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RESEARCH ARTICLE

Contracting Medical Services-Experiences from Selected European Countries

Hanna Karaszewska[2], Joanna Nieżurawska*[1], Marek Zarębski[3]

[1] *Department of Management, Faculty of Finance and Management, Torun School of Banking, Poland.*

[2]*Department of Human Resource Management, Nicolaus Copernicus University, Torun, Poland.*

[3]*Department of Logistic, Nicolaus Copernicus University, Torun, Poland.*

Abstract

The main aim of this article is to show experiences from Selected European Countries in Contracting Medical Services. In this study the mechanisms involved in the formation of the payments of medical doctors employed on permanent and civil contracts have been identified. The theoretical part is illustrated with examples drawn from the practice of closed health care units (hospitals) and open health care units (health care centres) located in Poland. The method of direct interview including the participation of experts was applied in order to realise the above goal 10 experts representing closed health care (hospitals) and 14 heads of the outpatient clinics. The results of the conducted expert interviews have been presented in this paper.

Keywords: *Medical doctors' remunerations, Wage formation mechanism, Plasticisation of payments, Contracting medical services, Types of remuneration in hospitals.*

Introduction

In the health care system the key role is played by the doctor. It is he or she who sets the paths for the patient to follow from the very moment that he or she becomes an active participant of this system. Making a diagnosis, determining the kind and the directions of therapy, creating a network of ties among doctors of various specialisations, the doctor decides what should be the highest value in the health and life of another man. The engagement of all the best medical knowledge in the service of others is a reflection of respect for these values.

As a service provider the doctor is a cost generator. The model of financing of health care services and the doctor's place in it, determined by the mechanism of remunerations formation, on one occasion assigns him or her the role of 'an upholder of the system, on another - produces a consent for economic ignorance. In the areas where difficult choices must be made between the possibilities offered by modern medicine and the tough rules of economy while determining the directions of the treatment, there occur moral dilemmas and sometimes even appear doubts about the reasonableness of the offered help. In doctor's work, unlike elsewhere, medicine, economy and ethics get integrated into one whole.

The Theoretical Outline

Medical doctor is a very specific kind of occupation. Its profession is associated with a number of non-material advantages (social stratification and its consequences – a special recognition and esteem, the importance and the high ranking of the decisions made, the autonomy to act etc.). If we ignored the fact that both the health services market and the medical doctors employment market are organised markets, we could assume that the remunerations of doctors in Poland have been for many years an example of a positive verification of the neoclassical theory. According to this theory the advantages unrelated to payment lead to the downward shift in the employment supply curve and constitute one of the reasons why the wages rates are fixed so

that they balance the demand for labour and the supply of labour at a lower level.

At the time of expansion of the knowledge-based economy, the theory of human capital is referred to more and more commonly [1-2]. If we assume that the discounted sum of expected incomes is a measure of this capital, it becomes obvious that the current and expected payments constitute its exemplification. Facing the choice between maintaining the *status quo* in education and payments and losing profits by means of the current payments resulting from replacing the labour time with the time devoted to education in the hope that a better job and a higher level of remunerations can be obtained in the future, the entity will make a decision to invest in itself only if the discounted sum of profits on that prospective investment remains at least equal to the discounted sum of losses.

The above line of reasoning, on which the model is based [3]. Only if the variation in payments reflects the differences in the quality of intellectual capital and the preferences concerning its particular kinds, can this information provide basis for the choice of direction of the education generating plenty of this kind of capital. Many-year, arduous medical studies and the long and complicated path of getting the consecutive degrees of specialisation add up to the intellectual capital of the physician. Therefore, the physician should earn a lot. However, his or her work should be subjected to objective evaluation, just like performance in other kinds of work

Model of Remunerations of Physicians-Basic Decision-Making Dilemmas

Although by nature health care centres have their own separate character, they nevertheless have to settle the same dilemmas as other entities whenever the formation of remunerations is concerned. The basic dilemmas are the following:

- The choice between the contract-related payment, resulting from the plasticisation of employment, and the remuneration received for the performance of subordinated work.
- The choice between the payment reflecting inner justice (based on a thorough evaluation of competences) and the payment reflecting the external competitiveness (the payment for work determined by the market evaluation),]
- The payment resulting from the range of rendered services (an equivalent of payment for results) vs payment for competences,
- A relatively stable payment vs a variable payment, conditioned among others by a high threshold of tolerance of risk [4].

The limited size of this study does not allow to discuss all of the above-signalled dilemmas.

Since the present authors believe that the choice: civil contracts vs the traditional employment relationship is crucial and the mode of formation of contracts - decisive in the settling of many of the above-signalled dilemmas, a subsequent part of this study is going to be devoted to the presentation of the types of physicians' remunerations, especially from the angle of the principles of medical contracts formation. Also, an attempt will be made to evaluate the consequences of their introduction and the conditions of their efficiency.

Contracting Medical Services-Experiences from Selected European Countries

In **Austria** health care funds fulfil the role of holders financing health benefits (the payer). The contracts are concluded on doctors' behalf with the health care funds by Physicians' Chambers (the membership in which is obligatory). The fee for the services (the basis of the capitation rates is provided by the earlier concluded regional or, more often, national agreement concerning the rates) is paid by the patient, and the health care funds refund the costs of the treatment (also in the case of the services of the doctors who are not on contract with a health care fund (up to 80%). Many physicians, also those employed in closed health services, run more than one medical practice. Many of them (especially in the country) run also a pharmacy as part of their practice.

In **Belgium** most general doctors run a private practice. The access to the general doctor and to a specialist is easy and the patient has a right to choose the doctor. In the Belgic system there applies the principle that the doctor obtains the payment from the patient for his or her advice or consultancy. The value of the royalty is negotiated by the representation of doctors with health funds. The fee is partly refundable by the health fund after producing the bill. The patient's participation in the costs of the treatment in an outpatient clinic is lower in the case of certain categories of patients (those characterised by a low income, widows, the disabled, old age pensioners, orphans). Equal rates oblige both in open and closed specialist health care units. Both general doctors and specialists have autonomy to prescribe medicines.

In **Croatia** only the basic health care service doctors (internists, paediatricians and gynaecologists) have individual contracts (there is one state insuring institution). In order to conclude a contract it is necessary to have a list of patients with their number specified. The capitation system is in force. The doctor refers the patients to public hospitals for consultations and extra examinations without any limitations. It generates the lengthening of the period of waiting for the appointment and leads to the spread of the practice of informal payments. The doctor without a contract has no right to write out refundable prescriptions or a doctor's leave.

In the **Czech Republic** there functions the system of health care funds. Individual medical practices are registered by the local authorities after obtaining a positive opinion from the Physicians' Chamber. The choice of the service provider results from the consensus reached by the committee consisting of the representatives of the Physicians' Chamber, the health care funds, the local administration, and a medical consultant. The value of medical contracts depends on the point valuation of medical services and the value of the medical point. They are established in the negotiations of the health care funds with the representatives of patients and doctors' self-government. The medical contract keeps to the minimum the point limit, regulated quarterly, and the financial limit for medicines and extra examinations (the doctor is charged for exceeding it).

In **Slovakia** there occurs the system of health care funds. Only the doctors running a private practice do obligatorily belong to the Physicians' Chamber. There also exists an association of such doctors, representing them in negotiations. The capitation system is used to remunerate the basic health care doctors. The principle of gatekeeping is in force.

In **Germany** 90% of citizens are covered by an obligatory health insurance. The insurance premium is diversified. However, there exists a compensatory mechanism among the health care funds, taking into consideration the risk factors occurring in the insured. General practitioners and specialists conducting private medical practices are obligatorily the members of the association which negotiates contracts with the health care funds on their behalf, and also the standards of conduct, and the evaluation of new medical procedures. The system *fee for service* is in force. The development of coordinated health care is prognoses in the long run. It will be possible only in the conditions of a permanent and consequently realised right of the health care funds to conclude, in addition to collective agreements, also individual contracts with doctors and medical care centres.

In **Slovenia** there exists one insurance institution. Every year an agreement is made determining among others the network of health care services, the rates, the allocation of the means, and the working hours of the doctors in the outpatient clinics. The ministry of health, the medical insuring institution, the Physicians' Chamber and the Pharmacy Chamber, the association of employers involved in health protection as well as the association of sanatoriums are parties to this agreement. The capitation system is in force, but a considerable part or the doctor's remuneration comes from additional fees (for additional work, by means of patients' participation in the costs of treatment).

In **Hungary** there exists one health insurance institution (the National Fund of Health Insurance), which is autonomous and is the main payer in the health sector with the exception of investments and highly specialised procedures. The health care provided by outpatient clinics is realised with few exceptions by the health care units which are the property of the state or of local governments. They also conclude contracts on services. In the basic health care the principle of *gatekeeping* is in force (it does not concern the access to the gynaecologist or ophthalmologist); there are no limits concerning the referrals to medical examinations. The payment mechanisms connected with the financing of medical services are diversified in the section of the kinds of services. The basic health care service employees are remunerated within the framework of capitation system, the specialists - according to the principle: *fee for service*. In closed health care units the DRG (Diagnosis Related Groups) system is exploited to some extent.

Siemaszko's model, the Act on General Insurance, obliging in **Poland** until 1999, has been replaced by an insurance model based with some modifications on Bismarck's conception, the Act on Universal Health Insurance. As a result of evolution of the system (originally the function of the insuring institution was fulfilled by the health care funds), the role of the payer has been taken over by one institution – the National Health Fund. The planning functions in the system of health protection have been passed over to local governments. Local governments have become the owners of the property as well as the public organs responsible for the provision of health services for the population. The Ministry of Health fulfils the function of the central organ. Conducting an appropriate health policy, controlling and partially financing the system have become its primary tasks.

The Legislator has specified the conditions which the service provider has to meet. In addition to health care units (hospitals, old-age care and medicinal plants, sanatoriums, preventive entities and other entities for the people requiring day-and-night health care in adequate conditions, outpatient clinics, health service centres, specialist outpatient clinics, emergency service centres, diagnostic laboratories, stomatological prosthetic and orthodontia laboratories, curative rehabilitation units, crèches) they can be persons professing a medical occupation within the framework of their own business activity.Contracts or, in the case of units providing commercial services, financing from the means of physical persons, have replaced the previous, budget-based system of financing [5-6].

Types of Remuneration in Hospitals in Poland-Research Results

Research Methodology

The main objective of the study whose results have been presented in this paper was to identify the mechanisms of remuneration formation and their determinants in closed health care units (hospitals) as well as in open entities (outpatient clinics).

The following detailed objective was set:

The determination of the advantages and threats of contracting as a form of employment and of remuneration of medical doctors.

The method of direct interview including the participation of experts was applied in order to realise the above goal 10 experts representing closed health care (hospitals) and 14 heads of the outpatient clinics located in the Kuyavsko-Pomorskie Region took part in the study. The experts in hospitals represented 50% of all the public hospitals and 34% of all the hospitals located in the Region. In the Kuyavsko-Pomorskie Region there are 29 registered hospitals, including 20 public and 9 non-public units. The experts representing open health care constituted 4.8% of all the entities under study. The results of the conducted expert interviews have been presented in this paper.

Description of the Community under Study

The health care entities under study are hospitals and medical clinics situated in the

area of the Kuyavsko-Pomorskie Region.

All the hospitals under study are public units, 60% of which are specialist hospitals, 20% - multi-department hospitals, with teaching hospitals constituting the same proportion. The studied hospitals constitute 34.5% of all the hospitals found in the Region. The heads of outpatient clinics in majority represented mixed, general and specialist clinics (50%). Only 36% of them were managers of exclusively specialist clinics, and 14% - managers of exclusively general ones (in Poland the majority of clinics are mixed, general and specialist).

The clinics under study are public clinics.

Types of Medical Doctors' Remunerations

The most common kind of contractual agreements in hospitals are salaries (29% indications); the next in turn are payments for each particular service rendered-(21%), and, finally, the scale of charges (21%). 25% of the experts pointed to the application of fee for service - FFS, basing on the experiences of hospital outpatient clinics. Capitation was used in this type of clinics much more rarely (4% of indications).

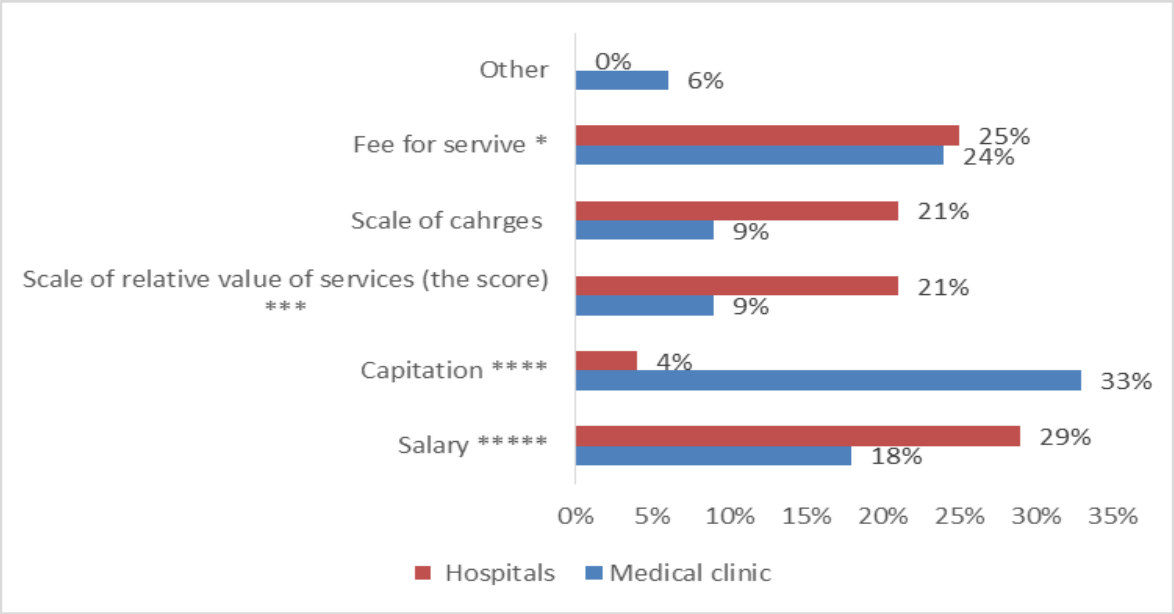

Fig 1: Mechanisms of contractual agreements of medical doctors used by the entities under study in hospitals and clinics (in %)

* specification of the remuneration for each rendered service,
** the earlier established 'menu' of prices for each service,
*** the scale prepared basing on the objective standards, which specifies the relative value of each service in relation to the unit in force (e.g. a medical consultation in doctor's office),
**** the sum allocated to one patient, established monthly, covered by the health care irrespectively of the number of rendered services,
***** remuneration from the employer.
Source: the authors' own elaboration based on their own research

The contracts of the doctors employed in hospital departments are most frequently based on the hourly rate and the number of medical duties on working days, Sundays and holidays, and they sometimes include a variable part, which is constituted by a share in the department's income or dependent on the number of conducted operations and interventions. The basic determinant of payment formation in hospitals still remains the kind and the degree of specialisation.In the outpatient departments representing open health care the most frequently used type of contractual agreement is capitation (33%) and fee for service (24%). Another form indicated by the outpatient clinics under study was the hourly remuneration (6%) (Fig. 1)

A variant of FFS, also applied by outpatient clinics, is the rate per appointment. It is the subject of negotiations with the doctor. Each specialist appointment has its point valuation. The following items are also the determinants of the contract: the localisation of the practice, the distance, the costs of getting to the patient, the number of doctors of a given specialisation in the area. The capitation system is also applied. The type of capitation taking into consideration the patients' demographic structure is an interesting solution, used in contracts with family doctors (allocating more points to the patients from risk groups - elderly persons and particularly difficult patients (e.g. babies).

The range and difficulty of the realised procedures have still remained the main determinants influencing the value of the contract in outpatient clinics.

Advantages and Threats of Contractual Agreements

The experts were asked to specify the main advantages resulting from the introduction of contracting medical services by doctors as independent health entities [7].

The basic advantage of medical contracts indicated by the interviewees (Fig 2) was the acquisition of the tool of plasticisation of employment (80% indications in the hospitals and 79% in the outpatient clinics) and of the labour time (the possibility of lengthening of the labour time and a greater availability of employees - 80% indications in the hospitals and 39% in the outpatient clinics). They also pointed to cost savings by means of decreasing the tax burden and the expenditure on social benefits (80% indications in the hospitals and 43% in the outpatient clinics).

They have noted the following threats: the increase of the payments of contract employees (60% indications in the hospitals and approximately 43.9% in the outpatient clinics) and a gradual weakening of ties between doctors and their place of work (40 % indications in the hospitals and 21.4 % in the outpatient clinics), (Fig 3). (In Poland contract doctors often work in several units, rendering also commercial services within the framework of private practices).

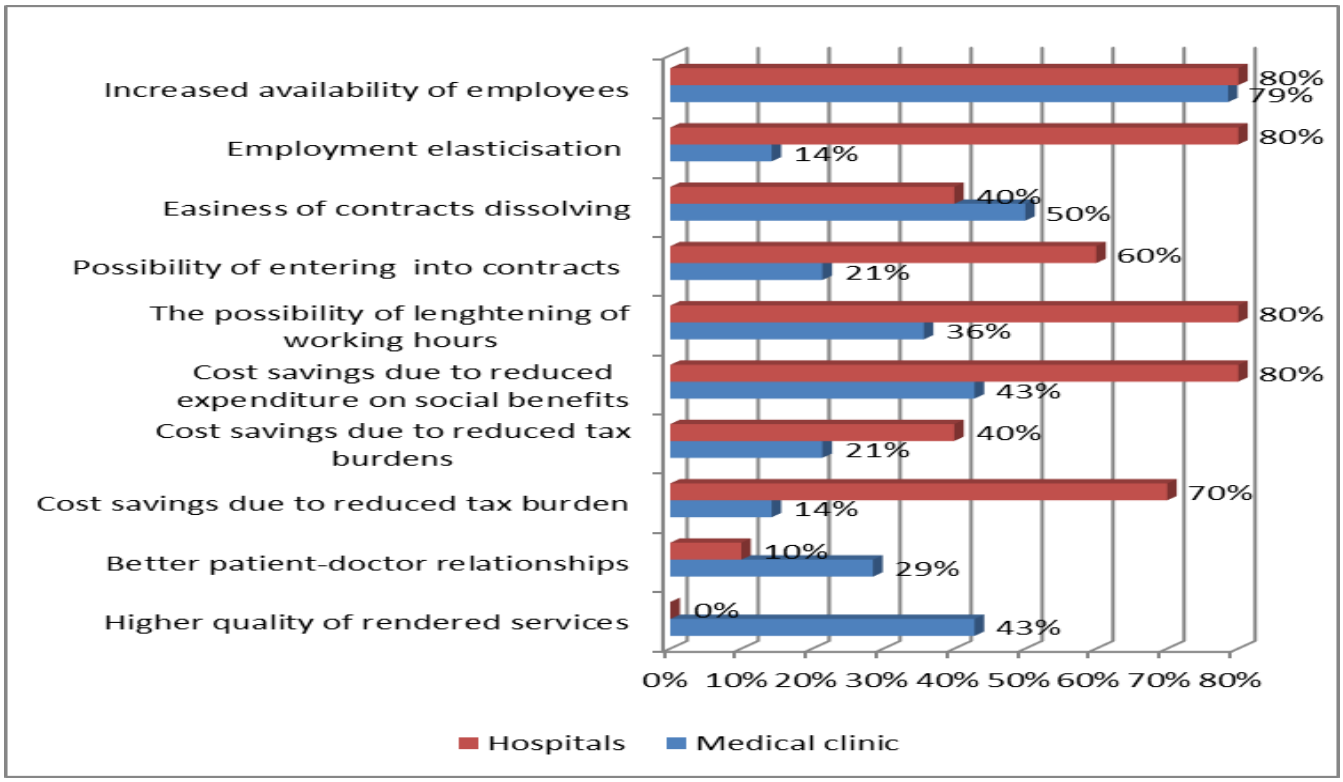

Fig 2: The advantages of contractual agreements concluded with doctors in hospitals and outpatient clinics in Poland (in %)

Source: The authors' own elaboration

Contractual agreements have led to the escalation of demanding attitudes, which has resulted in the increase of payments, now often largely exceeding their former values. They have led to the disintegration of the medical milieu and caused the weakening of ties between doctors and their place of work (in Poland contract doctors often work in several units, also rendering commercial services within the framework of private practices).As the main determinants influencing the contract value the respondents have mentioned the range and the level of difficulty of the applied procedures, whereas in hospitals the kind and the degree of specialisation is the dominating determinant.

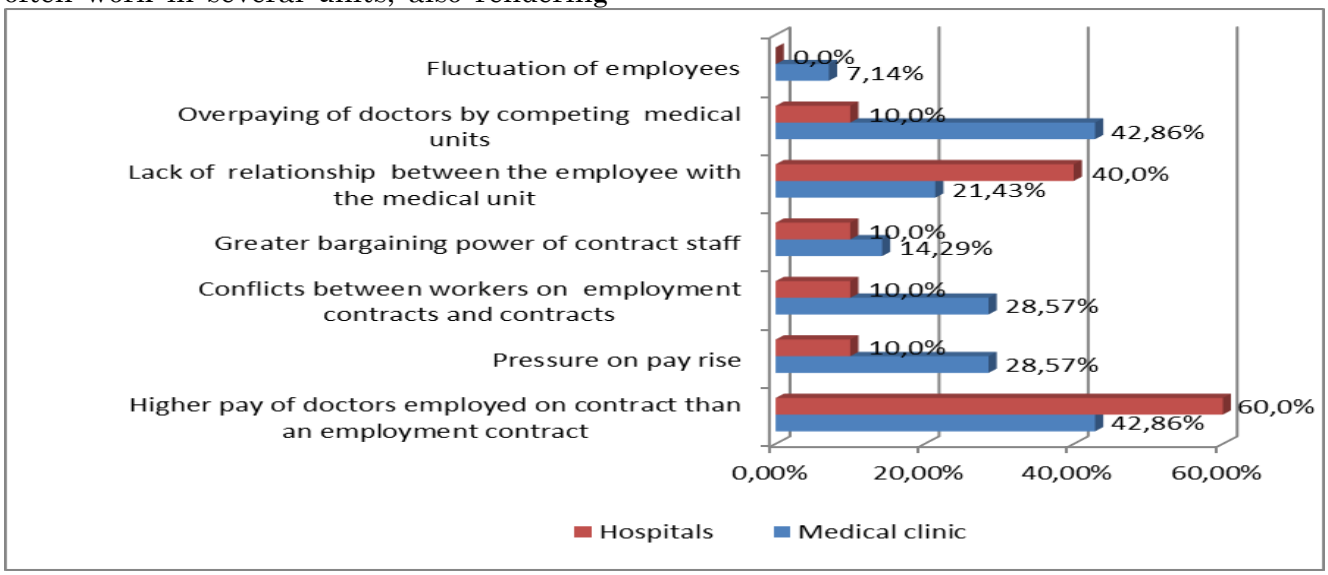

Fig 3: The limitations of contractual agreements concluded with doctors in hospitals and outpatient clinics in Poland(in %)
Source: The authors' own elaboration

The financing system of health care service does not impose on the ZOZes (health care units) the performance of systemic evaluation of contracts in general, not to speak of their particular kinds. Practically, the attempts of evaluation of the impact of contractual agreements on the sphere of employment or on the financial standing are not made [7].

Table 1: Types of remunerations of doctors, their weak and strong points

Type of remuneration	Description	Strong points	Weak points
Fee for service	Remuneration for each service rendered.	Ties the payment to the range of services realised. Generates good access to medical care. Creates the possibility of selection of service provider. Favours high quality of health care services.	Encourages choosing expensive services, thus raising fees. Presents the difficulty managing the payment system due to the great changeability of the amount and types of this kind of services. Involves a complicated cost accounting. Hinders the flow of information between the patient, the service provider, and the payer.
Capitation	Monthly remuneration is dependent on the number of patients remaining under the care of a medical doctor independently of the number of services rendered.	Allows to ensure a full-profile medical care. Increases the doctor's responsibility (managing the patient's moving around in the system, education of patients). Allows cost control. Makes the management of the system of payments easier. Accounts for the cost of care and of the system of information in a simple manner.	Encourages decreasing the range of the doctor's own services and referring patients to specialists. Does not involve sufficiently strong motivators to encourage rendering services of high quality.
RVS - relative value scale	The scale has been elaborated on on the basis of an objective point valuation of each procedure in relation to the procedure assumed as standard (e.g. consultancy in doctor's office).	Leads to the objectification of payments. Favours cost rationalisation. Is less costly than the UCR.	Involves an enormous number of procedures being subject to valuation and poses difficulty valuating some of them. Involves an increase of the number of points (*code creep)* with

			the number of rendered services being the same.
Mixed system	Capitation, fee for the appointment, lump sum for prophylaxis.	Allows to combine positive aspects of many systems.	Presents difficulty managing the payments.
USA-specific			
UCR - usual, customary and reasonable	Involves rejection of bills which differ from the customary, average and reasonable i.e. from those used by the majority of doctors in the preceding year.	Eliminates the necessity of costly valuation of many procedures. In the USA - limits the impact of the competition on the doctors realising services within the framework of the coordinated health care.	Involves cost rise. Leads to striking disproportions in salaries.
RBRVS resource-based relative value scale	The scale of the relative value of services, established by the government in the USA responsible for the realisation of the Medicare programme. The determinants of the value of services are: the doctor's working time, the intensification of efforts, the costs of the undertaken actions, the costs of the specialist training.	Allows to take into consideration the multiplicity of the determinants of the level of difficulty of the procedures.	Reflects the great extent of interference of the State in the market mechanisms.
Payment for coordination	Takes into consideration the payment for the specific services in coordinating the medical care, usually with the particular types of service providers. The most typical example of that is the model of old-age care and the medicinal plant, where the service provider gets paid for ensuring the coordination of the services which are not provided by other entities and non-refundable. The types of care in which the payment for coordination is used includes: the basic health care, the care for patients with chronic diseases, and the care for healthy patients at risk from chronic diseases.	Leads to an improvement and perfection of the relation: doctor-patient, including in particular the communication between patients and carers. Causes an increase of the extent of the patient's and his or her family's participation in the decisions concerning the care. Leads to an improvement of liquidity, concerning the issue of how, where and by whom the particular kind of care should be provided. Imposes restrictions on sending unnecessary and ineffective care (e.g. a visit in an emergency centre by the patients whose cases should rather be examined in the doctor's office), thus increasing the effectiveness of the health care system.	Many patients can suppose or expect that the coordination of care will be provided without any extra fee. The time-consuming character of coordinated services may radically reduce the number of patients – the receivers of those services.
The model based on episodes or bundled payments	Single payments for groups of services connected with such a treatment or health condition which requires many deliverers in various circumstances (among others the Proven Care model in Pennsylvania concerning the operations of the coronary artery bypass grafting type). The reform of the health care system of Minnesota from 2008 offered the variant of bundled payments in the form of a basket of services. The baskets of health services takes into consideration the services for eight health conditions (diabetes, prediabetic conditions, preventive services for children and adults, asthma in children, low back pains, obstetrical care, knee replacement operations). No service provider has offered such a complex basket of services so far, and none of the insurance plans covers the costs of their treatment.	Offers a chance of improvement of the coordination among various institutions providing health care. Ensures greater flexibility in providing certain kinds of care concerning their range and manner. Encourages effective episode management (cost reduction). Is characterised by simplicity in the cost management area (one bill instead of many). Makes transparent the provider's responsibility for the quality of their services.	Poses difficulty identifying the borders of an episode. Tends to increase the barriers of choice of a service provider and of realising the geographical preferences in services delivery by the patient. Offers no encouragement to reduce unnecessary episodes. Tends to avoid high risk patients and the cases which could possibly surpass the mean episode payment.

Complex model of payments for health services	The delivery of unit valuations on health services in full assortment for the particular individuals for a certain closed period of time. The full cost of the care is very similar to the payment from the patient. The main differences lie in a more refined methodology, which takes into consideration the risk, and in the inclusion of the qualitative measurement. In the USA the application of the total costs model in the health care is very limited.	Allows a greater elasticity for service providers to deliver the care. Involves a greater inclination towards innovation in services delivery planning, stimulating higher efficiency in services delivery. Provides an increased encouragement for the service providers who service certain particular groups of patients to enter into cooperation.	Involves the possibility of falsification of the data and of the information systems concerning the services demanded from the deliverers. The limited application of the model for wider and more integrated medical practices. The possibility of valuing the health of the population over the health of the particular patients. Creation of reasons to avoid high risk patients.

Source: the authors' own elaboration based on: [8], [9], [6], *Five Payment Models: The Pros, the Cons, the Potential*, „Medicine Journal Minnesota" 2011, no. 12, Shih A., Davis K., Schoenbaum S. (2008), Organizing the US Health Care Delivery System for High Performance. Commission on a High Performance Health System, The Commonwealth Fund, Subramanian S, Cromwell J. (2001), Impact of global bundled payments on hospital costs of coronary artery bypass grafting, "Health Care Finance", 27(4)

Conclusion

A considerable expansion of employment on contract agreements has had place in medical entities in Poland over the last 10 years. In a considerable proportion of hospitals, however, the mechanisms of contractual remunerations have not become radically different in comparison to the traditional employment contracts. Nevertheless, the efficacy of a contract agreement depends on its formula. The RVS formula (*relative value scale*) seems to be particularly attractive. However, it requires an appropriate valuation of procedures, which is in turn conditioned by the objectification of the remuneration sphere and by wage formation using modern tools. Valuation of competences is an indispensable determinant of an adequate specification of the share of labour costs in the particular procedures. It is equally important anyway when the above-described mechanisms of contractual remuneration are applied. Although some medical care units in Poland have made attempts at valuation, they have turned out rather ineffective, especially in the sphere of public hospitals; they tend to antagonise the medical milieu rather than integrate it. Even if attempts to objectivise payments are made, they focus on the solutions which are not quite perfect versions of the pay for performance. Generally, the payments of Polish physicians still reflect to a greater extent the situation on the labour market and, still worse, the bargaining power resulting from a real strike threat rather than the results of work and of an objective performance/competences valuation.

The mechanisms of contractual remunerations depend on the character of the medical unit (hospital / clinic). Irrespectively of the form of ownership, the most frequently applied types of contractual remunerations in clinics are capitation and service fees, and in hospitals -service fees and salaries, the observation which has been corroborated by earlier research [7].

The most important determinants of remunerations of the physicians employed in hospitals are the kind and the degree of specialisation. More frequent use of service fees in health centres results in an increased impact of the range of rendered services on remunerations.

As far as the hospital staff are concerned, the respondents have mainly listed the following advantages of the contractual form of remuneration: obtaining a tool of increase of employment flexibility, the chance of better labour time management including the possibility of its lengthening, and greater staff availability. The physicians employed in clinics have found this form of remuneration advantageous to a much lesser extent.

As far as the risks of contracts are concerned, the respondents have mentioned the increase of contractual employees' payments and weakening of ties between the physicians and their place of work, which happens to a greater extent in hospitals than in clinics [10,11].

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