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## DIRECTIONS FOR IMPROVING THE QUALITY OF SECONDARY AMBULATORY MEDICAL AID TO THE UKRAINIAN POPULATION

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### Abstract

**Purpose:** to conduct a systemic comparative analysis of the activities of municipal and private outpatient clinics (OC) providing secondary medical care, identify problem areas and ways to increase the population's satisfaction with the quality of medical care.

**Methods:** Methods of the system approach and analysis, sociological, medical and statistical method, method of expert estimations had been applied in this research. The sociological research was conducted in 2017 according to a specially developed program and involved 437 patients, 411 doctors in community OC and 396 patients, 106 doctors in private OC in Kiev. Expert assessment of the state of the organization of outpatient care was carried out by 21 highly qualified experts.

**Results:** On the results of comparative analysis of the activities of public and private OC had been determined that the population is not satisfied with the existing organization of work of public OC. The development of outpatient care depends on the level of funding, management quality, effective planning, organization of production, and the introduction of public-private partnership (PPP) mechanisms .

**Conclusions** In the current economic conditions priority in optimizing the activity of the municipal OC to improve the population's satisfaction with the quality of medical care is the transition of the OC to the principles of PPP.

**Key words: public-private partnership, public satisfaction with the quality of medical care, out-patient care.**

**Introduction** The World Health Organization (WHO) defines health care quality as its property, and involves the receipt of each patient this complex diagnostic and medical help, which led to optimal for the health of the patient results, in accordance with the level of medical science, and the maximum satisfaction of the patient process of medical care [1].

In Ukraine, the irrational organization of primary and secondary ambulatory care, its lack of funding led to the loss of comprehensiveness and continuity in the provision of health care, formal implementation of preventive and dispensary work [2].

Analysis of sociological survey of adult patients outpatient SFA Kiev, testified that the current system of providing ambulatory care does not meet the modern needs of the population [3].

European Economic Commission of the UNITED NATIONS issued a practical guide on effective management in the field of public-private partnership (PPP), which certifies that: "the PPP is implemented with the purpose of financing, planning, creating and operation of the facilities, industries and provide services to the public sector [4].

PPP promotes innovation infrastructure development projects in the interest of society by combining the resources and experience of the private and State partners. PPP – a new and effective way to attract investment, because this type of partnership not only can promote the growth of the economy, but also promote socially important infrastructure [5].

In modern economic conditions of the country, there is a need to create a new model of consultative medical institution that provides secondary outpatient medical care on the basis of economically effective production and on the basis of public-private partnerships.

**The aim of the research** -to carry out systematic comparative monitoring of public and private consultative-diagnostic centers (KDC) that provide secondary outpatient medical care, identify problem areas and suggest ways to improve the quality of medical aid to the population of Ukraine.

**Materials and methods.** To achieve this goal in examined used the sociological, medical statistical method, the method of expert evaluation and method of systematic approach and analysis. A comprehensive health-organizational study conducted by specially designed program in Kyiv in 2017, 2006 poll covered the following groups of respondents: 437 patients municipal KDC; 396 patients private KDC; 411 physicians municipal KDC; 106 doctors private KDC in Kyiv. the sample of respondents were qualitatively and quantitatively

representative. Questionnaires were filled by respondents anonymously. Statistical processing survey involved the use of methods of statistical grouping, table summaries, analysis of the absolute and relative series distribution, assessment of the statistical significance of differences results poll respondents in the public and private of KDC (criterion Pearson  $\chi^2$ ).

Expert estimation of the State of the Organization of the consultative-diagnostic assistance to public and private consultative-diagnostic centers and necessary conditions for improvement of activity of public KDC in Kyiv carried out 21 highly qualified expert, as to which were the leaders of public and private health care establishments (including 5 candidates of medical sciences). All experts had the highest qualification category in the field of "organization and management of health care". Statistical processing of expert evaluation materials is carried out using methods of variation analysis (with the definition of average arithmetic mean values, mean square deviations and average errors of averages). The statistical significance of the differences in the results of the expert assessment of the state of the organization of the activities of communal and private KDC is determined by the Student's criterion (t).

The study also analyzed materials of the official financial and statistical reporting of KDC in Kyiv by 2014-2017.

### **Results of the study**

A comprehensive comparative analysis of the activity of public and private KDC carried out using tools that allow you to determine the impact of each individual group medical indicators level of satisfaction of the population received medical help and activities of KDC.

The program is the target of the analysis provided for obtaining a comprehensive assessment of the basic aspects of OUR CENTER by the results of sociological research, peer review, as well as financial and statistical reports of KDC.

The main objects of analysis we have discussed:

- the process of providing health care,
- training and professional development of medical staff,
- financial and economic activities.

Case study was conducted taking into consideration the provisions of Trebina M.P. (2010, 2011), according to which: "for Sociology all problems are urgent and require immediate response, as related to the topical interest of the modern society "[6].

In the course of sociological research, the following indicators were selected for the tools that allowed to determine the impact of the process of providing medical care on

patients' satisfaction (table 1): comfortable receiving medical services (points 1, 2, 3) friendliness, courtesy and competence of the staff of KDC (item 4); satisfaction from visiting the KDC (items 5, 6, 7).

Table 1

**Comparative analysis of the results of the sociological survey of patients of public utility and private of KDC**

№	Question	Option answers	The results of the survey of patients utility KDC		The results of the survey of patients private KDC	
			ABS. n=437	P $\pm$ m %	ABS. n=396	P $\pm$ m %
1	Are you satisfied with the schedule of doctors?	1. Yes	215	49.2 $\pm$ 2.4	375	94, 7 $\pm$ 1, 1
		2. no	222	50.8 $\pm$ 2.4	21	5, 3 $\pm$ 1, 1
2	Are you satisfied with the Organization of the work of the registry?	1. Yes	238	54.5 $\pm$ 2.4	388	98,0 $\pm$ 0, 7
		2. no	199	45.5 $\pm$ 2.4	8	2,0 $\pm$ 0, 7
3	How much time have you spent in anticipation of receiving the doctor?	1 to 15 minutes	151	34.6 $\pm$ 2.3	4 0	10,1 $\pm$ 1, 1
		2. from 15 to 30 minutes	184	42.1 $\pm$ 2.4	—	—
		3. from 30 to 60 minutes	73	16.7 $\pm$ 1.8	—	—
		4 do not expect	29	6.6 $\pm$ 1.2	35 6	89,9 $\pm$ 1, 1
4	You are satisfied with the ratio of staff to you?	1. Yes	337	77.1 $\pm$ 2.0	390	98, 5 $\pm$ 0, 6
		2. not quite	88	20.1 $\pm$ 1.9	6	1, 5 $\pm$ 0, 6
		3. no	12	2.8 $\pm$ 0.8	—	—
5	Are you satisfied with the quality of medical care provided?	1. Yes	205	46.9 $\pm$ 2.4	371	93, 7 $\pm$ 1, 2
		2. not quite	123	28.1 $\pm$ 2.2	25	6, 3 $\pm$ 1, 2
		3. no	109	24.9 $\pm$ 2.1	—	—
6	If there is a ACU physicians of all specialties, advice that you need?	1. Yes	392	89.7 $\pm$ 1.5	242	61,1 $\pm$ 2, 4
		2. no	45	10.3 $\pm$ 1.5	154	38,9 $\pm$ 2, 4
7	Is it possible to be inspected in the volume determined by the doctor?	1. Yes	281	64,3 $\pm$ 2.3	388	98,0 $\pm$ 0, 7
		2. no	156	35.7 $\pm$ 2.3	8	2,0 $\pm$ 0, 7

Analysis of the results of the conducted researches showed that the working hours of doctors meets  $49.2 \pm 2.4\%$  of patients, public and  $94.7 \pm 1.1\%$  private KDC ( $p < 0,05$ ).

Satisfied with the Organization of the work of the registry  $54.5 \pm 2.4\%$  of patients, public and  $98.0 \pm 0.7\%$  private institutions ( $p < 0.05$ ), and the ratio of staff to patients the worst  $\pm 2.0\%$  and  $98.5 \pm 0.6\%$ , respectively ( $p < 0.05$ ).

The study found that the time patients waiting for admission into public and private KDC significantly differ ( $p < 0.05$ ) in private institutions,  $89.9 \pm 1.1\%$  of patients did not expect in line and to the Cabinet of a doctor trapped in time reception. In the municipal KDC  $42.1 \pm 2.4\%$  of patients awaiting a physician from 15 min to 30 min, and  $16.7 \pm 1.8\% - 30 - 60$  minutes.

Satisfied with the quality of medical care provided by  $46.9 \pm 2.4\%$  of patients in public KDC in private- $93.7 \pm 1.2\%$  ( $p < 0.05$ ) is not quite satisfied with the utility KDC - $28.1 \pm 2.2\%$  and not satisfied- $24.9 \pm 2.1\%$ . in the private diagnostic centers is not quite satisfied with the provided medical help  $6.3 \pm 1.2\%$ , not satisfied is not detected.

In the communal KDC the vast majority of patients ( $89.7 \pm 1.5\%$ ) was able to get doctors all specialties. Private diagnostic centers share of such patients was significantly lower ( $61.1 \pm 2.4\%$ ,  $< p 0.05$ ).

At the same time to pass the examinations prescribed by the doctor in the volume of municipal institutions were able to  $64.3 \pm 2.3\%$ , in private –  $98.0 \pm 0.7\%$ , respectively ( $p < 0.05$ ).

Analysis of financial security and material and technical condition CDC testified that during the 2014-2017 years funding the General Fund budget, utility CDC was 52.1-71.4% of needs. The costs of salaries accounted for 70.5%, and on medication 3% of the total budget, and the medical equipment is less than one percent.

The demand for high-value equipment in each municipal KDC was about 9 to 13 million UAH.

The tools that determine the quality of OUR management, assigned: problem management, presence of personnel in the economic motivation of labor, reliable funding of KDC, modern diagnostic equipment and materials, methods of diagnosis and treatment, the availability of economic and legal independence of KDC. The results of the a survey of 411 physicians municipal (first group) and 106 private (second group) KDC obtained the following data.

Characterizing the organizational problems KDC that prevent the normal activities of the institution, the doctors of the public KDC see them in the first place, the problems management. Yes,  $95.4 \pm 1.0\%$  of doctors believe that management utility KDC carried out formally, whereas  $92.5 \pm 2.6\%$  of doctors from private medical institutions see in him the

desire to help and train staff, and  $7.5\% \pm 2.6\%$  characterize it as the highest degree of confidence in the staff ( $p < 0.05$ ).

The next problem is the lack of personnel with public KDC the economic motivation of work (according to 76, 9 $\pm$  2.1% of physicians) while in private establishments 98.1 $\pm$  1.3% of doctors does not indicate this problem ( $p < 0.05$ ) in the low level of wages of health workers see the problem – 82,0  $\pm$  1.9% of doctors of the first group, while the second group of respondents in 98,1  $\pm$  1.3% do not have this problem ( $p < 0.05$ ).

Pretty serious problems, according to doctors, utilities KDC, prevent the provision of the population with quality medical assistance, are: lack of establishment of reliable funding (83,0  $\pm$  1.9%), modern diagnostic equipment and materials (80.5  $\pm$  2.0%), modern methods of diagnostics and treatment (81,5  $\pm$  1.9%) insufficient economic and legal independence of KDC (77.6  $\pm$  2.1%). In the opinion of the vast majority (90.6-99.1%) the surveyed doctors in private medical institutions listed problems ( $p < 0.05$ ).

86.4  $\pm$  1.7% of doctors in the municipal KDC consider promising direction of development data of institutions of formation of new organizational models the principles of PPP.

The tools that determine the quality of personnel management, assigned: the employment of staff, the level of qualification of the personnel, the presence of conditions for continuous training, the working atmosphere and the degree of satisfaction of medical staff for their work.

Analysis of the municipal workforce of KDC that provide secondary outpatient medical care, testified that the staffing of the posts of doctors is 74.9-85.7% (private of KDC- 98.8%, respectively).

Analysis of expert research materials allowed to obtain an additional characteristic of the state of the organization of medical care in communal and private consultative-diagnostic centers for parameters not reflected in official statistics, as well as to reveal a number of problems in their work.

Generic assessments of structural and organizational components of utility KDC were the following: concept development KDC received an average of  $3.4 \pm 0.2$  bal, economic and legal independence of the institution- $3.2 \pm 0.2$  bal, strategic long-term development plan of  $3.5 \pm 0.2$  bal. Noted the lack of business activity plan of the institution- $2.1 \pm 0.3$  bal, market strategy governance- $1.1 \pm 0.1$  bal.

Poor ratings received funding institutions ( $2.9 \pm 0.1$  bal) and normative-legislative framework for the development of KDC ( $2.2 \pm 0.1$  bal). Group opinion of experts reiterated the fact that regulatory and legal framework for the development of KDC there is insufficient.

Equipment of the organizational-technical resources and modern diagnostic equipment is priced accordingly to  $3.2 \pm 0.2$  and  $3.1 \pm 0.2$  bal.

More highly experts assessed the staffing medical personnel, their qualifications and status of excellence ( $4.1 \pm 0.2$ ;  $4.3 \pm 0.2$ ;  $4.2 \pm 0.2$  bal, respectively).

Assessing the structural and organizational components of the activities of private KDC experts noted the presence of economic and legal independence ( $5.0 \pm 0.0$  bal), normative and legislative base for development ( $4.2 \pm 0.2$  bal), strategic (long-term) plan ( $4.3 \pm 0.2$  bal), the concept of establishment ( $4.2 \pm 0.2$  bal), business plan ( $4.8 \pm 0.1$  bal), as well as adequate financing ( $4.7 \pm 0.2$  bal) and employment ( $5.0 \pm 0.0$  bal) and qualifications ( $4.9 \pm 0.1$  bal) medical personnel.

High scores of experts received the equipment of private institutions of modern diagnostic equipment ( $4.9 \pm 0.1$  bal) and organizational-technical resources ( $4.5 \pm 0.2$  bal). Thus, all listed parameters experts more highly appreciated structural and organizational aspects of the work of the private of KDC, compared with utilities ( $< 0.01$ ). Exception made the availability and performance of the plan of training medical personnel, who received the same scores in the communal and private KDC ( $4.2 \pm 0.2$  and  $4.4 \pm 0.2$ , respectively,  $p > 0.05$ ).

The results of the peer review also concluded that the transition of the municipal KDC on mechanisms of PPP ( $4.8 \pm 0.1$  bal) is a way of improving the Organization of work of the municipal KDC. Implementation of PPP provide STONE-economic stability, increase material promptly, the introduction of economic and clinical standards in practice, which in turn, will improve the quality and increase customer satisfaction the population of medical help.

Thus, the comparative analysis of the major aspects of public and private KDC allows you to assert that a functioning private KDC is much more effective and provides the highest degree of satisfaction of patients provided medical services. Accordingly, the conclusion that without the effective activity of the municipal KDC impossible is to achieve the satisfaction of the population provided quality medical care. Transfer utility KRF on PPP guidelines will facilitate the obtaining of the necessary investment, the economic sustainability of the KRF, the introduction of modern technologies and, consequently, improve the quality of care.

## **Conclusions**

In conducted a special program medical-organizational study is a comprehensive description of the activities of OUR CENTER in Kiev for not captured in official statistics parameters identified problem areas of functioning of KDC and ways to increase satisfaction of population quality of care.

Found that the quality of the received medical aid granted only  $46.9 \pm 2.4\%$  of patients in public IT (in private- $93.7 \pm 1.1\%$  ( $p < 0.05$ )).

Reasons for dissatisfaction with the quality of the population received medical care, according to the doctors of utility STONE- are: lack of reliable institutions financing ( $83,0 \pm 1.9\%$ ), modern diagnostic equipment and materials ( $80.5 \pm 2.0\%$ ), modern methods of diagnostics and treatment ( $81,5 \pm 1.9\%$ ), the low level of wages of health workers ( $82,0 \pm 1.9\%$ ) and the lack of economic incentives to provide quality medical care ( $76, 9 \pm 2.1\%$ ) and insufficient economic and legal independence of KDC ( $77.6 \pm 2.1\%$ ). A promising direction of development of municipal KDC, in the opinion of the overwhelming majority of the surveyed doctors ( $86.4 \pm 1.7\%$ ), is the formation of their new organizational models the principles of PPP.

The results of the peer review also concluded that the transition of communal STONE- on the mechanisms of PPP is a way of improving the Organization of communal KRF. The introduction of the PPP will ensure OUR economic stability, increase material promptly, the introduction of economic and clinical standards in practice, which in turn, will improve the quality and increase customer satisfaction the population of medical help.

**Prospects of the further researches** are ground and develop optimized models of CDC on PPP.

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