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The Validity of Application of a SWOT-Analysis in Assessment of Results of Implementation of the Territorial program of State Guarantees for the Far East Region in 2011-2013

ABSTRACT

To define the possibility of application o f SWOT analysis in the social and economic sphere a multi-stage model of SWOT outcome analysis of realization of the Territorial program of state guarantees for the Far East federal district for 2011-2013 has been implemented. The algorithm of a five-stage SWOT analysis is formed by ranking and assessing their interrelation. The results of the work confirmed that due to the flexibility of SWOT analysis it is possible to apply it in various spheres. The application of the multi-stage analysis allows to reveal major and minor factors as well as to carry out the detailed analysis of interrelations between them and to define the further strategy.

Key words: the territorial program of state guarantees, SWOT-analysis, compulsory health insurance, quality and accessibility of medical care.

SWOT-analysis is defined as a method of strategic planning to identify factors of internal and external environment of the organization and their division into four categories: Strengths, Weaknesses, Opportunities and Threats. Initially, the technology of using the SWOT-analysis was proposed in 1965 by Harvard University professors Leraned, Christensen, Andrews, and Guth for the development of business strategies. This method is quite versatile, in connection with what is considered to be useful not only in economics and management, but also in the areas where goals have complex social or socio-economic features (6,8).

Classical methodology of the SWOT-analysis is adequately described in literature (2,3) and includes three main stages: 1) identification of factors which characterize the internal and external structure of the subject; 2) assessment and ranking of the factors determined; 3) formulation of strategies for the development of the subject based on the intersections of SWOT factors pairs.

Applying this method allows to explore the elements and define their interaction depending on their goals, it can also be used for rapid assessment and strategic planning for the long term. Using the method, as a rule, does not require special knowledge or education (8).

However, the SWOT-analysis results are usually presented as a qualitative description, while assessing of the situation often requires quantitative parameters. SWOT-analysis is quite subjective and highly dependent on the observer's position and knowledge. As a result, the qualitative SWOT-analysis needs a large amount of different information which requires significant efforts.

According to literature the experts' attitude towards SWOT is rather ambiguous. A number of authors argues that findings formulated on its basis are descriptive in nature without recommendations and prioritizing. They use epithets like "it's just a surface description", "a brief statement of well-known circumstances, a static image, an initial catalog of questions for further consideration", which could give " initial rough checklist only" (1,6,10).

However, the validity of this analysis allows us to rank these or other factors on the likelihood of their realization and impact on the situation, as well as analyze the impact and interaction of factors in conducting a thorough multi-stage algorithm for creation of the SWOT-analysis (7).

Thus, the main aim of the work was to observe the SWOT-analysis applied for assessment of the results of the Program of state guarantees for free medical care to citizens of the Russian Federation in 2013.

MATERIALS AND METHODS

The analysis was applied to the results of the Program in 2013 in comparison with 2011 and 2012 and the results of the realization of the Territorial program of government guarantees for medical care (TPGG) during the reporting period in the Far East Region on a basis of the official data of the Russian Ministry of Health.

The SWOT-analysis algorithm:

1. To evaluate the data presented in accordance with their positive and negative dynamics, therefore to choose main parameters influencing the change in the situation, both for the better and for the worse. The prior indicators which determine the achievement of the main aim of the Program: TPSG deficit reduction, an increase in effectiveness and satisfaction with the quality of medical care (4). The results are documented in the matrix (Table 2).

2. To share the internal and external factors which influence the effectiveness of the TPSG realization.

3. To assess opportunities and threats according to their probability of occurrence and the degree of influence on the situation in question.

4. To perform the analysis of interaction of opportunities/threats and strengths/weaknesses in the realization of the Program. The results are documented in the matrix (Table 3).

5. To rank the factors identified according to their importance and produce the final results of the analysis (7).

Results

One of the priorities in realizing the Program in 2013 is the redistribution of medical care towards hospital substitution and outpatient technologies. It is clearly seen in the structure of medical care costs under the Program (Table 1).

Table 1

The structure of medical care costs within the Program from 2011 to 2013.*

Terms of care	**2011**	**2012**	**2013**
Costs from all sources of financing	1 596,9 bill. Rubles	1 718,4 bill. Rubles	1676,4 bill. Rubles
Ambulance	11,178 bill. Rubles/10ths. people(7,0%)	12,372 bill. Rubles/10ths. people(7,2%)	11,232 bill. Rubles/10ths. people(6,7%)
Outpatient care	52,059 bill. Rubles/10ths. people(32,6%)	57,051bill. Rubles/10ths. people(33,2%)	58,003bill. Rubles/10ths. people(34,6%)
Outpatient emergency care	-	-	1,341bill. Rubles/10ths. people(0,8%)
Specialized hospital care	91,822bill. Rubles/10ths. people(57,5%)	97,09bill. Rubles/10ths. people(56,5%)	91,531bill. Rubles/10ths. people(54,6%)
Inpatient care	4,631bill. Rubles/10ths. people(2,9%)	5,327bill. Rubles/10ths. people(3,1%)	5,532bill. Rubles/10ths. people(3,3%)

*excluding the cost of other services.

On the initial stage the strengths and weaknesses of the Program in 2013 were considered, as well as the main opportunities and threats that may affect the achievement of the established standards (Table 2).

Table 2

Realization of the Territorial program of government guarantees (2013). SWOT - analysis.

	Strength	**Weaknesses**
Internal factors	• Increased share of medical care costs on outpatient andinpatient facilities • Growth of per capita funding of the Program • Increased spending of financing for the realization of the Program by 15.0% from all sources compared to the previous year • Reduction of thecost of hospital care • Creation and realization of TPGG by the subjects of the Russian Federation in accordance with the Program • Increase of hospital substitution technologies • Increase of inpatientand outpatient medical care • Reduction ofhospital medical care • Increaseof HTMC • Reduction ofProgram deficit • Implementation of standard of palliative medical care • Reduction of ambulance and increase of outpatient emergency medical care • Implementationof standards of prophylactic medical care	• Imbalance of the TPGG (depending on the performance in regions) • The standards to provide medical care within inpatientcareby the Program are not reached • Exceeding the average standard of medical carein hospitals within the Program • Uneven distribution of hospital care (the standard for region budget has not reached and the one for CHI has exceeded) • Insufficient development of palliative medical care • Insufficient development of preventive medical care • Absence of emergency medical care in 26 subjects of the Russian Federation • Insufficient development of medical rehabilitation • Non-compliance with medical care payment methods recommended by the Program (in a number of subjects)

External factors	**Possibilities** • Increasing of palliative, preventive and emergency medical care in accordance with the target standards of the Programs • More efficient use of available resources in order to improve the quality of medical care (target setting of the health care reform) • Focus of the state programs on technical equipment of the outpatient department in order to improve the diagnostics and possibly reducethe level of hospitalization • Review of financing: increase in the share of Program funding provided by CHI • Reallocation of funding sources between the costs of the federal budget and CHI fund for the purpose of more effective use of resources • Realization of financial obligations to provide medical care in regions by the subjects of the Russian Federation	**Threats** • Lack of the state and regional budgets • Reduction of the total share of free medical care costs • Lack of awareness and skill level of the units providing medical care and defective system of their interaction and feedback • Extension of the period of hospitalization due to the lack of continuity in the outpatient sector, including the worst of medical equipment and shortage of qualified personnel, as well as unnecessary duplication of research in hospitals • Climatic and geographic location and transport accessibility (for remote regions of the Russian Federation) • Instability in the foreign policy situation • Underestimating the necessities for certain types of medical care

*CHI - compulsory health insurance

According to the generalized data in the realization of the Program for 2013 the prevalence of strengths was noted.

However, the basic analysis is hardly applicable to solve important strategic tasks. It is necessary to evaluate the factors interaction.

According to the algorithm, the priority opportunities and threats were identified that had a real impact on the results of the Program (item 3 of the algorithm).

The strengths and weaknesses of the Program formed on the basis of identified "opportunities" and "threats" were noted as a very important step for the development of strategic directions. The analysis of the main interacting groups "Opportunities - strengths/weaknesses", "Threats - strengths/weaknesses" let us structure problems of the Program and formulate ways of their solving with the existing and prospective resources. The data are presented in a matrix (Table 3, Appendix).

These data determined "functional" opportunities and threats depending on the degree of importance of their impact on the overall system. Thus, the final stage formulates the main strategic directions based on their importance. The strategy is formulated on the basis of matrices (point 5 of the algorithm).

Strategic directions of the Program realization:

a) to take into account strategic opportunities requiring the concentration of all the necessary resources for their realization and related threats demanding constant attention and constant monitoring with direct fund allocationfromthe federal budget with partial funding from the **CHI** (including the basic benefits package);

b) to take into account strategic opportunities allowed to rank as the release of required resources and threats requiring monitoring. The monitoringis allowed of the two possible sources accordingly the significance of the level (territorial budget of the Russian Federation subjects with the support of the federal budget) with partial funding from the **CHI** (including in the basic benefits package);

c) to take into account strategic opportunities or threats to the current order. They are mainly controlled by regional authorities, funded from the territorial budget (funding is not excluded from the CHI).

Recommendations

I. In order to improve the quality and accessibility of medical care it is offered:

1). to create a new (functional) approach to the formation of schemes of development and placement of the network of the health facilities with the possibility of revising the existingnomenclature of health facilities from including regional peculiarities;

2). to allocate the total capacity of the network through the levels (stages), characterized in the first place, the degree of complexity of medical technologies. At the same time both efficiency and availability of medical care should be taken into account;

3). to increase the volume and regional availability HTMC through the creation and support of medical care in appropriateinstitutions within a radius of "normative affordability" following the Conception of Health Care of the Russian Federation until 2020, as well as the Message of the Russian President;

4). It is advisable to dividemedical care depending on the needs of the region population: the emergency assistance of the circulatory system diseasesshould be conducted in most institutions engaged in acute coronary syndrome medical care, but the routine surgical care of the circulatory system diseases should be concentrated in a limited number of specialized institutions (depending on the necessities of the region and hospital facilities);

5). it is recommended to identify reserves due to the rational structural differentiation of resources and forward them to provide a higher level of medical care necessities (regional and federal support of highly intensive technologies, grants from local budgets);

6) to determine the level of accessibility and quality of medical care as one of the reference criteria of the effectiveness of realization TPGG, and based on that to carry out a complex assessment and dynamic control performance.

II. In order to reduce the deficit of financial support of TPGG within the budget of the Russian Federation regions:

1) to distribute funding of strategic directions of the Program with priority realization;

2) to introduce effective methods of medical care payment with the performance indicators of medical organizations and to follow the payment methods provided by the Program;

3) to adopt financial support liabilities of medical care not included in the basic benefits package by the subjects of the Russian Federation;

4) to pay particular attention to TPGG planning in remote regions of the Russian Federation in order to mitigate the lack of financial support (to be able to redistribute financing).

III. task of effective global restructuring of medical care in the country / region at all levels of diagnostic and treatment process is defined (ambulatory care, hospital care, emergency care, HTMC)on condition that the high quantity of the doctors and hospital beds availability are ensured, with a low resource potential of the Russian health care system (9).

1) reasonable capacity planning of medical care in accordance with the demands and the economic component, such as further development of the day hospitals and inpatient technologies with a proportional decrease in the hospital medical care without compromising the availability and quality ofcare;

2) Improving the quality of outpatient care by the way of:

- enhancing the credibility of outpatient care facilities
- improving staffing and the skills of personnel structure
- cooperating hospital specialists and outpatient ones
- realizing the possibilities of primary care physicians to improve in the cardiovascular diseasestreatment and maintaining cardiac patients in practice (5,11).

3) Improving the efficiency of inpatient care by the way of:

- focus on maximizing surgical activity by hospitalization of patients for surgical treatment only;
- addressing patients for surgical treatment by the decision of prehospital medical commissions or transferring from the therapeutic department , where the cost per bed-day is much lower;

- foundation of specialized centers / departments with differentiate therapeutic and surgical targets (with capabilities of providing HTMC and without it);

- promotion of preventive medical care as well as emergency and palliative ones.

Conclusions

1. The flexibility of SWOT - analysis can be used in various areas of social and economic sphere.

2. The elementary (one-stage) SWOT-analysis is designed for preliminary assessment of the directions and orientation for a further detailed analysis.

3. It is difficult to take into account all conditions and hidden factors affecting the final result. In this connection with the elementary analysis it is possible to detect only priority areas which are insufficient to formulate the final practical recommendations.

4. It is advisable to use a step-by-step approach to the SWOT-analysis for obtaining more accurate information based on both primary and secondary factors and to avoid factors "congestion" with the loss of mainstream of analysis.

5. The use of multi-stage analysis reveals major and minor factors and provides a detailed analysis of their relationships.

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