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Paying General Practitioners in Europe

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Contents

Abbreviations

GP	General Practitioner
NHS	National Health System
SHI	Social Health Insurance System

Executive summary

The context
Primary care is community based first contact health care. In almost all European countries, general practice (or family medicine) is having this function. The financing of general practice is closely related to the organization of the health care system as a whole. In Europe, currently, broadly two types of health care systems exist. The first is the National Health Service (NHS), which has a tax-based financing and the organization of health care is the task of the (local) government. General practitioners may be self-employed or in salaried service. They are often paid via a capitation fee (a fixed amount per patient per time period) or a salary. In this system, general practitioners function as gatekeepers to secondary or specialist care. In a gatekeeping system, access to specialized care is dependent on a referral from a GP. Patients are often registered with a general practitioner or a practice. The second system is the Social Health Insurance (SHI) system. This system is mainly financed through (compulsory) earmarked premiums, levied from the salaries of employees. Health care is purchased by health insurance funds or companies. The government has no direct role in the organization of the care, but takes care of regulations to ensure a fair system. General practitioners in this system are mainly self-employed and paid via a fee-for-service structure. There are, however, also mixed forms of both systems.

GP payment systems
Payment systems existing in Europe are fee-for-service (for instance per consultation), salaries (payment per time-unit), capitation fees (payment per registered patient) and performance payments. Performance payments are payments for stimulating or reaching certain quality criteria. Most countries in Europe use mix of these payment systems. However, often there is one of the systems that is predominant. Capitation fees can be risk adjusted. Risk adjustment may vary from different fees for a few age groups (as in Czech Republic, Latvia and Slovenia) to a complicated system including age, sex, mortality and demographic features, as in Spain and England. In countries with mixed systems, the government hopes to combine the positive incentives of each system. In 19 of the 23 countries mixed payment systems are in place (see Table 2).

International comparable data on actual earnings of GPs are scarce. A longitudinal study in eight Western European countries revealed that there were significant differences between these countries, which were mostly consistent over time, except for England, where the introduction of a new payment system lead to a large increase in the income of GPs.

Employment and contracting of GPs
GPs in Europe are mainly self-employed and practice facilities and operating costs have to be funded from the fees they receive. In the countries with salaried GPs, the facilities are mainly owned by the (local) government. GPs or their practices often have a contract with health care purchasers. Contracts and fees are often negotiated in the form of a framework contract at national or regional level, details are negotiated by individual providers and purchasing bodies.

Other relevant issues
Out-of-pocket payments (co-payments) by patients can be used to contain public expenditure or to prevent unnecessary medical use. Co-payments are levied in 16

countries, although some countries exempt certain vulnerable groups from these payments. In Greece, Poland and Romania these co-payments are informal in nature. Some countries consider co-payments for primary care as a risk for unnecessary hospitalizations, as in The Netherlands, resulting in free GP-care at point of entry. Gate-keeping is in place in 17 of the 23 countries. There is some evidence that gate-keeping systems are more successful in slowing the rate of growth in health care expenditure. In some countries, specific categories of medical specialists are considered as primary care providers, mostly pediatricians and gynecologists. Up-to-date information on the scope of services provided by GPs is currently not available, except for some information on preventive care and out-of-hours care. Preventive care is provided by GPs in almost all the countries in this study. Out-of-hours care by GP practices or GP cooperatives is available in 11 countries. Quality of care of GPs is often regulated via a licensing process. Recurrent re-licensing, requiring continuing medical education, is in place in half of the countries. Patient evaluations of quality of GP care are seldomly available, England is the only country where patient evaluations effect the income of GPs. There is a significant difference in supply of GPs among the European countries. On average there are 0.8 GPs per 1000 inhabitants, but the maximum is twice as high and the minimum three times lower.

The organization and financing of general practice have been subject to many reforms in Europe. Most of these reforms are incremental, trying to steer the system in the desired direction, for instance through the introduction of performance payments. Reforms may be initiated when a new government comes into place that has another political conviction compared to the previous government.

Policy recommendations

Most GP payment systems in Europe consist of more than one way of financing. By mixing financing systems, steering mechanisms may be combined. For instance, capitation payment for comprehensiveness of care and fee-for-service to stimulate certain services. Risk adjustment of capitation fees may prevent risk selection behavior of GPs, stimulating a fair access for the whole population. Performance payments are also a means to promote certain services in several countries. Performance payments are bonuses that are paid when certain predefined targets are met.

GPs mainly own their own practices and thus are responsible for financing their fixed and operating costs themselves from the remuneration system. The self-employment is also reflected in the contracting mechanism in the different countries. Health care purchasers negotiate with GPs on conditions for practice and remuneration. In most cases this process of negotiation follows two stages: at national level, a framework contract is developed and at local level the details are further established between individual providers and purchasers. This is probably much more efficient compared to negotiations on individual level only.

Quality of care is not only regulated via financial incentives, but is also stimulated via educational requirements, continuing medical education, the introduction of clinical guidelines and the development of quality indicators. To date, only England is combining outcomes of quality indicators with financial incentives.

Introduction

The relevance of primary care

In Europe primary care is an important characteristic of the national health care systems. Primary care is medical care that is provided to the population and that applies to the following characteristics. Primary care is community based non-specialized care, the care is provided in the neighborhood. This is opposed to hospital based health care systems, where people go for medical problems directly to hospital outpatient departments. Primary care is easily accessible, i.e. there are no waiting lists and there is a relatively short travel distance to a primary care facility. In Europe, an important contribution to primary care is delivered by General Practitioners (GPs). When a person feels the need to seek medical assistance, he or she should attend a GP as first-contact of the health care system. Starfield [1] defined primary care as 'first-contact, continuous, comprehensive, and coordinated care provided to populations undifferentiated by gender, disease, or organ system'. This undifferentiated care is exactly what is delivered by GPs.

There is a considerable amount of evidence showing the relevance of governance and economic conditions of a primary care system where first access to the health care system is organized via general practice. Both governance and economic conditions influence access, continuity, coordination and comprehensiveness of care. They influence quality and efficiency of general practice, equity in health, costs of care, and the quality of professional life of GPs. [2] Countries may vary in what they see as primary care providers. In some countries, GPs are the sole physicians that serve as first point of entry for health problems of the population. In other countries, also pediatricians and gynecologists are part of the primary care physicians. In a few countries, primary care physicians are considered to be all those who function in ambulatory (community based) outpatient care (as in Slovakia), this may be both generalist and specialist physicians. Beside GP and some specialist care, primary care may also consist of midwifes, physiotherapists, and/or psychologists. In this paper we will focus on general practice and address the payment systems of general practice in the context of the health care system in which the GPs are active.

GP-emancipation

Until shortly after World War II, general practitioners used to be those physicians that did not further specialize after completing the training to become a physician. As a result, the status of these physicians was rather low. In the United Kingdom, the emancipation of general practice (or family medicine) started by the introduction of special vocational training, medical peer reviewed journals dedicated to general practice and the establishment of a professional organizations for GPs, the Royal College of General Practitioners. Subsequently, in several countries, special departments for general practice or family medicine were installed. As a result, the specialty of general medicine became a recognized and respected specialty [3]. Nowadays almost all European countries have specialized vocational training for GPs after graduation from medical school, lasting two to four years. All European countries nowadays have a GP care level in their health care system, either in the form of GP-practices or health centers. In health centers often more services than GP care is offered. For instance, also physiotherapy or several ambulatory specialist services.

Table 1. Health care system context, ownership of practices or primary care health centers and co-payments for patients

Country	Health care system		Ownership	Co-payments for patients	
	Social Health Insurance	National Health System/ tax-based			Peculiarities of co-payments
Austria	y		Self-employed	y	Special groups exempted
Belgium	y		Self-employed	y	Reduction for special groups
Bulgaria	y	y	Self-employed	y	Special groups exempted
Czech Rep.	y		Self-employed	y	Special groups exempted; annual ceiling for others
Denmark		y	Self-employed		
Estonia	y		Self-employed	y	Only for home visits
Finland	y	y	Municipality	y	Annual ceiling
France	y		Self-employed	y	
Germany	y		Self-employed	n/a	
Greece	y	y	n/a	y	Informal payments are common, private GP reimbursed only partially
Ireland		y	Self-employed	y	GP care free-of-charge for 30% of the population, rest: out-of-pocket
Italy		y	Self-employed		
Latvia		y	Self-employed	y	
Netherlands	y		Self-employed		
Norway		y	Municipality	y	
Poland		y	Government	y	Informal payments exist
Portugal		y	Government	y	
Romania	y		n/a	y	Informal payments exist
Slovakia	y		Self-employed		Direct payments for preferential appointments
Slovenia	y		Municipality	y	Co-payments normally covered via voluntary health insurance
Spain		y	Government		
Sweden		y	Government	y	In some counties. National government sets ceiling
United Kingdom (England)		y	Self-employed		

n/a: Information not available; y = yes

General practice in relation to the health care system

General practice functions within the context of the whole health care system. The way general practice is financed is largely dependent on the overall organization of the health care system. We can mainly distinguish three different models of the organization of health care in Europe: the Bismarck system, the National Health Service (or Beveridge system) and the Shemashko system.

The Bismarck system is based on the principle of social health insurance (SHI). Employees buy, in most cases compulsory, health insurance and pay an earmarked premium deducted from their income for this insurance. These premiums are allocated to health insurers, who purchase health services and provide them to their insurers either for free or with a co-payment from the patient. Family members are mostly co-insured with the employee. The role of the state is relatively limited and focuses mainly on regulation and control. Health care providers and (social) insurers have a strong influence on the system. There is often parallel access to GP-care and specialized care and no strict geographic subdivision. Secondary (specialist) care is provided by non-profit hospitals and individual practitioners. Major weakness of the system is the lack of a power centre and cost control is difficult.

A National Health Service (NHS) is funded by means of general taxation. Responsibility for the budget is in hands of the Ministry of Health and as such the NHS is associated with a strong influence of the state. The organization is often part of a pyramid shaped hierarchical bureaucracy with general practice at the bottom and high tech hospitals at the top and goes together with a strict geographic subdivision. Access to specialized care is dependent on a referral from a GP: the so-called gate-keeping system. Hospitals are state owned and individual GPs have contracts with the NHS. A major weakness of the NHS is the risk for under-funding. Health care has to compete for public funding with other social segments like education and traffic. Due to the centralized organization, policy changes are much easier to implement: In the NHS, only political consensus within the government is needed, in the Bismarck system, consensus is needed among providers, insurers and employees, represented by trade unions. In some countries, due to decentralization towards lower levels of governments, the word ‘national’ is not very appropriate anymore. Therefore, in this paper, we will use the word ‘tax-based’.

The Shemashko system was a highly centralized system in which the state owns all health care facilities and all providers were in salaried service. Characteristics of the system where an underfunding of health providers and a high level of bureaucracy. The underfunding of providers lead to the phenomenon of informal payments: to receive better quality and faster access, patients had to pay providers under the counter. The system used to be in place in the Eastern European countries. At present the Shemashko system does not exist anymore in Europe, the reason it is mentioned here is that some of the problems, such as the informal payments, may still be in place in the countries with a former Shemashko system. Besides, the countries that switched from a Shemashko system to a tax-based or social insurance system are often currently still in the process of adapting and improving their health care systems.

From the 23 countries in this study, 11 have a Social Health Insurance system, 9 have a tax based system and 3 have a mixed system of social health insurance and tax-based (see Table 1).

Box 1

Methods

For this study, we initially included all 27 member states of the European Union plus three members of the European Free Trade Association (Iceland, Norway and Switzerland). For each country, we collected the Health System Review that is issued by the European Observatory on Health Care Systems and Policy. The European Observatory regularly publishes health system reviews that describe in a structured way the entire health care system of a country on the subjects organizational structure, financing, physical and human resources, provision of services, regulation and health care reforms. More recently, health system reviews also have a chapter on the assessment of the health care system. Health systems review are available at: http://www.euro.who.int/en/home/projects/observatory/publications/health-system-profiles-hits

In principle every four years a new review is published for a country. However, in practice this is not always the case. Therefore several reviews were rather old. Issues that were published before 2005 were excluded from this study, because they probable do not reflect the current situation anymore. In almost all countries, considerable changes in the health care systems have been introduced, mostly from the perspective of cost containment. For Germany no recent health review was available, but the country was included as far as the situation was known to the author.

Finally, the following countries have been included in this overview:

- Austria (2006) [4]
- Belgium (2010) [7]
- Bulgaria (2007) [10]
- Czech Rep. (2009) [13]
- Denmark (2007) [16]
- Estonia (2008) [19]
- Finland (2008) [22]
- France (2010) [24]
- Germany [5]
- Greece (2010)[8]
- Ireland (2009) [11]
- Italy (2009)[14]
- Latvia (2008) [17]
- Netherlands (2010) [20]
- Norway (2006) [23]
- Poland (2005) [25]
- Portugal (2007) [6]
- Romania (2008) [9]
- Slovakia (2011) [12]
- Slovenia (2009) [15]
- Spain (2006) [18]
- Sweden (2005) [21]
- United Kingdom (England) (2011) [26]

GP payment systems and their incentives

Paying the GP

Gress *et al* distinguished several different payment systems for GPs in Europe and described the incentives provided by each system. They argued, however, that payment systems get too much attention, not because they provide a strong steering mechanism, but because of the fact that they can be more easily manipulated. They emphasize that GPs also experience non-financial incentives, such as mandatory guidelines, professional standards and ethical constraints, that also influence GP behavior. Because general practice is part of the whole health care system, the incentives cannot be evaluated in an isolated way. Results of experiments in one

country can therefore not be transferred straightforwardly to other countries with different health care system characteristics [27]. There are three distinctive basic payment systems for GPs:

- Fee-for-service: in this system financial rewards are directly connected with work performed. GPs tend to delegate fewer tasks to other providers compared to other financing systems. Cost containment at the level of GP care is problematic in these systems, since budget setting is difficult. However, at the level of specialist care, cost containment may be reached because of the financial incentive for GPs to treat patients in their own practice instead of referring patients to specialist care;
- Capitation fees: GPs receive a sum of money per individual patient for a specific period of time. Patients are registered on a GPs list. Payments may be risk-adjusted to ensure equal access and provide incentives for continuity of care. For instance, risk-adjustment may take the form of higher capitation payments for elderly or chronically ill people or for people living in deprived areas. In capitation systems there is less choice for patients, who have to be registered at a GPs list (although changing GPs after a certain time period is often allowed). GPs tend to overdelegate to other forms of care, since this brings workload reductions. Despite risk adjustments there may be an incentive to risk selection, i.e. preferring more healthy patients on the list than chronically ill. Capitation is intended to ensure access to primary health care services for every registered patient. Furthermore, incentives for supplier-induced demand are reduced and incentives for continuity of care are increased;
- Salary system: GPs are paid for units of time, independent of services and patients. The system intends to combine income security for physicians and high accessibility for patients. However, in underfunded systems these two functions are not realized. Underfunding stimulate physicians to ask informal payments, which may hamper access for certain groups of patients. As with the capitation system, there is a risk of over-delegation to other care providers and a risk of undertreatment. Patients in these systems often complain about discourteous physicians [27].

Beside these basic payment mechanisms there are some varieties in these systems:

- Mixed systems: Here the basic payment systems occur in a mixed form. For instance:
    - Capitation fee for all patients, with additional payments for certain tasks (fee-for-service), target payments or function payments. Target payments are related to a predefined level of activity, for instance a percentage of the high-risk population that gets vaccinated against influenza. If the GP fulfills this target, extra payments will be available. If the target is not reached, no extra payments will be made. Function payments refer to extra tasks of GPs, for instance performing out-of-hour services. This is a mixed payment at patient level.
    - Mixed payment for different groups of patients (for instance for privately or publicly insured patients), this is a mixed payment at GP level.
    - Different payment systems for different GPs, which is a mixed payment system at the level of the health care system.
- Integrated capitation: here GPs are paid for the care for patients for other health care providers as well. The system is often referred to as fundholding. Income of the GP in this system consists of the integrated capitation fee times the

number of patients on the list and minus payments made to other providers. The intended incentives are to promote continuity and comprehensiveness of care through interdisciplinary coordination and active disease management. However, there is also a considerable risk of reducing access to secondary or tertiary care for patients and for risk selection. [27].

- Disease related funding. In this system, GPs receive for patients with certain diseases (for instance diabetes) a fixed amount for management of the disease. The funding includes all health care expenditures for the patient related to his/her disease, including preventive care and specialist care. The care should be provided according to evidence based clinical guidelines and clinical pathways [28]. Clinical pathways describe the organization of the care for a patient with a specific disease, including prevention, general practice, specialist and hospital care.

In Europe, today, in the majority of the countries a mixed payment system is in place for general practitioners (see Table 2), although often one of the systems is dominant. Countries where the main financing system consists of salaried physicians are Finland, Poland, Portugal, Spain and Sweden. In Sweden, mainly the salary system is used, but there may be Swedish counties where other payment systems exist as well, since the responsibility of Swedish health care system is delegated to the level of the counties. Also in Portugal and Poland a single payment system exists in the form of a salary for GPs. However, in Poland, due to the low level of the salary for GPs, informal payments exists, that are paid by patients directly to the GP in order to get faster access or better quality services. The Portuguese GPs work in health centers. These health centers are paid by a local governmental body directly on the bases of real expenditure. This means there is no global cost control. Countries with a dominantly capitation based system are Austria (for publicly working GPs), Bulgaria, Estonia, Ireland, Italy, Latvia, Romania and England. In these countries an additional financing system is mostly put in place to promote efficiency or to promote certain services, such as preventive services. The payment for the promotion of services may take place in the form of performance payment: if a certain threshold (for instance a certain percentage of immunized patients) is reached a bonus is paid to the GP. Countries with a largely fee-for-service system are Belgium, Denmark, France, Germany, Greece, and the Netherlands. The second system in place in these countries is mostly capitation or again performance payment for certain services, such as keeping medical records or reaching quality standards.

Capitation fees are risk adjusted in eight of the countries where a capitation fee system is (partly) in place. Risk adjustment may vary from different fees for a few age groups (as in Czech Republic, Latvia and Slovenia) to a complicated system including age, sex, mortality and demographic features, as in Spain and England (see Table 2).

There are a few countries that try to limit health care provision through the payment system. In Romania, for instance, provision of services above a certain threshold or having more than 2000 registered patients leads to a lower payment for the patients or activities above the threshold. In Slovenia an extra bonus is received for below average referral rates. In Latvia, GPs receive a part of the unused funds for secondary care referrals. In Estonia, performing unnecessary analyses and procedures may lead to a reduction in income. In Germany until recently a complicated system existed, in which a fixed regional budget was divided over the GPs, based on their provided services. To

Table 2. GP remuneration systems

Country	Remuneration: Capitation fee (Risk Adjusted)	Remuneration: Fee-for-service	Remuneration: Salary	Remuneration: Bonuses, performance payment, allowances	Peculiarities
Austria	y	y			
Austria, private		y			57% of GPs work privately
Belgium		y		y	
Bulgaria	y			y	Bonus for keeping medical record and providing preventive services
Czech Rep	r.a.	y			capitation age adjusted.
Denmark	y	y			Fee-for-service:2/3, capitation 1/3
Estonia	r.a.	y		y	Capitation age adjusted (73%), fee-for-service: 15%, basic allowance: 10%
Finland, type 1			y	y	Bonus for out-of-hours care
Finland, type 2	y	y	y	y	Bonus for out-of-hours care
France		y		y	Performance payment: voluntary
Germany		y			Budget cap
Greece		y			Informal payments common
Ireland, public	r.a.	y			Capitation adjusted to age and distance to practice
Ireland, private		y			
Italy	y	y		y	Reward for effective cost containment
Latvia	r.a.	y		y	Capitation age adjusted. Bonus based on performance indicators and low referral rates
Netherlands	r.a.	y			Capitation adjusted for age and living in deprived area; Out-of-hours care paid per hour on duty
Norway	y	y			Capitation: 30% of income
Poland			y		
Portugal			y		
Romania	r.a.	y		y	
Slovakia	r.a.	y			Capitation adjusted for age (85% of income), Reduced payment for high number of patients or services
Slovenia	y	y			Capitation: 50%, fee-for-service: 50%; Bonus for low referral rates
Spain	y			y	Capitation adjusted for age, population density and mortality: 15%
Sweden				y	May differ per county
United Kingdom (England)	r.a.			y	Capitation adjusted for many factors, performance payment for meeting quality targets

r.a = risk adjusted, y = yes
In Austria, Finland and in Ireland there are two systems of remuneration for GPs

each service a certain value was assigned in the form of points. Each GP invoiced the provided number of points to their professional association. The association subsequently assigned a monetary value to the points, based on the total budget and paid the GPs the calculated monetary value of the number of their invoiced points. So total expenditure for GP care could not exceed the predefined budget. At present the system is changing: the points are replaced by monetary values, although a certain cap on expenditures will still be in place.

In some countries dedicated allowances for GPs are available, mostly for practice costs, such as in Austria and Latvia. In Belgium, an allowance exists for coordinating the medical record of the patients.

Promotion of certain services, often preventive services, is financially stimulated through performance payments and bonuses in several countries (see Table 2). For instance in Italy for prescribing less or generic pharmaceuticals, a bonus can be gained. In Belgium and France, GPs can gain extra income by coordinating medical records for their patients.

Fundholding as payment mechanism is still very rare in Europe. In England, fundholding was introduced in the beginning of the 1990s and abolished at the end of that decade. A kind of fundholding is in place in Latvia, where GPs receive part of the unused funds for secondary care referrals. As fundholding needs large practices, to overcome the risk of high secondary care costs due to a few individual patients and to give the fundholder sufficient negotiation power, it may not be in line with the idea that GP care should be community based and easy to reach.

Payment of the GP for integrated disease management is currently still in a pilot phase. Pilots have been introduced in Germany [28] and the Netherlands. The implementation is rather difficult, since GP care and secondary care are normally funded via different budgets and according to different financing systems (sector based financing) and now care should be financed based on indication (money follows the patient).

International comparative data on GP earnings are scarce. This type of information is often not collected by countries. Furthermore, due to the fact that most GPs are independent entrepreneurs, it is difficult to distinguish between the revenue of the GP and the actual income after deduction of practice costs, since practice costs of GPs are often not registered separately from all other entrepreneurs in the national tax systems. A study into the payment of GPs in eight Western-European countries revealed that there are significant differences between countries, that are consistent over time [5,29]. There was no significant difference between countries where dominantly fee-for-service systems were in place, compared to countries where non-service related payment systems were dominant (salary or capitation). In countries where GPs functioned as gate-keepers to specialist care, the level of remuneration was consistently higher over time compared to countries where patients had direct access to specialist care. Figure 1 provides an overview of the income in these eight countries over time, adjusted for inflation and price-level differences between the countries.

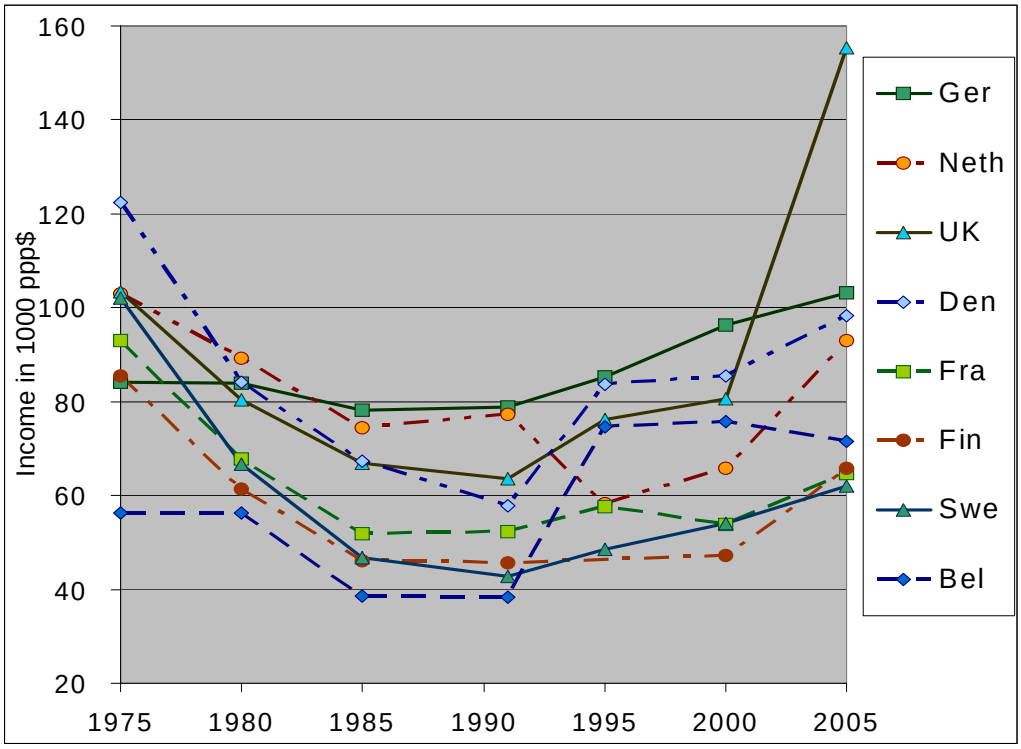

Figure 1. Annual GP income over time in ppp$, corrected for inflation, index year = 2000, for eight Western European countries [5,29]

Employment and contracting of GPs

Depending on the health care system, GPs are either employed within the health care system (often as civil servants) or contracted through the system. In both cases, GPs have to meet certain minimal requirements (such as an adequate training and consequently a license to practice as GP, in some health care systems a minimum number of patients on their list or a minimum number of consultations is required). Contracting often comes with a negotiation process, either between individual GPs and the paying party (government or health insurers) or between associations of GPs and (associations) of payers.

Contracting often occurs in a two layer system. Firstly, a kind of framework contract is negotiated at national level. Secondly, details are further negotiated between health care purchasers or governments and the individual health care providers. This is the case in eight countries (see Table 3), whereas two other countries start the first negotiation layer at regional level. Negotiations only at national level, mostly between national health insurance institutes or national governments and representatives of GPs (GP associations or chambers) occur in five countries. Contracts directly between individual purchasers (or governments) and individual providers take place in six countries. If no agreement can be reached, in the negotiations at national level, often the government takes the initiative to break the impasse through either defining the level of remuneration by patients or setting the fees for the providers unilaterally. If no agreement can be reached at the individual level, the individual provider may end up empty handed, except in the Netherlands, where GPs may always bill the insurance company for care provided to one of their patients. Selective contracting of GPs is hardly in use at present, only in Estonia the national health insurance funds are explicitly allowed to selectively contract GP-practices (see Table 3).

Ownership of practice premises and funding of fixed assets

GP-practices have to be settled in buildings, the least that is necessary is a consultation room, and a certain amount of medical equipment is required to be able to perform (simple) diagnostic procedures. GPs may be self-employed, in which case they are themselves responsible for funding the fixed assets for their practice. Investments have to be financed through the payment they receive. Practice costs, including also personnel such as practice nurses and administrative employees, appear to form on average 50% of the total turnover of GPs, irrespective of the level of the remuneration [5]. Another option for owning and funding fixed assets is via public financing. In that case, GP practices are mostly integrated in health care centers where also other health care professionals are working. These health care centers are owned by (mostly local) governments. In some countries, governments own the health care facilities and GPs pay rent for the use of these facilities. In 14 countries, GPs are self-employed and run private practices. As mentioned before, funding of fixed assets has to be financed by the GPs themselves through the fee-structure (see Table 1). Only in England, the fee structure includes a dedicated funding for premises and for instance IT-facilities. In Czech Republic, the health centers are owned by municipalities and private GPs rent the facilities from the municipalities. In Finland, Norway and Slovenia municipalities own primary care health centers where GPs work, mostly in combination with other primary care workers. Regional or national governments own primary care centers in Poland, Portugal, Spain and Sweden.

Primary care hospitals

A particularity of the Finish primary care system is the existence of GP-led hospitals. These hospitals were introduced because of large travel distances to specialized hospitals in the country. Nowadays they provide mainly long-term care for chronically ill persons who are not fit to stay at home or as an in-between station between hospital stay and home, until the patient is fit enough to go home.

Other relevant issues

Access to general practice

As GP-care is considered to be comprehensive and continuous, in many countries patients should register with a specific GP or GP-practice. This GP keeps the medical record of his or her patients and coordinates care in complex cases. Patients are mostly allowed to switch from one GP to another, but often this is restricted in time, for instance, patients may switch each six months.

As steering mechanism to prevent unnecessary medical use or to contain public expenditure, in some European countries a co-payment for patients for GP consultations is in place (see Table 1). Co-payments for GP-visits are required in 16 of the 23 countries in this study. For one country (Germany) this information is not available (see Table 1). On the contrary, in other countries, as in The Netherlands, no co-payments for GP visits are levied in order to avoid primary care sensitive hospitalizations. These are hospitalizations for conditions that could be managed in primary care if the patient had been seem timely. The philosophy is that co-payments may lead to postponement of visiting a GP until symptoms are too severe to be handled

Table 3 Contracting and negotiating for conditions of GP care

	Contract/ Agreement Period		Level of negotiation and negotiating partners	Peculiarities
Austria	y	n/a	National: Associations of insurers and Association of physicians; Individual: Physicians and social insurers	If no contract is agreed: courts of arbitration are called upon
Belgium	y	2 yrs	National: National institute of Health and disability insurance and National representatives of physicians	If no agreement, options: 1. government sets fees, 2. submission of another draft agreement, 3. government sets reimbursement levels for patients, leaving fees for physicians free
Bulgaria	y	1 yr	National: National Health Insurance Fund and professional associations of physicians; Individual: primary outpatient provider organizations and regional health insurance funds	
Czech Rep	y		National: Ministry of Health, representative of health insurance funds and health care providers; Individual: health insurers and providers	Reimbursement levels negotiated for one year, all other conditions for 5-8 years; National agreement is guideline for individual negotiations; If no agreement reached: Ministry of Health determines the details
Denmark	y	n/a	Regional: Danish Region and different professional organizations; Individual: GPs must have an agreement with the Region in order to receive fees	
Estonia	y	1 yr	National: National Health Insurance Fund and Society of Family Physicians; Individual: selective contracting by National Health Insurance Funds	
Finland			National: Salaries are negotiated by physicians' trade union and the Commission of local Authority Employers.	Private providers are free to set fees, although the Social Insurance Institute determines the level of reimbursement for patients

	Contract/ Agreement Period		Level of negotiation and negotiating partners	Peculiarities
France	y	n/a	National: Social Health Insurance Institute and each professional union. Individual: Social Health Insurance Institute and individual provider	Three types of contracts: 1. Targets for good practice (national); 2. good practice contracts (individual) and 3. Public health contracts (voluntary)
Germany	n/a	n/a	National: Social Health Insurance Funds and regional physicians organizations	
Greece	n/a	n/a	n/a	
Ireland	y	n/a	Individual: providers of public sector services and National Primary Care Reimbursement Board	
Italy	y	3 yrs	National: Central government and GPs' trade unions	
Latvia	y		Individual: State Compulsory Health Insurance Agency territorial branches and providers.	Self-employed GPs are assisted by the Association of General Practitioners. In the case of health centers, contracts are signed with the administration of the health centre.
Nether-lands	y	n/a	National: maximum fees negotiated between National Association of General Practitioners, Association of Health Insurers and Ministry of Health; Individual: Health insurer and (group of) providers	Negotiation for lower fees at individual level is allowed, but seldomly occurs. Contracts are not necessary for reimbursements. Additional reimbursements may be negotiated between individual providers and health insurers.
Norway		n/a	National: Norwegian Medical Association and Norwegian Association of Regional Authorities	
Poland	y	n/a	Individual: National Health Fund with individual providers	A model of competitive tendering is applied.
Portugal				GPs are civil servants
Romania	y	1 yr	National: National Health Insurance Fund and Ministry of Public Health; Individual: District Health Insurance Fund and provider	

	Contract/ Agreement Period		Level of negotiation and negotiating partners	Peculiarities
Slovakia	y	n/a	Individual: provider and health insurance company	Associations of providers assist individual providers in the negotiation; Health insurers are obliged to work nationally, but due to significant market share differences at regional level, their negotiation power may vary; If no agreement, providers end up empty handed
Slovenia	y	n/a	Individual: Local government and individual provider	
Spain	y	1 yr	Regional: regional government with regional health service and individual primary care provider teams	
Sweden	y		Physicians negotiate their salary with their employers	
United Kingdom (England)	y	n/a	National: British Medical Association (GP committee) and body representing NSH employers.	Four types of contracts: 1. General medical services: contract between GP-practice and Primary Care Team based on national negotiation; 2. Personal medical services: contract between GP-practice and Primary Care Team based on negotiations between these two parties; 3. Alternative provider medical services: Primary Care Teams contract other than GP practices for the provision of GP services (not very common); and 4. Primary Care Team medical services: GP practices are run directly by the Primary Care Team; Primary Care Teams are regional authorities that are responsible for purchasing health care in their area.

n/a: Information not available or not applicable

in general practice and thus lead to avoidable hospitalizations and thus increase health care expenditure.

Gate-keeping

As GP care is first-contact care for the health problems of the population, an important role is the channeling of the patient to the right specialist care. In some countries this is highly formalized. In a gate-keeping system, patients have to see there GP first and the GP refers the patient to the appropriate secondary provider if the health problem cannot be solved in his/her own practice. In some of these systems, there is an option for patients to go directly to secondary care, but this may result in either higher user charges or complete out-of-pocket payments for the treatment. The rationale behind a gate-keeping system is to reduce costs because patients are prevented from physician hopping (seeing more than one specialist for their condition) and seeing the wrong secondary care physician. There is some evidence that countries with a gate-keeping system are somewhat more successful in slowing the rate of growth in health care costs [30]. Gate-keeping is a characteristic of the NHS system, although it is by and by introduced in countries with a social health insurance system as well. A gate-keeping system is always combined with patients registering with a personal GP or GP practice. At present 17 of the 23 countries in this study have a gate-keeping system in place for the whole population (see Table 4). In Ireland, gate-keeping is only applicable to Medical Card holders, being mainly the poorer part of the population. In Bulgaria, Estonia, Italy and Sweden, pediatricians and sometimes a few other specializations are directly accessible, whereas for other specialties the gate-keeping system is in place (see Table 4).

Table 4. Gate-keeping and scope of GP services,

Country	gate-keeping	Out-of-hours	Preven-tive services	Particularities
Austria	to some extent	Yes		
Belgium	No	Yes		
Bulgaria	Yes, partly		Yes	Women and children have direct access to gynecologists and pediatricians
Czech Rep	No	Yes	Yes	Patients register with GPs
Denmark	Yes			Number of patients on list is limited
Estonia	Yes, partly		Yes	Prevention issues are part of the bonus system; Direct access to ophthalmologists, dermato-venereologists, gynecologists, psychiatrists, dentists, pulmonologists (in case of TB) and all needed specialist care in case of trauma. Chronically ill have access to specialists without referral, but are increasingly managed in primary care
Finland	Yes		Yes	Municipality based GPs are gatekeepers; health centers provide preventive services (not necessarily by a GP)
France	Yes		Yes	Self-referral increases co-payment from 30 to 70% plus an additional fee

Country	gate-keeping	Out-of-hours	Preven-tive services	Particularities
Germany	No			
Greece	No		Yes	No gatekeeping due to lack of GPs; some outpatient departments of hospitals provide primary care; health centers are staffed by more professionals than GPs only
Ireland	Yes, partly	Yes	Yes	Gate-keeping applicable for medical care holders (30% of the population); Out of hours care provided by GP-cooperatives
Italy	Yes, partly	Yes, partly	Yes	GPs provide influenza vaccinations; Pediatricians are directly accessible, only some GPs set op out-of-hours services
Latvia	Yes	No	Yes	Out of hours services provided by hospital departments and emergency medical assistance teams
Netherlands	Yes	Yes	Yes	Out-of-hours care provided by GP-cooperatives
Norway	Yes	Partly	Yes	75% of GPs participate in local emergency wards
Poland				
Portugal	Yes		Yes	
Romania	Yes	Yes	Yes	87% of GPs provide emergency coverage at night or on weekends; Preventive services: immunizations
Slovakia	Yes	Yes	Yes	Out-of-hours care provide in shifts according to the schedule of the self-governing regions; capitation payments do not motivate GPs to manage patients themselves
Slovenia	Yes	Yes	Yes	Gate-keeping by personal physician, not necessarily a GP.
Spain	Yes		Yes	There are specific 24-hours emergency primary care centers
Sweden	Yes, partly		Yes	Some counties have gate-keeping systems; 24-hour 'hot lines' where medical advice is provided by registered nurses; Pediatricians and district nurses also provide first contact care for children
United Kingdom (England)	Yes		Yes	Out-of-hours care is mostly delegated to the Regional Health Authorities

Empty cells in the table imply that there is no information provided in the health system reviews on that issue

A survey into the degree of gate-keeping in 18 European countries revealed that there is a considerable variation in the number of different health care services that either need a GP referral or are directly accessible. The 17 health care services in the study ranged from mainly primary care providers (dentists, physiotherapists) to specialist ambulatory care, hospital care and tertiary (rehabilitation) care.

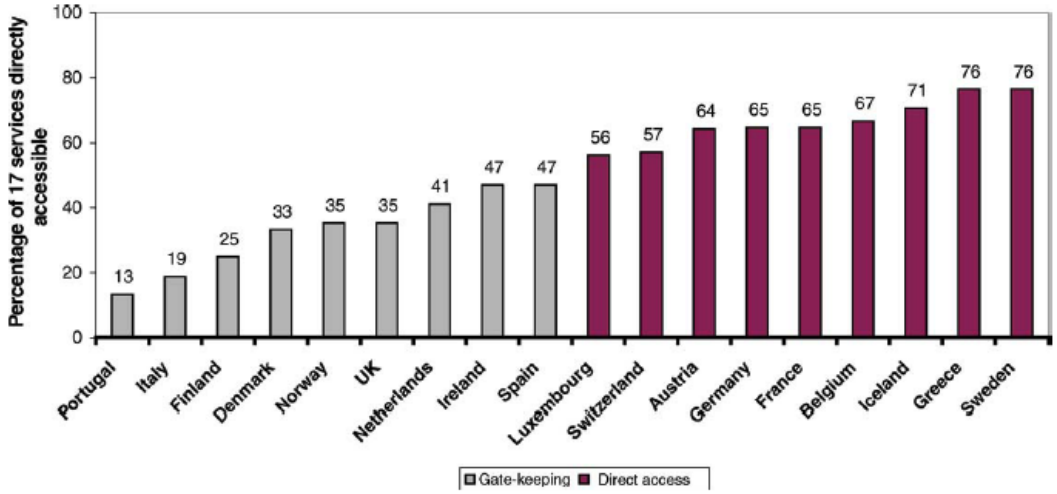

Figure 3. Direct access of health care services in 18 European countries [31]

Scope of services

Primary care may vary in content in the different countries. Information on the type of services provided by GPs in the different European country is currently not available in the sense of international comparative data. The most recent comparative study, conducted by Boerma, was performed in 1993 [32]. Since primary care has changed considerably in content and there have been numerous reforms in the countries included in this study, the information is no longer reflecting current practices. However, there is to some extend information available on whether GPs are involved in preventive services, whether primary care services are shared with pediatricians and gynecologists, and whether GP care is organized by GP practices or health centers that provide a wider scope of care (e.g. also physical therapy, midwifery etc.). Preventive services appear to be provided at least to some extent by GPs in almost all countries. This may range from simple immunization services for, for instance, influenza or childhood vaccinations to population screening programs for cancer and health examinations. In Bulgaria, Estonia and Sweden primary care is shared with specialists, such as pediatricians and gynecologists (see Table 4). In countries where primary care is provided by health centers, often more specialists besides GPs are available.

A new international comparative study on general practice, the Primary Health Care Activity Monitor for Europe (PHAMEU) is on the way, but is at present not yet available. The results will probably become available at the end of the year. This study is targeted towards revealing the current state and development of primary care systems in Europe. The study runs in 31 countries, all 27 EU-members, one EU candidate country (Turkey) and three members of the European Free Trade Association (EFTA) (Iceland, Norway and Switzerland). For more information on this study, please refer to the following website: www.phameu.eu.

Provision of out-of-hours services (night and weekend emergency services) via GP practices or GP cooperatives is available in 11 countries (see Table 4). In the other countries medical needs outside office hours are mostly attended by hospital emergency wards, which is associated with higher health care expenditures.

Accountability

A final important issue in GP care is the quality assurance and requirements for practicing in primary care. To be allowed to practice as General Practitioner or Family Physician, a specialist training ranging from two to four years is often required after graduation from medical university. Besides, GPs should continuously educate themselves in order to keep up with medical developments in their field of practice. Requirements for practice may consist of re-licensing repeatedly after a certain period of time. Re-licensing is granted when the GP can show that a predefined set of continuous training has been passed successfully. Currently, half of the European countries have a mandatory system of continuous training for GPs in place. GP quality may further be reassured by Quality committees, either government based or via self regulation organized by GP associations. These committees have the power to withdraw licenses in the case of malpractice.

Quality standards or quality indicators to evaluate general practice have been mentioned in six countries (Czech Republic, Denmark, Ireland, Romania, Slovakia, and England). To what extent these quality indicators actually influence the provision of GP care is unclear. In Denmark, the quality indicators are published on the internet (however, it is not clear whether this is at present available only for specialist care or also for GP care) and England is the only country where the quality indicators are used in the remuneration system of the GPs. The development of clinical guidelines is present in Estonia, France, Ireland, Latvia, The Netherlands, and Spain. To what extent clinical guidelines are implemented in daily practice is unknown. Besides, the fact that guidelines or clinical indicators are not mentioned in the Health System Reviews of the other countries does not imply that they do not exist in these countries.

Finally, the quality of GP care may be evaluated by patients. England is, however, the only country where patient evaluations influence GP remuneration. Patient evaluation is part of the Framework and Outcomes Contract, and good evaluations may provide points for GPs that will be remunerated by a monetary value. There are a few countries where patient surveys have taken place, but these did not have direct consequences for GP care delivery or GP remuneration.

Reforms

Most countries have faced several reforms concerning the organization and financing of primary care in the past decade. Most of these reforms are incremental reforms, trying to steer the system in the right direction. Changing the system dramatically (as happened in the Eastern European countries in the beginning of the 1990s), requires on average several decades to establish and crystallize into a relatively fair and sustainable system. The health care providers have to get used to their new roles and changes in governments may result in adjustments according to the political conviction of the new government in place. In the countries where formerly the Shemashko system was in place, new elections and subsequently new priorities of the government may lead to changes in the opposite direction of the government that was in place before the elections. From the Western European countries (the old European Union member states) only few countries faced a large reform of the GP financing system. These changes took place in the United Kingdom (England) and the Netherlands. Both reforms resulted in a substantial increase of the income of GPs and subsequently of primary care costs. This is probably the result of uncertainty concerning the income,

which leads to very concise billing of activities that are subject to fee-for-service. Currently, in Germany also a large reform is taking place, but the consequences of this reform are not yet available. In the other countries, mostly small changes took place. Often in the form of financial incentives for preventive care services and for implementing cost containment measures, such as prescribing generic drugs or reducing the number of referrals to secondary care. The reform in the Netherlands concerned the whole health care system and it took several decades of political plans and small incremental changes in the direction of the major reform before all stakeholders were ready to accept the reform.

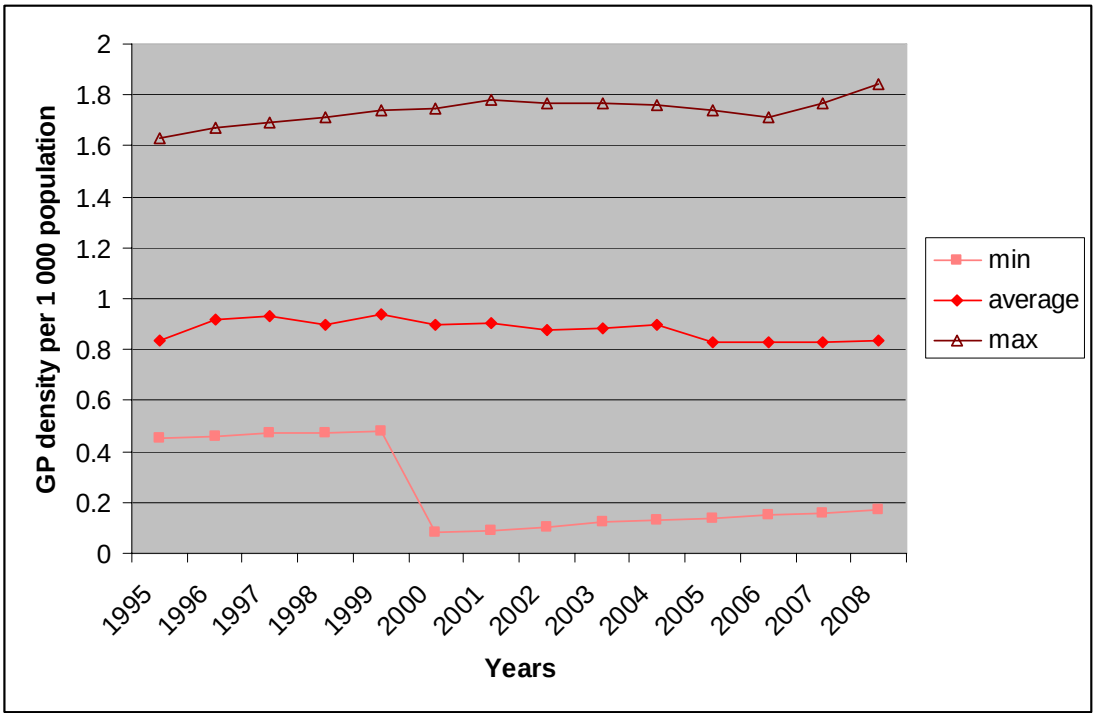

Figure 3. Development of GP supply from 1995 to 2008 in Europe (Based on data from OECD health data files 2010)

GP supply in Europe

The number of GPs per 1000 population varies considerably over the countries, whereas the supply over the years is relatively constant (see Figure 3). The countries with the highest number of GPs are Belgium (until 2006) and Portugal (from 2006 to 2008). The lowest numbers can be found in The Netherlands, where a small increase is perceived in the period 1995-2008 from respectively 0.46 to 0.54 GPs per 1000 population. GP supply is lowest in Poland, data became available in 2000, at that time 0.08 GPs per 1000 population were registered, although the supply increased to 0.17 per 1000 population in 2008. Actual supply of primary care physicians in Poland may be higher, since the GP specialization is relatively new, it was introduced in the 1990s. Shortage of supply of GPs was covered by the former ambulatory specialists, such as specialists in internal medicine. Besides, primary care is also offered by pediatricians and gynecologists [25]. In the Netherlands, pediatricians and gynecologists are considered as specialists in secondary care for which a GP referral is required. In Belgium, the high number of GPs reflects the fact that there was no planning of physician supply. This changed recently and since 2004, a numerus clausus became

into effect in Belgium. A numerus clausus means that a limited number of students are permitted to specialize in family medicine [7]. According to the literature is a greater supply of primary care providers associated with better health outcomes [2]. In almost all countries, some kind of workforce planning is available (except for Austria, Bulgaria, Romania and Slovakia), although the planning criteria are mostly not explicitly mentioned. Mostly workforce planning is regulated via numerus clauses for university training. Belgium, Estonia and the Netherlands have a workforce planning that is based on expected future supply of GPs. In The Netherlands, also future demand is taking into account in the workforce planning. International comparative data on utilization of GP care (for instance number of consultations) are not available in the international comparative databases. In some countries, as in Poland, shortages result from migration of GPs to other countries. In Sweden and England, migrant GPs from other countries are used to overcome shortages.

Policy recommendations

Primary care in Europe is paid and organized in many different ways. Each system has its own positive and negative features. When implementing systems from other countries, the health care system in the implementing country should either be comparable to the other country or one should evaluate how the incentives of the measure to be implemented will match with the own health care system context [27]. Although Gress *et al* warn that financial systems get too much attention as steering mechanism, many countries use these incentives to promote quality of care [27]. Trough mixing financing systems, steering mechanisms may be combined. For instance capitation payment for comprehensiveness of care and fee-for-service to stimulate certain services. Risk adjustment of capitation fees may prevent risk selection behavior of GPs, and thus prevent a more difficult access for vulnerable people to the primary care system. Performance payments are also a means to promote certain services in several countries. Performance payments are bonuses that are paid when certain predefined targets are met. Payment systems based on disease management (money follows the patient) are a new phenomenon that has not yet matured. In Europe this is largely due to the fact that the financing of the health care system is organized by sector: for GPs and secondary care (medical specialists and hospitals) different remuneration systems and budgets exist, that cannot be combined easily. Furthermore, to implement disease based financing, guidelines and protocols have to be developed to ensure good care for the patient. This is not possible for all health complaints and thus disease based financing can only exist in combination with other financing systems. Experiences from England and the Netherlands learned that large reforms in GP financing system may lead to unexpected expenditures in GP-care. Especially when the changes are such, that GPs cannot estimate their future income, because existing administrative systems are not suitable for the new system.

GP-practices throughout Europe are mainly owned by the GPs themselves. Funding of the practice costs, both fixed and variable, are the responsibility of the individual practice, even in countries where the health care system is largely organized by the government. Only in countries where GPs are in salaried service, practice costs are funded by (local) governments. The self-employment of GPs also reflects in the contracting systems. GPs negotiate with national representatives of health care purchasers (governments or health insurers or health insurance funds) on conditions for practice and remuneration. In most cases this process of negotiation follows two

stages: at national level, a framework contract is developed and at local level the details are further established between individual providers and purchasers. This is probably much more efficient compared to negotiations on individual level only. Selective contracting of GP care is currently hardly practiced. Selective contracting implies that purchasers have the right to not contract GPs that either do not meet certain quality standards or with whom no agreement could be negotiated.

Access to the health care system as a whole can be regulated via GPs. GPs can function as gate-keepers, ensuring that patients go the right type of secondary care if necessary and treating patient in the primary care setting if possible, which is much cheaper compared to hospital care. However, patients in systems with direct access to secondary care evaluate GP care more positively compared to patients in a gate-keeping system [31]. It is not clear whether this is the case because patients have a possibility to choose or whether patients consider going to a GP first when they evaluate their condition as needing attended by a specialist physician as an unnecessary step and thus annoying. Since health care provision systems become increasingly patient centered, this may be a point of consideration. Another issue that is related to access, but also to cost-containment, is formed by out-of-pocket payments for GP consultations. Out-of-pocket payments are on the one hand considered as a means to contain health care costs. In countries with poor public resources for health care, co-payments may be a means to keep the system affordable. On the other hand, free access to GP care at point of entry may reduce primary care sensitive hospitalizations, because people do not experience barriers to contact the health care system and thus make the system more affordable.

When major reforms are envisaged, the establishment of professional association of GPs and subsequently involving these organizations in the negotiation of policy changes will create support for (future) changes, which is necessary to make them successful in practice.

Quality of care is an important issue, that cannot be regulated by financial incentives only. To ensure that GPs keep up with recent (medical) developments, a system of re-licensing, requiring a minimum amount of continuing learning credentials could be introduced. The introduction of (national) guidelines may reduce practice variations and improve quality of care. The development of quality indicators and the publication of audits based on these quality indicators, for instance on the internet, may stimulate GPs to improve quality of care. However, in Europe to date, only England is combining outcomes on quality indicators with financial incentives. To evaluate accessibility of care and GP-practice organization, patient surveys may play an important role. Currently this policy instrument is not commonly implemented and again only in England the outcomes of patient surveys may lead to financial consequences for GP practices.

There is to our knowledge no information available whether there is a difference in health outcomes, level of expenditure or satisfaction of patients for the difference between GP staffed practices and health centers where more health care professionals are situated.

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