terms of 'access to new health technologies' for those who are able and willing to pay, the Dutch approach has a better score for 'equal access to care'. In Belgium, patients have more choice, if they can pay. Of course, the condition is that they are informed about the existence of other treatment options. Based on the Patient Rights Act of 2002, their doctor should inform them about all treatment options, including those that are not covered by mandatory basic health insurance. More research is needed to know to what extent doctors effectively perform this task. For instance, doctors might be inclined to only inform well-off patients who can afford to pay out-of-pocket for an expensive new health technology.

Within the Dutch health system, there is less transparency on the availability of new health technologies. Out-of-pocket payments for new health technologies do not exist in the Netherlands. The comprehensiveness of the statutory benefits package may be part of the explanation. However, since it is impossible for the benefits package to cover all new health technologies, Dutch patients may not have access to certain new technologies. Another element of the Dutch health care system may also negatively affect transparency. Since health insurers and hospitals are free to contract, including on the use of new health technologies, the patient may not know about new technologies being used in one hospital but not in the other.

Contrary to the Netherlands, Belgium has a two-tiered system so far as access to new health technologies is concerned. Access to new health technologies depends on the

<sup>220</sup> See Dutch newspaper article (2015): 'Ziekenhuis verbiedt kankerkuur' (translation: Hospital forbids cancer Treatment). *De Telegraaf*, 16 June 2015. Available at [http://www.telegraaf.nl/gezondheid/24164283/\\_Ziekenhuis\\_verbiedt\\_kankerkuur\\_.html](http://www.telegraaf.nl/gezondheid/24164283/_Ziekenhuis_verbiedt_kankerkuur_.html).

patient being informed about the new technology and the ability and willingness to pay out-of-pocket. Covering new health technologies that are not (yet) reimbursed by mandatory basic health insurance is one of the reasons for the existence of PHI in Belgium.

In sum, there seems to be a trade-off between equal access to care on the one hand and choice and transparency on the other. In a two-tier health care system, there is no equal access to new health technology. In an egalitarian system, transparency on where and what technology is being used, as well as choice are limited.

#### **Research question 8:**

*What can be the role of voluntary private health insurance in providing access to new health technology?*

Eighty-two per cent of the Belgian population and 84 per cent of the Dutch population has subscribed to PHI (figures for 2015) (Assuralia, 2016; CDZ, 2015; Vektis, 2015). While Belgian PHI mainly offers coverage for inpatient costs, Dutch PHI focuses on outpatient costs such as dental care and physiotherapy. As opposed to Belgium, PHI in the Netherlands does not offer coverage for new health technology which is not (yet) covered by mandatory basic health insurance. In Belgium, the role of PHI in covering new health technology is recognised by the government. The Belgian 'Special Solidarity Fund', which is an integral part of mandatory basic health insurance, explicitly stipulates that patients first have to seek reimbursement for a new technique from PHI before they can file a request with the Fund.<sup>221</sup>

In the Netherlands, expenditure on general hospitals is almost completely covered by mandatory basic health insurance. Out-of-pocket expenditure represents only 0.4 per cent of total expenditure on hospitals. The situation is very different in Belgium, where private expenditure on general hospitals amounts to 20.1 per cent of total expenditure on hospitals. Additional health insurance covers 8.6 per cent of total expenditure on hospitals.<sup>222</sup>

While in the Netherlands it is theoretically possible to charge a supplement for new health technology to patients who have a reimbursement policy, the general perception is that this is not happening in practice. Although the Dutch government is promoting

221 Article 25 septies. §1, 4° Wet betreffende de verplichte verzekering voor geneeskundige verzorging en uitkeringen gecoördineerd op 14 juli 1994 (Health Insurance Act).

222 Source: OECD Health Statistics (figures for 2015). As discussed in chapter 2 of this thesis, the real figure for private expenditure on general hospitals is likely to be substantially lower than the OECD figure mentioned here.

competition on price and quality among health insurers and health insurance policies and although legislation allows them to do so, health insurers are not offering two benefits-in-kind policies A and B whereby for policy A treatment X has been contracted and for -the more expensive- policy B treatment Y, using new health technology, has been contracted.

An analysis of the Belgian and the Dutch approach reveals that a closed explicit system of entitlements to care may create an environment in which patients (and their doctors) are encouraged to look for and to use new health technologies which are not (yet) reimbursed by mandatory basic health insurance. Reimbursement by PHI can facilitate the use of new health technologies, e.g., by providing reimbursement for technologies that are not yet reimbursed by mandatory basic health insurance but that are under review for reimbursement (= 'waiting room function'). Risk-averse individuals may want to protect both their health and their wealth by assuring access to expensive health technology not (yet) covered by mandatory basic health insurance. In all types of health systems, there is an increasingly concerted effort to define an 'essential' package of health care that is covered by mandatory basic health insurance (Jost, 2005). Because of the increasing offer and demand of health technologies and growing budgetary constraints, the comprehensiveness of the statutory benefits package is coming under strain. Smith (2013) has investigated the question of how to choose the benefits package to which all citizens are given free access when objectives include financial protection as well as health improvement. A key concern is the type of private markets available and the nature of patients' responses when a treatment is not covered by such a package. Smith (2013) has modelled three scenarios: no availability of private care; a spot market of private care paid for out-of-pocket; and a market in prepaid complementary private insurance. His conclusion is that governments can secure an optimal system of mandatory health insurance coverage by specifying a benefits package in line with redistributive goals and nurturing a complementary voluntary insurance market.

In short, by covering technologies that are not (yet) reimbursed by mandatory basic health insurance, PHI can play a significant role in providing access to new health technologies. However, due to equity reasons, the statutory benefits package should include essential (new) health technologies.

#### **7.1.4. Regulation of PHI markets**

##### **Research question 9:**

*To what extent do free market rules effectively apply to voluntary private health insurance?*

In addition to the general treaty provisions on freedom of establishment (Article 49 of the Treaty on the Functioning of the European Union ('TFEU')<sup>223</sup>) and freedom to provide services (Article 56 TFEU), the EU has adopted specific non-life insurance Directives with the aim of increasing competition in the European insurance market.<sup>224</sup> Recital 19 of the Third Non-Life Insurance Directive<sup>225</sup> states that 'within the framework of an internal market it is in the policyholder's interest that he should have access to the widest possible range of insurance products available in the Community so that he can choose that which is best suited to his needs'.

Article 54 of the Third Non-Life Insurance Directive provides an exception to this rule. A Member State's supervisory authority may impose specific measures in the form of restrictions on insurance contracts in the interest of the 'general good', where contracts covering health risks 'may serve as a partial or complete alternative to health cover provided by the statutory social security system'. Where this is the case, a Member State can require private insurers to 'comply with the specific legal provisions adopted by that Member State to protect the general good in that class of insurance.'<sup>226</sup> A number of legal provisions may be introduced if private cover provides a partial or complete alternative to statutory cover: open enrolment, community rating, lifetime cover, policies standardised in line with the cover provided by the statutory health insurance scheme at a premium rate at or below a prescribed maximum, participation in risk equalisation schemes (referred to as 'loss compensation schemes') and the operation of PHI on a technical basis similar to life insurance.<sup>227</sup> Measures taken to protect the general good must be shown to be necessary and proportional to this aim; not unduly restrict the right of establishment or the freedom to provide services; and apply in an identical manner to all insurers operating within a Member State.

In his letter of 25 November 2008, European Commissioner Bolkestein, responding to a question from the Dutch government on the application of EU regulation to private health insurance, suggested that the Article 54 exception only applies to substitutive health insurance: 'I do not think that it would be proportionate to apply the requirements to any complementary insurance cover offered by private insurers which goes beyond

223 Consolidated version of the Treaty on the Functioning of the European Union, *OJ C* 202, 7 June 2016, pp. 47-200.

224 For an analysis of the relevant EU legal framework, see F. Paolucci, A. Den Exter and W.P.M.M. van de Ven, 'Solidarity in competitive health insurance markets: analysing the relevant EC legal framework', *Health Economics, Policy and Law* 1(2) (2006) 107-126.

225 Council Directive 92/49/EEC of 18 June 1992 on the coordination of laws, regulations and administrative provisions relating to direct insurance other than life assurance and amending Directives 73/239/EEC and 88/357/EEC, *OJ L* 228, 11 August 1992, pp. 1-23 ('Third Non-Life Insurance Directive').

226 Article 54(1) and Recital 24 of the Third Non-Life Insurance Directive.

227 *Ibid.* Article 54(2) and Recital 24.

the basic social security package of cover laid down by the legislation.<sup>228</sup> Thomson and Mossialos disagree with the assumption that only substitutive private health insurance provides social protection. They argue that where the statutory benefits package is relatively narrow and/or subject to extensive co-payments, it could be considered that individuals do not have adequate protection from the financial risk associated with ill health unless they purchase PHI covering excluded (and effective) services and/or statutory user charges (Thomson and Mossialos, 2010).<sup>229</sup> However, the credibility of this argument depends on the extent to which low-income groups and high-risk groups (e.g., the elderly and chronically ill) effectively have access to such additional cover. Regulation of PHI that is not affordable for these groups cannot be considered to effectively protect the general good.

Under certain conditions, national governments can restrict the application of free market principles to PHI. A restriction on free competition may be justified where it serves overriding requirements relating to the public interest, is suitable for securing the attainment of the objective which it pursues and does not go beyond what is necessary in order to attain it.<sup>230</sup>

Recent European Court of Justice (ECJ) case law has revealed apparent inconsistencies in its approach to the regulation of PHI. In 2013, the ECJ upheld Belgian regulations limiting the operation of the free market by restricting increases in premium rates of PHI contracts.<sup>231</sup> By contrast, in 2012, an ECJ ruling required Slovenia to repeal such restrictive legislation and not to hinder the operation of the free market.<sup>232</sup>

The question is to what extent free market rules effectively apply to PHI in the EU. An important element in the discussion is how the appropriateness of the restrictive measures taken by Member States can be assessed. We discuss a set of criteria developed by the European Commission to test the proportionality of national regulation of PHI. We also discuss the concept of services of general economic interest (SGEIs). When a PHI scheme can be defined as an SGEI, the application of free market rules to that scheme can be restricted.

228 F. Bolkestein, 'Letter from the European Commission to the Dutch Minister of Health, Welfare and Sport', European Commission, 25 November 2003.

229 S. Thomson and E. Mossialos, 'Private health insurance and the internal market', in: E. Mossialos, G. Permanand, R. Baeten and T. Herve (eds.), *Health Systems Governance in Europe: The Role of EU Law and Policy* (Cambridge: Cambridge University Press, 2010) pp. 419-460.

230 Case C-518/06, *Commission v. Italy* [2009] ECR I-3491, para. 72.

231 Case C-577/11, *DKV Belgium SA v. Association belge des consommateurs Test-Achats ASBL* ECLI:EU:C:2013:146.

232 Case C-185/11, *Commission v. Slovenia* ECLI:EU:C:2012:43.

In the *DKV* case, the European Commission proposed five criteria to assess the proportionality of national regulation relating to PHI:<sup>233</sup> (1) the nature of the PHI at issue (i.e., whether substitutive, duplicative, supplementary or complementary), with national measures being more proportionate in case of substitutive health insurance; (2) the expenditure by PHI as a share of total national health expenditure, with national measures being more proportionate where this share is increasing; (3) the objective of the public interest rationale invoked: granting access to PHI irrespective of age and health status (and thus protecting the weakest in society) or protecting consumers who freely concluded their contract in a competitive market, with national measures being more proportionate where the first objective is aimed at; (4) the existence of a competitive insurance market, which succeeds in creating a wider choice for the consumer and a decrease in premium rates, with national measures being more proportionate in case there is no really competitive insurance market; (5) the existence of other, less restrictive measures.

Given that expenditure financed by PHI as a share of total health expenditure is much larger in Slovenia and the Slovenian PHI market is less competitive than the Belgian market, it is remarkable that the ECJ upheld the Belgian regulatory regime but found the Slovenian regime incompatible with EU law. Article 54 of the Third Non-Life Insurance Directive explicitly allows EU Member States to restrictively regulate PHI that serves as a partial or complete alternative to health cover provided by the statutory social security system. According to this criterion, since PHI in Slovenia mainly covers co-payments (85%) and makes health care more accessible, the proportionality test rather points towards allowing restrictive regulation to be introduced in Slovenia. Since the ECJ apparently accepted regulation of premium rate increases in Belgium but not in Slovenia, it is not clear whether this kind of regulation could be adopted by other EU Member States.

The qualification of a PHI scheme as a service of general economic interest (SGEI) can serve as a justification for national regulation restricting the operation of the free market. SGEIs are commonly defined as economic activities that would not be generated by market forces alone or at least not in the form of an affordable service available to all on a non-discriminatory basis.<sup>234</sup> SGEIs are carried out in the public interest under conditions defined by the State, which imposes a public service obligation on one or

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<sup>233</sup> Commission Européenne, Observations écrites dans l'affaire C-577/11, Brussels, 28 February 2012 (JUR(2012)250478 CV/tm).

<sup>234</sup> J. Almunia, 'Reform of the state aid rules for services of general economic interest (SGEI) and decisions on WestLB, Bank of Ireland and France Telecom', Press conference, Brussels, 20 December 2011. SPEECH/11/901.

more providers.<sup>235</sup> The concept 'service of general economic interest' (SGEI) is mentioned in Article 106(2) TFEU.

A key value of EU Member States' health care systems, which applies to welfare services more generally, is universal access or coverage.<sup>236</sup> To guarantee universal coverage, the national government plays a vital role in regulating market-oriented systems. After all, the health care market is characterised by several instances of market failure, for instance, information asymmetry and risk selection.<sup>237</sup>

When a service is determined to be an SGEI, Member States may enact measures which would otherwise be contrary to the rules of the Treaties, notably the competition rules. Member States retain a wide discretion to define SGEIs, i.e., to use the concept of an SGEI as a tool to intervene in the market. This discretion is subject only to a test for manifest error of assessment.<sup>238</sup>

The closest attempt at clarifying the 'manifest error of assessment' test was made in *BUPA* where the ECJ noted that the minimum criteria all SGEIs must fulfil are the presence of an act of the public authority entrusting the operators in question with an SGEI mission and the universal and compulsory nature of that mission.<sup>239</sup>

In the *BUPA* case, the ECJ concluded Irish PHI to be an SGEI.

Unlike the Belgian public interest argument -consumer protection- Slovenia's public interest argument that Slovenian PHI ought to be considered as a part of the social security system was rejected by the ECJ.

A short answer to the research question is that recent ECJ case law has revealed apparent inconsistencies its approach to the regulation of PHI. Therefore, it is not clear to what extent EU free market rules apply to complementary PHI.

235 European Commission, 2011, *State aid: Commission adopts new package on state aid rules for services of general economic interest (SGEI) — frequently asked questions*, available at [http://europa.eu/rapid/press-release\\_MEMO-11-929\\_en.htm](http://europa.eu/rapid/press-release_MEMO-11-929_en.htm).

236 U. Neergaard, 'Services of general economic interest: the nature of the beast', in: M. Krajewski, U. Neergaard and J.W. van de Gronden (eds.), *The Changing Legal Framework for Services of General Interest in Europe — between Competition and Solidarity* (The Hague: Asser Press, 2009) pp. 17-50.

237 S. Lavrijssen and S. de Vries, 'Chapter 19, Netherlands', in: Krajewski et al. (eds.), *ibid.*, pp. 383-422.

238 G.S. Ølykke and P. Møllgaard, 'What is a service of general economic interest?', *European Journal of Law and Economics* 41(1) (2016) 205-241.

239 Case T-289/03, *BUPA and others v. Commission* ECLI:EU:T:2008:29, para. 172.

**Research question 10:**

*What is the future role of voluntary private health insurance within the framework of social health insurance systems in the European Union?*

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 disadvantaged from achieving this potential, if it can be avoided (Whitehead, 1992).

Equity of access to health care services can be improved by defining essential health care services (Söderlund, 1998). Essential health care services should be made accessible to everyone within the health care system. The Committee on Choices in Health Care, the so-called Dunning Committee, established in 1990 in the Netherlands, has developed a set of four principles, to be applied successively, in order to delineate essential from non-essential health care services: necessity, effectiveness, efficiency, and individual responsibility. The principle of necessity is defined very broadly, basically meaning any treatment that is necessary to maintain or restore health, or to relieve suffering (van de Ven, 1995). With regard to the principle of effectiveness, only interventions where there is evidence for an effect are covered. The services to be covered are further narrowed down by those that give value for money, by only funding efficient services. Finally, services that are best dealt with by the individuals themselves are excluded (i.e., services that can easily be paid for by the individuals themselves) (Sabik and Lie, 2008).

More recently, the 2010 U.S. Affordable Care Act (ACA) stipulates that a broad package of 'essential health benefits' (EHBs) equivalent to that of a 'typical employer plan' be offered by qualified health plans participating in newly created state-based insurance exchanges, as well as by new plans offered to individuals and small employers outside these exchanges. U.S. Congress directed the Department of Health and Human Services (DHHS) to flesh out the details. The DHHS, in turn, asked the Institute of Medicine (IOM) to recommend a process for defining and updating the EHB package (Iglehart, 2011). The ACA states that EHB packages must include at least 10 broad benefit categories: ambulatory patient services; emergency services; hospitalisation; maternity and newborn care; mental health and substance abuse disorder services, including behavioural health treatment; prescription drugs; rehabilitative and habilitative services and devices; laboratory services; preventive and wellness services and chronic disease management; and pediatric services, including oral and vision care. The IOM advanced the following criteria to define medically necessary services: 'medical services that are (1) clinically appropriate for the individual patient, (2) based on the best scientific evidence, taking into account the available hierarchy of medical evidence, and (3) likely to produce

incremental health benefits relative to the next best alternative that justify any added cost' (Institute of Medicine, 2011). DHHS regulation stipulates that the mandatory EHB package needs to be defined at a state level. As a result, there are quite significant differences in EHB packages between states. For instance, essential health benefits in Alabama are quite different from those in New Hampshire.<sup>240</sup> Reproductive health and obesity surgery may be included in the EHB package in one state but not in another. The issue of reproductive health illustrates political discussions playing an important role in determining EHBs. Obesity surgery is a good example of the normative discussion on what constitutes a disease and what does not.

A 2008 WHO report enumerates five goals for defining EHB packages: priority setting on the grounds of effectiveness and relative costs, poverty reduction, equity, political empowerment and accountability, and improving service delivery (World Health Organisation, 2008). The report stresses that implementing an EHB package is not just a technical exercise. Political and institutional processes need to be engaged, because successful implementation involves dialogue on purpose and design; decisions on financing and delivery arrangements, and adaptation over time.

Coming back to the discussion on the regulation of PHI, the following question can be asked: If PHI really is so important that restrictive regulation is needed, would it not be better to integrate PHI within the social security system? The poor, the sick and the old who cannot afford PHI are not protected by government-designed consumer protection rules regarding the PHI market. As a consequence, regulation of PHI protects only well-off (or better-off) customers who can afford to buy PHI. When PHI covers essential health care, a more equitable result might be reached by integrating that care into the social security system rather than by developing restrictive regulation protecting only the well-off part of the population who can afford PHI.

New health technologies are often reimbursed by PHI. From an equity point of view -if essential health care services are concerned- new health technologies should be integrated in basic health insurance rather than protecting only those customers who can afford additional cover.

PHI also provides financial protection from co-payments. Traditionally, co-payments were introduced to reduce moral hazard. Co-payments are meant to prevent people from seeking medical care that may not be necessary. Apart from their traditional role,

<sup>240</sup> The EHB packages per state are available at: <https://www.cms.gov/ccio/resources/data-resources/ehb.html>

co-payments also allow the public sector to shift costs on to households. In countries where PHI covers co-payments, the scope of statutory coverage might erode over time and there are concerns about the fact that those who do not have PHI may face financial and other barriers to accessing health care (Thomson and Mossialos, 2009).

If there is insufficient public funding to reduce co-payments and to integrate (new) health technologies within the mandatory basic health insurance system, basic health insurance could be extended with private funding. Low income groups, who cannot afford private funding, could be subsidised. The French government has chosen this option. In 2014, 7.4 per cent of those covered by PHI benefited from a public programme providing free coverage to the poorest ('complementary universal health coverage', '*couverture maladie universelle complémentaire*' (CMU-C)) (Franc and Pierre, 2015). Individuals with an income above the CMU-C ceiling can get a voucher to partially fund the premium for a PHI contract ('*aide complémentaire santé*').

In summary, if all essential health care were to be covered by an affordable mandatory basic health insurance scheme, there would be no need to develop restrictive regulation for the PHI market (see also Pauly, 1991). Customers taking out PHI would no more need special government protection than customers taking out home or car insurance.

### 7.1.5. Optimal design of PHI products

#### Research question 11:

*How can the gap between the current offer of dental insurance products and an optimal design for complementary dental insurance be explained?*

In Belgium, France, Germany and the Netherlands, the current offer of complementary dental insurance (CDI) is not optimal. After reimbursement of dental costs by MBI and CDI, out-of-pocket expenditure on dental care remains at a fairly high level (e.g., 45% in Belgium). The design of CDI products does not respond to the criteria of optimal insurance because the majority of products on the market do not protect against high financial risk, nor do they give access to otherwise unaffordable dental care. Moreover, moral hazard and adverse selection are insufficiently counteracted. The gap with optimal insurance design can be explained by both supply-side aspects and demand-side aspects. For reasons of public policy, insurers are reluctant to offer optimal CDI and behavioural economic aspects such as liquidity constraints, debt aversion and ignorance can explain why consumers are willing to buy suboptimal CDI. Public policy would like voluntary CDI products to provide both optimal insurance coverage and equal access to insurance. However, this is not possible because optimal insurance requires selective

underwriting and risk rating (to counteract adverse selection<sup>241</sup>), which is inconsistent with equal access. In Belgium, France and the Netherlands, guaranteeing equal access seems to be more important than providing optimal coverage.

### **Research question 12:**

*How can current complementary dental insurance design be improved?*

The following strategies to optimise CDI can be derived from the potential explanations for the current existence of suboptimal CDI. First, policymakers should carefully decide which dental care is essential and ought to be covered by MBI. Dental care which is considered non-essential by policymakers and which is therefore not covered by MBI should be subject to private insurance logic. If, because of budgetary constraints, essential dental care cannot be covered by MBI, subsidisation of private insurance for low-income people might be an alternative to full public provision.

Second, moral hazard could be counteracted by the systematic use of deductibles and co-insurance. Standard lists of usual market prices could be compiled and provider networks adhering to a price list could be created. Insurers should not shy away from legal action in case of excessive amounts being claimed.

Third, selective underwriting and risk rating could be used to counteract adverse selection and to protect existing clients against free riders who abuse the insurance system. Providing insurance for pre-existing conditions is incompatible with the insurance principle that only future, unforeseen risks can be covered. A burning house cannot be insured.

Fourth, applying waiting times for expensive treatments such as prosthetics and providing only limited coverage during the initial years of the contract constitute alternatives for a general limitation of coverage.

Fifth, behavioural economics aspects such as liquidity constraints and debt aversion could be dealt with by offering a combination of optimal dental insurance in combination with a health (dental) savings account. Ignorance and social comparison can be

<sup>241</sup> Unlike mandatory health insurance, voluntary CDI is prone to adverse selection. Individuals who expect high health care costs differentially prefer more generous and expensive insurance plans; those who expect low costs choose more moderate plans. This phenomenon, called adverse selection, is a major concern in health insurance markets. Adverse selection can lead to three classes of inefficiencies: prices to participants do not reflect marginal costs, hence on a benefit-cost basis individuals select the wrong health plans; desirable risk spreading is lost; and health plans manipulate their offerings to deter the sick and attract the healthy (Cutler and Zeckhauser, 1998).

taken care of by improving the transparency of CDI products. Consumer organisations can play an important role in clarifying the market offer for the consumer.

## 7.2. DISCUSSION

In this thesis, we have discussed several issues relating to private expenditure on health and voluntary private health insurance (PHI). The two themes are closely related since expenditure covered by PHI is a part of private expenditure on health. The other part is out-of-pocket expenditure on health.

In the European Union (EU), private expenditure represents 21 per cent of total expenditure on health (2015). PHI covers only one-quarter of private expenditure on health. With 15 per cent of total health spending, out-of-pocket expenditure is quite substantial in the EU. In the United States, for instance, out-of-pocket represents 12 per cent of total health spending.

PHI converts out-of-pocket health spending into spending covered by insurance. In this discussion, we will focus on this conversion.

Health insurance has two important advantages for the consumer, but also two disadvantages (see Table 4 below). On the one hand, health insurance reduces the financial risk for the insured and provides access to health care that would otherwise be unaffordable (Nyman, 1999). People wish to reduce the impact of unexpected shocks to their levels of overall consumption (Pauly, 2007). On the other hand, insurance increases costs. This is due to loading -the administrative and other expenses of the insurer- and moral hazard. Moral hazard refers to adverse behaviours encouraged by the guarantee of financial protection against losses caused by the occurrence of adverse events (Gruber, 2005). Insurance reduces the marginal cost of health care services borne by the individual which may result in excessive consumption of these services ('consumer-initiated moral hazard'). Providers may also be inclined to induce additional demand for services for which they know that the costs are covered by insurance ('supplier-induced moral hazard') (Pauly, 1968; Feldstein, 1970; Feldman and Dowd, 1991; Paolucci, 2011).

**Table 4.** Advantages and disadvantages of health insurance

Advantages	Disadvantages
Reduction of financial risk for the insured	Loading costs
Access to health care that would otherwise be unaffordable	Moral hazard

Consumption of health goods and services that are not covered by mandatory basic health insurance or for which substantial cost-sharing arrangements apply may increase financial risk. Access to these goods and services may prove difficult or impossible because of financial reasons. PHI can reduce financial risk and guarantee access to health care.

However, loading costs of PHI are significant. In France, loading costs of PHI are 15 per cent for non-profit provident associations, 19 per cent for non-profit mutual associations and 23 per cent for commercial for-profit insurance companies.<sup>242</sup> Loading costs of mandatory basic health insurance are lower because of economies of scale and because there are no acquisition costs.

Moral hazard is a particularly important issue as far as health insurance is concerned. Because insurance reduces the user price of health care and because the premium a person pays is usually independent of that person's use, the person responds to the lower out-of-pocket price by demanding more medical care and possibly more expensive types of medical care. Insurance that makes all care free of out-of-pocket payment leads to nearly 50 percent greater spending than wealth-related catastrophic coverage with deductibles, with very modest improvements in health outcomes (Pauly, 2007).

PHI can be worthwhile if the advantages outweigh the disadvantages.

Loading costs can be reduced by automating administrative and sales processes. Thanks to digitalisation and artificial intelligence, the loading costs of Sygeforsikringen, a non-profit Danish private health insurer with two million clients, are under 8 per cent.

Viability of PHI can be improved by effectively counteracting moral hazard and adverse selection. Cost-sharing arrangements, such as deductibles, co-payments (fixed sum) and co-insurance (percentage), can be used and costs can be reduced through negotiations with health care providers. In countries such as Belgium, France and the Netherlands, most private dental insurance products offer only limited benefits because insurers have insufficiently invested in measures to counteract moral hazard and adverse selection.

The crucial question is: which private health costs should PHI cover?

<sup>242</sup> Acquisition costs, which represent a significant part of loading costs, are 5, 6 and 13 per cent for provident associations, mutual associations and insurance companies respectively (DREES, 2015). Loading costs of mandatory basic health insurance are only 5 per cent.

Trivial risks lead to losses that can be borne by the insured without any noticeable burden. Coverage of trivial risks does not contribute to 'the reduction of financial risk for the insured'. However, insurance against trivial risks has proven successful, e.g., a dental insurance product on offer in the Netherlands, with a coverage limit of 250 EUR per year only. This success can be explained by behavioural economics (e.g., debt aversion).

Reimbursement by PHI of cost-sharing arrangements included in mandatory basic health insurance schemes is a tricky issue. The question is: what role does cost-sharing play? To counteract moral hazard or to shift health costs from public to private sources of funding? **PHI providing coverage for cost-sharing arrangements imposed by mandatory basic health insurance can have an inflationary effect on public health spending** by eroding the 'slowing down' effect of deductibles, co-payments and co-insurance on the use of health goods and services. Until 2002, Belgian law<sup>243</sup> forbade coverage of cost-sharing arrangements by PHI. However, this legal provision was never enforced and in 2002 it was removed from the law altogether.

The relationship between PHI and the supplementary fee system in Belgium and France can also be called into question. People subscribing PHI may be less price-sensitive. Knowing that a patient is additionally insured may lead health care providers to charge higher fees. As a result, **PHI can have an inflationary effect on supplementary fees**. This inflationary effect could be counteracted by engineering effective cost-sharing arrangements for the reimbursement of supplementary fees.

In Belgian hospitals, supplementary fees are allowed in single rooms only. The link between supplementary fees and single rooms has a negative effect on the level of comfort in Belgian hospitals. In the rest of the economy, single rooms have long since become the standard. We cannot imagine a hotel receptionist telling us we will need to spend the night sharing our room with X, Y or Z in the bed next to us. In current times, with privacy being increasingly prized, **it would be better to cut the link between single rooms and supplementary fees and offer a single room to every patient**.

**Providing access to (new) health technologies, not (yet) reimbursed by mandatory basic health insurance is an important role to be played by PHI.** According to Thomson and Mossialos (2009), this role is more significant than giving subscribers greater choice of provider and enabling them to bypass waiting lists for publicly-financed treatment. PHI covering new health technologies is a good thing, provided governments do

<sup>243</sup> Art. 37, §18 Wet betreffende de verplichte verzekering voor geneeskundige verzorging en uitkeringen gecoördineerd op 14 juli 1994 (Belgian Health Insurance Law).

not use the existence of PHI to shift costs from public to private sources of funding. PHI creates solidarity amongst subscribers. This is better than a situation without PHI, where access to expensive new health technologies is limited to 'the happy few' (= the rich). If the whole population ought to have access, any new health technology should be readily reimbursed by mandatory basic health insurance. However, this may not be feasible, because of budgetary constraints. **An alternative and less costly solution could be for governments to subsidise PHI in order to provide access to new health technologies for people with low-income.** In France, for instance, government subsidises people with low-income to buy PHI.

Reimbursement of new health technologies by PHI often is followed by reimbursement by mandatory basic health insurance. Reimbursement by PHI is used as an argument by health technology companies and health care providers, when lobbying for reimbursement by mandatory basic health insurance. Therefore, coverage of new health technologies by PHI should be the result of careful consideration. Evidence-based medicine should be the guiding principle. **Reimbursement by PHI can give an aura of respectability to therapies that are not evidence-based.** This is for instance the case for alternative medicine (e.g., homeopathy), which is sometimes reimbursed by PHI.

Creating transparency on the availability of new health technology is an important issue. **Patients have the right to know that new technology is on the market, even when their physicians assume that their patients cannot afford to pay for the new technology out-of-pocket.** The decision whether or not to pay for new health technology ought to lie with the patient. After all, the patient may have access to funding sources (e.g., through friends, family or crowdfunding) that the physician is not aware of. The patient can also decide to forgo other consumption, in order to be able to finance new health technology.

Weisbrod (1991) has shown how the expansion of health insurance has contributed to financing the development of new health technologies, and how new technologies have expanded demand for insurance. **In times when budgets of mandatory basic health insurance tend to be tight, PHI could provide additional funding for new health technologies.** In this way, PHI could contribute to the further evolution of health technology.

In 2006, the Dutch government decided to exclude dental care and physiotherapy from the basic package. Only elective treatments are covered by mandatory basic health insurance (e.g., dental care for children under age 18 and physiotherapy for critical illnesses). Dutch patients can buy voluntary private health insurance products for dental care and

physiotherapy. In many countries, reimbursement of dental care and physiotherapy by mandatory basic health insurance is quite limited. Excluding them from the basic package can free up money; money that could be used, for instance, for more extensive reimbursement by mandatory basic health insurance of new, expensive cancer treatments. **By providing coverage for so-called less essential health care services, PHI could help governments to free up money for new, expensive, health technologies.**

Giving a greater choice of provider and providing access to a preferred provider are also roles which can be played by PHI. Supplementary fees can buy access to a preferred physician (e.g., a physician working in a private hospital -'clinique privée'- in France and a senior resident -'Chefarzt'- in Germany). However, as discussed in chapter 3, the current supplementary fee system is not sustainable. There is cost inflation of supplementary fees and -most importantly- the added value for the patient is not clear. Patients should get extra value for the extra money paid. Today, there is little transparency as to the quality of care provided by a physician charging supplementary fees. If such transparency were to be created, the current supplementary fee system might no longer be acceptable since everyone -not only those able to pay supplementary fees- would want to have access to physicians providing -objectively proven- better quality of care. **A system could be conceived where -instead of charging supplementary fees on top of social security tariffs- physicians are free to set their fees but without reimbursement by mandatory basic health insurance.** Such a system exists in France, where about 1,000 physicians -sector 3 physicians- are not reimbursed by mandatory basic health insurance. They need to prove that they are worth the (extra) money. If such a system exists, it is important -for equity reasons- for basic mandatory health insurance to provide comprehensive coverage and a good quality of care. The advantage of such system is that physicians would need to make a clear choice: either they choose to work within the social security system (and fully respect social security tariffs), or they choose to work outside of the social security system (and are at liberty to set their fees). The disadvantage is that physicians choosing to opt out of the social security system would no longer be accessible for people with low incomes. Eventually, this might lead to top physicians only being accessible for the wealthy. However, this risk is also inherent in the current systems of supplementary fees.

Currently, PHI represents only 5 per cent of total health spending and one quarter of private health spending in the EU. High out-of-pocket spending is at odds with equal access to health care. Therefore, in the absence of coverage by mandatory basic health insurance, converting out-of-pocket spending into spending covered by PHI is a step forward. However, **PHI is a step forward only then when the advantages of insurance outweigh the disadvantages.** Insurance coverage is not needed for every euro

of out-of-pocket spending. Providing insurance for trivial risks and for cost-sharing arrangements may prove counterproductive. Coverage of non-evidence-based medicine can even be dangerous. Fostering competition and applying private insurance logic could lead to a decrease in loading costs and a reduction of moral hazard, which -in the end- might prove beneficial to the consumer.

In the ideal world, all essential health care should be covered by mandatory basic health insurance. In the real world, mandatory basic health insurance can be supplemented by voluntary private health insurance.

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