

## THE ANALYSIS OF THE RANGE OF MEDICINES IN VERSATILE TREATMENT-AND-PROPHYLACTIC ESTABLISHMENT

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**Abstract.** *In article the basic concepts of the range of medicines in treatment-and-prophylactic establishment are described. Data of the farmako-economic analysis of application of medicines are submitted.*

Carrying out the farmako-economic analysis of application of medicines in versatile treatment-and-prophylactic establishment is the most important element of a control system of quality of delivery of health care – provides its availability, efficiency and safety.

For the last decades the farmakoekonomika began to be used actively in many countries for ensuring financing of medicines from means of national health systems. In Australia in 1990-1992 requirements for granting an economic justification of inclusion of medicines in the restrictive list, that is the list of medicines expenses on which are subject to compensation from the budget of health system were developed and introduced.

The documents regulating use of a farmakoekonomika by drawing up restrictive lists of drugs and pricing on drugs were developed also in Canada, Belgium, the Netherlands, Norway, France, Germany, Spain and other countries [1,2,3].

According to some authors [18], one of key problems of a farmakoekonomika is the problem of sufficiency of financial means for delivery of health care with use of modern medicines. This problem has two components, among which: scoping of the financing necessary for delivery of health care with use of modern medicines; scoping of the medicinal help which can be provided at the available financing.

To deal with this problem, we will consider some moments concerning application of medicines in versatile treatment-and-prophylactic establishment.

The range of medicines - set of their types, versions and grades united or which are combined on a certain sign. Practically all economists treat the range quite so [6,7,8,9].

One of properties of the range is width — quantity of types, versions and names of medicines of uniform and diverse groups. This property is characterized by two absolute measures — the valid and basic width, and also a relative indicator — width coefficient.

The valid width — the actual quantity of types, versions and names of the medicines available.

Basic width — the width assumed as a basis for comparison. As basic width the quantity of types, versions and names of medicines regulated by normative or technical documentation (standards, price-lists, catalogs, etc.), or greatest possible can be accepted. The choice of criteria of definition of a basic indicator of width is defined by the purposes [5,11].

Completeness of the range – characterizes number of assortment positions in each concrete group. Basic completeness is determined or by normative documents, or as the maximum quantity of medicines of group.

Range depth – is characterized by existence of kinds of one type of medicine (or options of separate medicines).

Extent of use of the range – an indicator of use of the range of the medicines which are available in LPU for a certain period of time.

Novelty (updating) of the range – ability to satisfy to the changed requirements at the expense of new preparations.

The structure of the range – is characterized by a specific share of each look and the name of a medicine in the general set. Indicators of structure of the range can have natural or monetary value and have relative character. They are counted as the relation of quantity of the separate medicines entering into the range. The structure of the range calculated in kind can differ significantly from structure of the same range in terms of money.

Stability – is determined by extent of change of indicators of width, completeness, depth and structure for the studied time periods.

Harmony – proximity degree between medicines of various assortment groups taking into account their practical application, requirements to the organizations of production, channels of distribution or other indicators. It provides the qualitative characteristic of the range and isn't measured quantitatively owing to what this property has descriptive character [5,6].

The range is subject to the continuous changes depending on various factors operating on a sales market of medicines. These factors can be subdivided into the general - the works of the treatment-and-prophylactic establishment (TAPE) which aren't depending on specific conditions and specific - the reflecting specific conditions of work of this LPU [4].

Demand and production of goods belong to the general factors influencing formation of the range.

Specific factors are factors which reflect specific conditions of work of a drugstore of LPU. Synthesis of references showed that the most important specific factors treat [12,13,15,16,17]:

- size of a pharmaceutical warehouse;
- conditions of supply with medicines of offices of LPU;
- number and structure of patients;
- quantity and a profile of the served beds;
- material and technical resources of a drugstore;
- number of suppliers;
- characteristic diseases for the area of activity of LPU;
- opportunities and terms of delivery of medicines in LPU drugstore;
- restriction of warehouse of a drugstore of LPU;
- mutual dopolnyaemost of medicines;
- financial stability and authority of LPU;
- extent of updating of the range of medicines;
- skill level of the personnel of LPU, including drugstore;
- territorial arrangement of a drugstore;
- information circulation in system "the patient doctor – a drugstore";
- stability and flexibility of the range.

Basis in improvement of structure of the range is the analysis of consumption of medicines as in general on establishment, and in a section of each its division thanks to which steadily spent medicines come to light. Employees of a drugstore, by means of all the programs of automation existing today can help with it. But, as experts note to estimate the categories "more and less" of the consumed medicines, it is necessary to trace them at least for the last year, and in an ideal - for some last years. It will allow to estimate objectively data and precisely to define seasonality of an expenditure of medicines though it is necessary to consider that the structure of patients on nozologiya during this time could change, appear new commodity brands [19].

According to literary data the main problem, that neither managers of drugstores, nor the management of LPU don't know accurately that is specifically necessary – what medicines and during what season [14] is. Most of experts consider that even if pharmaceutical institutions are automated, the analysis of consumption can not be used, and trace the range in "the manual mode", very not easy. Therefore the category of the fast-spent medicines can disappear from the range for indefinite time as it wasn't managed to be ordered in time. Thereby provoking failures in adequate and timely pharmacotherapy in the conditions of a hospital.

In literature optimization of the range is called continuous process, and it is considered insufficient to be limited in work on it only to the analysis of consumption, cutting off of the low-consumed medicines and addition of novelties [5,10]. Other means of optimization of the range – is reduction of influence of personal habits and addictions of heads of LPU by formation of the range.

In order to avoid irrational costs of medicines expediently conducting monitoring of medicines and the monthly analysis of the range of the available reserves of medicines as in general on LPU, and in each profile office. It will allow to create the adequate form of medicines for the medical organization not only for names, but also for a quantitative index.

Since the beginning of 2009, from the moment of introduction in Clinics of Irkutsk state medical university (further in the text – Clinics of IGMU) the personified actual accounting of medicines and products of medical appointment as authors such analysis is constantly carried out.

In general the average monthly range of medicines in 2014 on average on establishment increased in comparison with 2009 by 8,3%. The increase in the range occurred in each office of

Clinics of IGMU, but its greatest increase is recorded in office of maxillofacial surgery, ophthalmologic and resuscitation анестезиологическом offices – 28,2%; 27,1% and 16,2% respectively. Thus the average monthly rest of medicines in the monetary value doesn't exceed an average monthly actual expense as at continuous monitoring of the range and amount of the medicines which are available in a warehouse and posts of office there is no "zalezhivaniye" of medicines. On the contrary, there is their continuous updating as the new party arrives only at the minimum admissible remains in a warehouse of office of the previous.

For 2014 in each profile office much more medicines, than in 2009 are involved in an average monthly turn. For this reason, despite increase in the range of medicines, the share of their actual monthly expenditure increased in 2014 in comparison with 2009 by 15,8%. The smallest rate of a gain was noted in neurologic office. This fact is explained by that only in this office of Clinics of IGMU the annual demand for acquisition of medicines was made rationally, proceeding from the actual requirement, but not taking into account considerable insurance stocks.

Proceeding from the aforesaid, the conclusion follows that when planning means under the article "Medicines" it is necessary to consider not only data of the actual range and amount of the spent medicines, but also a profile of office and data on the actual expense of medicines on 1 bed for the previous period for the purpose of rationalization of use of financial means according to this item of expenditure.

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