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ASPECTS FOR REGALATION DEMAND IN PRIMARY HEALTH CARE

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ABSTRACT
The reform in primary health care focused attention of the healthcare system on implementation of qualitative, adequate and fairly distributed medical services. Particular attention is paid to the needs of the patient from a medical standpoint. Depth analysis of contemporary socio-market criteria showed that these needs are only one factor determining the demand for medical care. The medical needs always exceed available resources in healthcare. This requires the application of different ways to regulate the demand for health services. In primary health care the implementation of regulatory standards and user charges are used. The article presents the results of analysis of three practices for primary health care in terms of their regulatory standards (the first three months 2010.) and public opinion in terms of user fee. It is concluded that the both applied methods reducing the superfluous and the necessary services, which did not increase the efficiency of the system.

Key words: primary health care, demand, regulatory standards, efficiency

The reform in the primary medical care set the focus in the healthcare system on performing quality, adequate, productive and fairly distributed medical services. First one pays attention to the needs of the patient from medical point of view. The profound analysis of the modern social and market criteria shows that the needs are only one of the factors, specifying the demand of medical assistance (1). The needs of medical assistance are always greater than the available resources both at the level of outpatient /primary and specialized/ medical assistance and at the level of hospital medical assistance. This implies the need of implementing different ways for medical services demand regulation. With the primary medical assistance in our country one uses the application of regulative standards as a financial controlling tool and the users' fees as a method for sharing the costs (2).

The methods for sharing the costs in the system for primary outpatient medical assistance vary in the member countries of EU, as the basic forms are proportional and fixed additional payment. In two countries, Denmark and Greece, one applies balanced additional payment. Meanwhile there are countries where the system of primary outpatient medical assistance doesn't include sharing of the costs (Germany, Italy) (5).

The purpose of the present article is to examine and analyze some aspects in the medical assistance demand regulation with the primary health care.

In order to achieve this purpose, we have set our tasks as follows:

1. Examination and analysis of the normative documents relating to the regulations at a level of the general practitioner.
2. Coefficient between the awarded /by NHIF/ and the necessary regulative standards of one GP for assuring the appropriate level of quality of the medical assistance provided.
3. Research and analysis of the work in three practices for primary health care (PHC) with regard to the regulative standards for the first quarter of 2010.

The materials we are using are normative documents / National Framework Contract (NFK) (3) from 2010, Appendix Nr. 13 and Nr. 14/ (6), the data base of the three practices for PHC in the city of Sofia and respectively

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their regulative standards for the first quarter of 2010.

Activities regulation /Art. 175 of NFK 2010/ according to prices and volumes in the outpatient assistance is performed in compliance with Art. 3, par. 2 of the LHNHIF from 2010 according to the order, specified by the Management Board of NHIF. Every quarter one assigns to the individual contracts with performers of PHC and SOMA: number of specialized medical activities set /the so called direction Nr. 3 for consultation with a specialist/ and value of the medical and diagnostic activities set /MDA/ in compliance with Art.3 of the LHNHIF from 2010. The number of the specialized medical activities set and the value of the medical diagnostic activities set on par. 2 are specified in reports, which represent an integral part of the individual contracts with the performers of PHC and SOMA.

One of the factors who has a strong influence on the medical assistance demand is the age. Children /age group of 0-18 years/ and the people over 65 years need and use medical services most, as the medical services are from the primary, specialized and hospital assistance. According to the European forecast (2008) in the beginning of the year 2050 approx. 25% of the Europe's population shall be over 65 years of age. There shall be averagely 1.6 chronic diseases per person. More than 1/3 of the men over 60 years of age shall have more than 2 chronic non-infectious diseases.

In **Table 1** we introduce the number and distribution /on age groups, dispensary observation/ of the compulsory health insured persons /CHIP/ in the three examined ambulatory practices for primary health care /APPHC /, which we are marking respectively with APPHC 1, APPHC 2 and APPHC 3.

Table 1. *Number and distribution of CHIP in APPHC 1, APPHC 2 and APPHC 3.*

PRACTICE	Total CHIP	Number of children up to age 18	Number of dispensary observation	Number CHIP over 18 years subject to review preventive
APPHC 1	1903	116	177	**1610**
APPHC 2	1505	39	184	**1282**
APPHC 3	1088	22	175	**891**

The regulation standards for Medical diagnostic activity (MDA) granted by NHIF for the first quarter of 2010 respectively for the three practices could be seen in **table 2.**

Table 2. *The regulation standards for MDA granted by NHIF for the first quarter of 2010*

PRACTICE	Total value of MDA
APPHC 1	2143
APPHC 2	1910
APPHC 3	1241

In Appendix Nr. 13 "Package of activities and researches of CHIP on International Classification of Diseases (ICD), sent to a dispensary by the GP and paid by NHIF" from the NRD from 2010 there are presented the obligatory consultations with specialists and the obligatory laboratory researches, to which the patients are subject when sent to dispensary by the GP. In the observed three practices the patients from dispensaries have diagnoses on MKB 10 – I10, I11, E11.9 and I20. The number of patients sent to dispensary and their distribution according to the diagnoses they have is presented in **Table 3.**

Table 3. *The number of patients sent to dispensary and their distribution according to the diagnoses for three practices*

Code ICD	The number of patients sent to dispensary		
	APPHC 1	APPHC 2	APPHC 3
I10	58	47	49
I11	72	89	69
I20	9	8	11
E11.9	38	40	46
TOTAL	177	184	175

Provided that in the first quarter of 2010 in all practices we assume that 1/4 of the sent to dispensary patients would be examined in all three examined practices, the amounts which should be spent up to the limit are represented in **Table 4, 5 and 6** respectively for practice 1, 2 and 3.

Table 4. *Necessary blood tests and their cost / BGN / per Practice 1*

Code ICD	Necessary blood tests	Price of blood tests/BGN/	Number of dispensaries patients	Total cost /BGN/
I10	Total cholesterol, triglycerides, HDL-cholesterol	4,29	15	64,35
I11	Total cholesterol, triglycerides, HDL-cholesterol	4,29	18	77,22
I20	Total cholesterol, triglycerides, HDL-cholesterol, INR	5,52	2	11,04
E11.9	Microalbuminuria Glycosylated hemoglobin	17,24	10	172,40
TOTAL			44	325,01

Table 5. *Necessary blood tests and their cost / BGN / per Practice 2*

Code ICD	Necessary blood tests	Price of blood tests/BGN/	Number of dispensaries patients	Total cost /BGN/
I10	Total cholesterol, triglycerides, HDL-cholesterol	4,29	12	50,41
I11	Total cholesterol, triglycerides, HDL-cholesterol	4,29	22	95,45
I20	Total cholesterol, triglycerides, HDL-cholesterol, INR	5,52	2	11,04
E11.9	Microalbuminuria Glycosylated hemoglobin	17,24	10	172,40
TOTAL			46	329.30

Except for dispensary observation of litytes for MDA on normative documents the general practitioners have to perform also obligatory prophylactic check, including obligatory examination of cholesterol and triglycerides. For one patient the amount which GP shall spent from his/her regulative standards, in order to perform these examinations is BGN 2.86.

Table 6. *Necessary blood tests and their cost / BGN / per Practice 3*

Code ICD	Necessary blood tests	Price of blood tests/BGN/	Number of dispensaries patients	Total cost /BGN/
I10	Total cholesterol, triglycerides, HDL-cholesterol	4,29	12	52,55
I11	Total cholesterol, triglycerides, HDL-cholesterol	4,29	17	74
I20	Total cholesterol, triglycerides, HDL-cholesterol, INR	5,52	3	16,56
E11.9	Microalbuminuria Glycosylated hemoglobin	17,24	12	198,26
TOTAL			46	341,37

Upon presence of risk factors /specified in the normative documents/ it is necessary that one mandatorily examines the blood sugar before meal of all CHIP subject to prophylactic examination. Let's assume that the half of the persons subject to this check need this examination, too, from the granted to the general practitioners regulative standards for MDA one should have to spent more funds. For one patient the amount which GP shall spent from his/her regulative standards for testing the blood sugar before meal is BGN 1.43. When determining the level of risk for cardiovascular diseases the GP assigns to CHIP an examination of HDL-cholesterol, too. There are different methods for determining that risk, one of which is to compare the gender with the waist size. If we suppose that one third of the persons, who are subject to prophylactic check, need this examination, too, this means that from the limits of the GP one shall have to spend more funds, as per one patient the amount, which the GP shall spend from his/her regulative standards for an examination of HDL-cholesterol is BGN 1.43.

In **Table 7** we present what would it be when for all CHIP planned for the first quarter there would be performed a prophylactic check with the specified examinations.

Table 7. *Expenditures for cholesterol and triglycerides screening for the first three months of 2010.*

PRACTICE	Total amount for three months spend for:			
	Total cholesterol and triglycerides	Blood sugar	HDL-cholesterol	Total
APPHC 1	1123.98	561.99	185.90	1871.87
APPHC 2	895.18	447.59	150.15	1492.92
APPHC 3	683.54	341.77	114.40	1139.71

Table 8. *Total cost*

PRACTICE	Total value of MDA	Total amount spent on research dispensaries	Total amount spent on preventive tests	Total funds spent:
APPHC 1	2143	325,01	1871.87	2196,88
APPHC 2	1910	329,30	1492.92	1822,22
APPHC 3	1241	341,37	1139.71	1481,08

Table 9. *Comparison between the limits granted by the NHIF and the necessary funds /BGN/ dispensaries in research and screening*

PRACTICE	Amount in BGN DMA	
	granted	necessary
APPHC 1	2143	2196,88
APPHC 2	1910	1822,22
APPHC 3	1241	1481,08

With a comparative presentation of the granted vs. necessary funds in BGN for MDA from Table. 9 we could draw the conclusion that the granted funds are not enough even for the planned activity, not even to talk about urgent cases /for example appendixes, cystitis, pneumonia, bronchitis, kidney crisis etc./, for which there is need from examination of blood, urine, x-ray and ECG's for diagnostic specification.

The users fee for examination by a general practitioner is BGN 2.40, i.e. 1% of the minimum working salary. This fee must not be paid, however, by the disabled people, pregnant women, children under 18 years of age, social weak people, people with diseases such as cancer, Parkinson, heavy forms of cardiovascular, asthma, diabetes etc.

The users fee has two basic functions: a limiting one and an additional financing one. As a limiting measure it prevents the unlimited and uncontrolled visits to medical institutions. From the Association of the General Practitioners (GP) they think that the complete removal of the users fee shall have a reverse effect – increased visitations of a specific group of citizens which would hamper the access to medical services of people who really need them (7). The users fee is also an important part of the budget of the medical institutions. The removal of the fee shall worsen the financial stability of the outpatient medical assistance, and for many of them, especially in the rural regions, this shall result in closing the medical institutions because of bankruptcy. With the decrease of the users fee one wouldn't be able to solve the problems in the healthcare system, to the contrary – the problems would become deeper, that is the position of Bulgarian Doctors Association (7).

Since 1st July 2008 all women over 60 years and all men over 63 years shall pay a users fee to the amount of BGN 1.00. Results of a survey performed by Ts. Petrova (4) show that 62.3% of the covered pensioners share the opinion that the users fee from BGN 1.00 would provide them with a better access to the general practitioners and 23.3% of them consider that this wouldn't have an effect on the accessibility of the GP. 68.5% of the surveyed people, who are employed and 8.2% of the unemployed share the same opinion. In the same opinion one has searched for the opinion of the surveyed people with regard to the unreasonable over-usage of medical services depending on the education of the surveyed people – 40% of the surveyed people with university degree share the opinion that the users fee for the women over 60 years and the men over 63 years would increase the unreasonable over-usage of medical services. The same answer has been given by 23.2% of the people with educational and qualification degree "expert" (professional bachelor), as well as 36.8% of the people with high school education. Besides 63% consider this as a prerequisite for the generation of lists for people waiting for an examination and this would hardly result in an increase of the healthcare services quality.

The concerns of the general practitioners are that the removal of the users fee shall result in removal of the barrier, which is currently also too low, for the people, who have the habit of visiting their general practitioners with or without occasion. They think that the users fee shall be paid and shall remain valid for all, and for the people who are free of such fee the payment should be done by the ones who have given them this privilege (7).

The position of the GP's is that the users fee is a working tool and it could be made better, but not removed. General practitioners offer various possible solutions. One of them is that for examinations according to obligatory programs the fee should be included in the value of the examination.

We could summarize here that every country should guarantee to the best possible extent the access of its people to healthcare services. From the one part the users fee is a regulatory tool against the unreasonable over-usage of medical services and engages the patient with participation and responsibility in the treatment process or in another process, too. From the other part, however, it should under no circumstances become a financial burden, limiting the possibilities of the people for making use of the medical services.

Most analyzers in the field of healthcare consider that the implementation of systems for cost sharing should be a weak tool in order to achieve the goals for efficiency and fairness in the distribution of the resources in the healthcare system. Serious researches show that there is a trend for the cost sharing to result in a decreased demand not only for redundant services, but for necessary services, too, which doesn't lead to a sufficient increase of the system's efficiency.

Researches on the fairness of the cost sharing bring some concerns to light, too. Cost sharing in general is affecting to a greater extent the low-cost and vulnerable groups of the people. From the other part the introduction of systems for full or partial compensation of these groups of users distorts the incentives and turns out to be very expensive and extremely hard for administering.

The redundant consumption is rather a supply problem than a demand's one. The broader use of micro methods for management of the clinic activity, for example the implementation of administrative means such as specific guidelines and reports could be relatively successful in regulating the oversupply.

Despite all these disadvantages, the sharing of the costs is widely used as a political tool. The main reason is that it is considered as an important component of the market approach in the healthcare system, which stimulates the efficiency in the sector as a symbol of the individual responsibility. The additional payments in the healthcare system are a strong means for maintaining the level of costs for healthcare during periods of a low and negative economic growth, when the tax incomes are significantly lower. A strong argument for introducing a system for sharing the costs in the healthcare system is that this increases the transparency and that a part of the non-regulated payments is replaced by regulated payments, which helps decreasing the corruption within the sector.

One could draw the conclusion that by means of both applied methods one decreases the demand not only of redundant, but also of necessary services, which doesn't increase the efficiency of the system.

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