

I. V. PESTUN, Z. M. MNUSHKO, I. V. TIMANJUK

*National University of Pharmacy
Kharkiv Medical Academy of Postgraduate Education*

ECONOMIC EFFICIENCY OF PHARMACY MANAGEMENT IN UKRAINE: DEFINITION, CURRENT FEATURES, FACTORS OF INFLUENCE, TRENDS

The effectiveness of pharmacy management and its networks (associations) is a socio-economic category, which reflects the capabilities of the internal material, financial, personnel, information, management resources of the organization and the impact of the development level and changes in society.

The aim of this work is a comprehensive research, analytical study and systematization of features, factors of influence and trends in the economic efficiency of pharmacy management (networks) in Ukraine. The tasks were to determine the features, opportunities for increasing the economic (quantitative) indicators of the effectiveness of pharmacy management (networks), existing threats (risks) to achieve their optimal values.

Results. On the bases of scientific literature, regulatory documents, statistical data, information sites of the Internet and structural-logical, analytical methods, generalization, comparison, grouping, and formalization of reasoning were identify problems and trends in this area. Laws, regulations of the government, orders from the Ministry of Health, statistics, scientific publications, materials of the public organization's activities in pharmacy and scientific forums were analyzed, which allowed to highlight the actual problems and approaches to the solution in the management of pharmacies (networks). The quantitative indicators under which the research was carried out are the property status of the enterprise, production potential, financial stability, solvency, business activity, profitability, and asset management efficiency. The results of the research are presented in the form of a table that describes the peculiarities of ensuring the efficiency of management of pharmacies and pharmacy networks (associations) in Ukraine, the possibility of increasing the economic (quantitative) indicators of management efficiency, modern threats (risks) for them.

Conclusions. It has been shown that the most positive influence on the economic efficiency of pharmacy management (networks) is creating associations of pharmacies, innovation management, the introduction of modern software, marketing management, etc. The greatest threat to stable tendencies poses the high competition, low consumption of drugs, an increase of administrative and other expenses of pharmacies (networks).

Key words: efficiency of pharmacy management; economic (quantitative) indicators of management efficiency; factors of influence on economic indicators of management efficiency; opportunities for increasing the efficiency of management of pharmacies (networks); threats; risks

І. В. Пестун, З. М. Мнушко, І. В. Тіманюк

*Національний фармацевтичний університет
Харківська медична академія післядипломної освіти*

ЕКОНОМІЧНА ЕФЕКТИВНІСТЬ УПРАВЛІННЯ АПТЕКАМИ В УКРАЇНІ: ЗНАЧЕННЯ, СУЧASNІ ОСОБЛИВОСТІ, ФАКТОРИ ВПЛИВУ, ТЕНДЕНЦІЇ

Ефективність управління аптеками та їхніми мережами є соціально-економічною категорією, в якій відображаються можливості внутрішніх матеріальних, фінансових, кадрових, інформаційних, управлінських ресурсів організації та вплив рівня розвитку і змін у суспільстві. Метою роботи є комплексне дослідження, аналітичне опрацювання та систематизація особливостей, факторів впливу та тенденцій економічної ефективності управління аптечними мережами в Україні. Завданнями було визначення особливостей, можливостей підвищення економічних (кількість) показників ефективності управління аптекою (мережею), існуючих загроз (ризиків) досягнення їх оптимальних значень.

Результати. На основі наукової літератури, нормативних документів, статистичних даних, інформаційних сайтів Інтернету та структурно-логічних, аналітичних методів, узагальнення, порівняння, групування та формалізації міркувань виявлені проблеми та тенденції цього напрямку. Були проаналізовані закони, постанови уряду, накази Міністерства охорони здоров'я,

статистика, наукові публікації, матеріали діяльності громадських організацій у фармації та наукових форумів, що дозволило виокремити актуальні проблеми та напрямки вирішення в управлінні аптеками (мережами). Кількісними показниками, за якими проведено дослідження, є майновий стан підприємства, виробничий потенціал, фінансова стійкість, платоспроможність, ділова активність, прибутковість, ефективність використання активів. Результати досліджень представлені у вигляді таблиці, яка характеризує особливості забезпечення ефективності управління аптеками та аптечними мережами (об'єднаннями) в Україні, можливості підвищення економічних (кількісних) показників ефективності управління, сучасні загрози (ризики) для них.

Висновки. Показано, що найбільший позитивний вплив на економічну ефективність управління аптекою (мережею) створюють аптечні об'єднання, управління інноваціями, впровадження сучасного програмного забезпечення, управління маркетингом і т. п. Найбільшу загрозу для стійких тенденцій представляє висока конкуренція, низьке споживання ліків, збільшення адміністративних та інших витрат аптек (мереж).

Ключові слова: ефективність управління аптекою; економічні (кількісні) показники ефективності управління; фактори впливу на економічні показники ефективного управління; можливість підвищення ефективності управління аптеками (мережами); загрози; ризики

И. В. Пестун, З. Н. Мнушко, И. В. Тиманюк

Национальный фармацевтический университет
Харьковская медицинская академия последипломного образования

ЭКОНОМИЧЕСКАЯ ЭФФЕКТИВНОСТЬ УПРАВЛЕНИЯ АПТЕКАМИ В УКРАИНЕ: ЗНАЧЕНИЕ, СОВРЕМЕННЫЕ ОСОБЕННОСТИ, ФАКТОРЫ ВЛИЯНИЯ, ТЕНДЕНЦИИ

Эффективность управления аптеками и их сетями представляет собой социально-экономическую категорию, которая отражает возможности внутренних материальных, финансовых, кадровых, информационных, управлеченческих ресурсов организации и влияние уровня развития и изменений в обществе.

Целью данной работы является комплексное изучение, аналитическая обработка и систематизация особенностей, факторов влияния и тенденций экономической эффективности управления аптечными сетями в Украине. Задачи состояли в определении особенностей, возможностей повышения экономических (количественных) показателей эффективности управления аптекой (сетью), существующих угроз (рисков) для достижения их оптимальных значений.

Результаты. На основании научной литературы, нормативных документов, статистических данных, информационных сайтов Интернета и структурно-логических, аналитических методов, обобщения, сравнения, группировки и формализации рассуждений выявлены проблемы и тенденции в этой области. Были проанализированы законы, постановления правительства, приказы Министерства здравоохранения, статистика, научные публикации, материалы деятельности общественной организации в фармации и научные форумы, что позволило выделить актуальные проблемы и подходы к решению в управлении аптек (сетей). Количественными показателями, по которым проводилось исследование, являются имуществоное состояние предприятия, производственный потенциал, финансовая устойчивость, платежеспособность, деловая активность, рентабельность и эффективность управления активами.

Результаты исследований представлены в виде таблицы, которая характеризует особенности обеспечения эффективности управления аптеками и аптечными сетями в Украине, возможности повышения экономических (количественных) показателей эффективности управления, современные угрозы (риски) для них.

Выходы. Показано, что наиболее положительное влияние на экономическую эффективность управления аптекой (сетью) оказывает создание аптечных объединений, управление инновациями, внедрение современного программного обеспечения, управление маркетингом и т. д. Наибольшую угрозу для устойчивых тенденций представляет высокая конкуренция, низкое потребление лекарств, увеличение административных и других расходов аптек (сетей).

Ключевые слова: эффективность управления аптекой; экономические (количественные) показатели эффективности управления; факторы влияния на экономические показатели эффективности управления; возможности повышения эффективности управления аптеками (сетями); угрозы; риски

STATEMENT OF THE PROBLEM

The effectiveness of management of pharmaceutical organizations is a multifaceted complex activity, in which separate units and employees of the enterprise, authorities, consumers, enterprises – manufacturers of pharmaceutical products, suppliers, etc., are involved. Accordingly, the effectiveness of the organization is affected by many factors that depend or not depend on it. Increasing the efficiency of production and trading enterprises contributes to increasing the level of satisfaction of goods and services, increasing the profitability of enterprises and socio-economic development of society as a whole. Pharmacies and their networks occupy a special place in society as healthcare and trade establishments, which creates significant complications in ensuring business efficiency. Consequently, the main problem of effective management of pharmacies and their networks is the achievement of coherence of business interests (profit) and the interests of society (providing affordable pharmaceutical assistance). Despite the socio-economic importance of the importance of pharmacies management efficiency indicators, there are practically no methodological and applied research in this area.

ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS

Fundamental provisions regarding the efficiency of enterprise management and certain areas of its activity are to some extent reflected in classical economic publications [1-9]. In the scientific pharmaceutical literature there are reports about research and analysis of change management's questions, crisis management, marketing efficiency, personnel management, etc. [10-14]. However, a comprehensive analysis of the modern features of ensuring the economic efficiency of pharmacy organizations is not enough.

IDENTIFICATION OF ASPECTS OF THE PROBLEM UNSOLVED PREVIOUSLY

A limited number of publications in the scientific literature are devoted to the problem of research and evaluation of the effectiveness of pharmaceutical organizations management.

OBJECTIVE STATEMENT OF THE ARTICLE

The purpose of this work is a comprehensive research, analytical study and systematization of features, factors of influence and trends in the economic efficiency of pharmacy management (networks) in Ukraine.

PRESENTATION OF THE MAIN MATERIAL OF THE RESEARCH

Scientific literature uses different approaches to the interpretation of the management efficiency

concepts. Generally, the term "efficiency" means effectiveness, performance, and productivity. Efficiency is evaluated as a corresponding ratio between the result and the goal or the result and the cost of its achievement [1, 4, 9, 15].

The expanded characteristic of the "efficiency" concept includes:

- concrete result (for example, the effectiveness of the campaign in terms of stimulating the sale or retail of a certain pharmaceutical product, the effectiveness of the discount cards introduction for pharmacy clients, etc.);
- match the result or process to the maximum possible, ideal or planned; the quantitative description of satisfaction with the functioning of the organization, unit, employee;
- the likelihood of meeting the performance targets.

Depending on the form of presentation of results and costs distinguish technical, economic and socio-economic efficiency [3, 8]. More common is the classification, according to which efficiency is in three types: economic, social, socio-economic. This classification of efficiency is the basis of all other divisions and is, therefore, considered to be general [5].

The economic and social efficiency of trade is closely interconnected. Economic efficiency of commercial activity is recommended to be assessed by the economic results that characterize the enterprise as a whole: general economic indicators (turnover, costs, profits, prices); indicators of resource use (development, turnover); quality of trade service (latitude, stability and updating of assortment); quality of goods [6, 16].

Indicators for assessing the effectiveness of enterprise management are divided into quantitative and qualitative. Quantitative indicators are determined by calculation, qualitative is obtained through expert assessments [2].

There are also three types of efficiency that actually characterize the internal effectiveness of the organization: individual, group, organizational efficiency, which correspond to the coverage scale [1, 7].

It should be noted that the basis for assessing the effectiveness of management often includes not as much of individual positions and management criteria, but more of how effective is the solution to the problems of the organization. Since the main objective of the business entity, including pharmacies or their networks, a commercial success (profit making), many management theorists regard this indicator as to the criterion for successful management. In relation to others – the main thing for an organization is its existence, survival, and performance. An organization that works to meet the needs of society is considered to be effective. This criterion reflects the so-called external effectiveness,

which serves as an indicator of achieving the goals of the organization [17]. The external importance of the effectiveness of pharmaceutical companies could be attributed to the interests of the target segment of clients, the requirements of healthcare, society as a whole. This is also the coherence of activities with the requirements of licensing conditions, the quality management system, with regulatory and legal constraints, etc.

Effectiveness of pharmacy (network) management is influenced by factors of the external and internal environment. Legislative changes, state of health protection of the population, innovative processes in society, market factors, features of target segments of consumers are the most important for these subjects. The main internal factors are material, financial, personnel, information resources, use of modern general methods of management and marketing management.

It should be noted that for Ukraine characteristic is the formation and development of pharmacy networks, which affects the peculiarities of pharmacy management, the management effectiveness of both individual organizations and the network as a whole. In the retail segment there are now about 20.6 thousand pharmacy points. However, the consolidation process continues. The share of top 100 pharmacy networks is more than 73 % of retail turnover among legal entities [18]. In fact, there is the formation of retail pharmacy megatops. A significant part of pharmacy networks presented on the market are local (operate within the locality). As of 01.01.2019 in Ukraine there are about 5 thousand local pharmacy networks. At the same time, the share of regional networks is gradually increasing, in the last 3 years their share increased by 5.4 %. Currently, more than one-third of pharmacy networks are regional – 31.7 %. The number of pharmacies in one network sometimes reaches 600 [19]. In general, the retail pharmaceutical market in Ukraine is characterized by a high level of competition, which emphasizes the importance of using modern methods to improve the efficiency of pharmacy management.

Due to the saturation of the pharmaceutical market with pharmacies, the growth of the market share of pharmacy networks and associations (pharmacy – wholesale firm-producer), proposals are made regarding the introduction of certain restrictions. In particular, the restrictions on the number of pharmacies at the disposal of one physical or legal person, the regulation of the distance between the pharmacies, the right to own a pharmacy business only to persons with pharmaceutical education, and others are proposed and actively discussed [20-22]. It should be noted that Ukrainian legislation differs by specified positions from the legislation of many European countries, where the

requirements for the opening and operation of pharmacies are more stringent.

Taking into account trends in the development of pharmacy networks in Ukraine, it is advisable to draw attention to a number of their competitive advantages: the possibility of increasing the financial performance of networks in general and individual organizations; increase of the general marketing potential of the network; expansion of the geographical presence of pharmacies and the convenience of their location; provision of a wide range of medicines and parapharmaceutical products; fairly high adaptability of management; attraction of better partners to the network; strengthening of positions of a separate retail point at the expense of network support, increase of activity's flexibility and efficiency, possibility of attraction to the work competent specialists of the necessary specialties, etc. [23, 24].

Despite different approaches to assessing the effectiveness of management of an organization, from our point of view, the most detailed is the division into quantitative (economic) and qualitative (social or socio-economic) criteria for the effectiveness of management activities [12]. The use of these components, in fact, allows combining economic and social approaches to analyzing the management effectiveness of pharmacy and their networks.

Based on our research and generalizations, we have identified the most important for pharmacies (pharmacy networks) quantitative criteria, opportunities and threats for improving the economic indicators of effective management (Table).

By supplementing the information given in the table, it is worth paying attention to the relationship between quantitative and qualitative (socio-economic) criteria in the work of the pharmacy. Thus, the indicators of the financial activity of pharmacies are affected:

- the ratio of sales volumes of drugs on prescriptions and without prescriptions, which testifies to the level of cooperation between pharmacists and doctors and the population, and the release of OTC drugs depends on the professionalism and motivation of the pharmacist's actions;
- the ratio of sales volumes of innovative (original) and generic drugs – given the difference in prices, demonstrates, besides the benefits of consumers themselves, the degree of load on pharmacists for the release of drugs, timing, financial, information costs, etc.;
- the profit from new drugs or other products is evidence of the innovative commitment of the pharmacy staff, an indicator of the effectiveness of staff training and its information provision, the quality of the provision of pharmaceutical services[12].

Table

**FEATURES OF THE QUANTITATIVE CRITERIA OF PHARMACY (PHARMACY NETWORK)
MANAGERIAL EFFICIENCY, OPPORTUNITIES FOR INCREASE AND THREAT**

Names of groups and criteria	Features for pharmacies (pharmacy networks)	Possibilities for positive change	Threats (Negative Impact, Risks)
Property status of the enterprise	Most pharmacies work in rented premises.	Acquisition or transfer of ownership of pharmacy premises	Increase of rent and tariffs for utilities, necessity to bring premises to the requirements of licensing conditions. Termination of the lease agreement
Production potential	In pharmacies that do not have their own building, the share of fixed assets is up to 20 % of the property, and if there is a building, the share – up to 80 % [12]. Due to the fact that most pharmacies do not manufacture drugs, difficult expensive equipment is not used.	Effective use of fixed assets	The need to purchase new equipment, furniture, computers
Financial stability • share of equity in the total value of property	The high share of borrowed capital (from 65 to 96 %) is typical for the sphere of trade [12]. In drugstores, mainly due to their working capital funded commodity stocks.	Strengthening effective cooperation with manufacturers and wholesalers of pharmaceutical companies, optimization of marketing contracts; use of budget management; structural flexibility of the pharmacy (network). Using software contributes to a detailed analysis of the commodity stocks structure, the turnover of commodity groups and individual names, the differentiation of profitability and trade margins, sources of profitability and cost-effectiveness, causes of accounts receivable and measures to prevent it, etc.	Threats are the increase of the main expenses: increase of the premises rent cost, increase of wages, increase of payment for utilities, introduction of the latest technologies, quality management system, international standards, etc.
Solvency. Coefficients: • absolute liquidity; • intermediate coating; • current liquidity	A modern feature is the creation of a minimum inventory, which does not require significant amounts to settle for the goods purchased. Forced to form a wide assortment with different price positions, to ensure availability of drugs. There is an untimely settlement with pharmacies from the state and local budgets	Economic justification of the turnover of different product groups and names	Risks – the existence of receivables, interruptions in deliveries, non-fulfillment of obligations under signed agreements.
Business activity (level of efficiency of using enterprise resources): • Profit • Turnover • turnover of working capital.	Commodity turnover structure: 83.3 % – medicines; 7.3 % – medical products; 4.9 % – dietary supplements; 4.5 % – other categories of goods (cosmetics, baby food, disinfectants) [19]. Profit and turnover are directly dependent on the turnover of working capital. The turnover rate of working capital is regulated by the use of categorical management. In Ukraine, the low consumption of drugs by people is typical (median consumption of drugs is about USD 62) [19]. Significant competitive advantages are the association of pharmacies.	Positive impact on categorical management and price management; introduction of an automatic system for regulating the target level of inventories; operational response to change in demand and seasonal sales fluctuations; development of services aimed at patients; capitalization of employees' knowledge; introduction of new business models (eg franchising); electronic orders, mathematical modeling of inventory optimization, market forecasting, introduction of P2P, B2B, B2C models	Threats – imperfect software, price competition between pharmacies; availability of commodity balances at high prices, reduction of the checks number, low purchasing power of the population
Profitability: • Total return on equity • Return on equity • Return on sales	Impact on the profitability of tax legislation, legal regulation of drug prices, reduction of the solvency of the population, the emergence of receivables with the participation of a pharmacy or network in social programs, the introduction of reimbursement system. Additional costs for innovation	Positive effect – an increase in the proportion of medicines subject to preferential taxation. Calculations and analysis of profit, margin, realized margin, income under a marketing agreement, share of product category, profitability of individual groups, decrease in the number of goods without movement	Negative impact – reduction of business profitability; part of population has low incomes; consumer benefits of cheap medicines; limited use of innovative medicines; a significant proportion of the pharmaceutical product with a maximum value added tax.
Asset utilization efficiency	High costs, the existence of factors limiting demand, the implementation speed of certain drugs and VMP, sources of income	Reduction costs, stimulation of the demand for product sales speed. Use of financial analysis methods. Increase of innovative potential; use of the software	Growth of the cost of pharmacies and their networks, reduction of the implementation speed of expensive drugs, legal restrictions on the source of profits

Financial stability characterizes the degree of financial independence of the enterprise in terms of ownership of its property and its use: the level of coverage of material working capital (inventories) by stable sources of financing; solvency of an enterprise (its potential ability to cover urgent liabilities with mobile assets); the share of own or stable sources in the total funding sources[3].

This group of indicators depends on the participation of a pharmacy or a network in social programs, the proportion of drug delivery at the expense of state or local budgets. At present, attention is drawn to the participation of drugstores in the «Available drugs» program in Ukraine. Thus, the MOH reported a monthly increase in the number of pharmacies from about 4.5 thousand at the beginning of the program implementation to more than 7.5 thousand today [25]. During 1.5 years of implementation of the government program, more than 6.5 million Ukrainians received medicines from cardiovascular diseases, type II diabetes and bronchial asthma for free or with a small surcharge. The state reimbursed the cost of medicines issued for more than 28 million recipes [26]. However, there is a delay in budget calculations with pharmacies, which is reflected in the financial situation of business entities [27]. This example shows the emerging contradictions between the financial, economic and social goals of pharmacies. Wholesale price for medicines included in the program «Available medicines» should be determined by establishing the reference prices of the Ministry of Health of Ukraine (at the level of average prices in the countries – Poland, Slovak Republic, Czech Republic, Latvia, Hungary) [28].

The solvency of pharmacies is closely connected to their financial sustainability. A modern feature of its preservation is the creation of a minimum inventory, which does not require significant sums for payments for the goods purchased. However, pharmacies and their networks should form a wide range with different price positions, provide access to medicines.

Important for financial stability and solvency is the implementation of measures to increase equity capital and market value of the enterprise, expansion of investment sources. The threats to the financial and economic situation are those that take place in the economic sector of Ukraine, which leads to a significant increase in the cost of business entities. All of them can not be called negative, for example, raising the level of average wages and pensions contributes to increasing the solvency of the population and welfare (prosperity). But it creates an additional financial burden on enterprises by increasing the staff salary and tax deductions. In order to manage financial and economic indicators, pharmacy management (network) should conduct

a systematic analysis of overall financial and economic indicators and solvency, timely identify the causes of insolvency of the enterprise. To take concrete measures of influence it is worth analyzing the dynamics of average income, profits, expenses for the structural unit (or for each pharmacy network) and for one specialist.

In order to improve financial stability and solvency appropriate management of change, use of strategic, financial, anti-crisis, marketing management, use of measures of regulation of accounts receivable [11, 13, 29-31]. In order to improve financial stability and solvency appropriate management of change, use of strategic, financial, anti-crisis, marketing management, use of measures to regulate accounts receivable.

The business activity of pharmacies as a criterion for the effectiveness of management has the most specific characteristics of the pharmaceutical market:

- the turnover of commodity stocks demonstrates, on the one hand, the reasonableness of the assortment structure, volume and frequency of orders for a pharmaceutical product, and, on the other hand, the correspondence of established demand stocks, the degree of satisfaction of the population and health care facilities with medicines and medical products (VMPs) by a certain pharmacy, as well as assesses the level of marketing activities of the pharmacy staff;
- direct communication with marketing and supply activities has the number of information databases, information provision of managers and pharmaceutical workers on drugs, the legislative framework, trends in the pharmaceutical market, etc.;
- the achievement of certain financial and economic results and the satisfaction of pharmacy and customer staff contributes to the stability of medicines and parapharmaceuticals range.

It should be noted that pharmacy networks have significant advantages in forming the optimal range of pharmaceuticals and their turnover, have the opportunity to redistribute the remnants of drugs and other goods between individual pharmacies, deliver medicines to order in a short time, form and maintain the necessary information databases, etc.

Opportunities to enhance the business activity of the pharmacy or the network as a whole depend on management adaptability, the ability to react in a timely manner to market changes, the effective use of digital technologies, reasonable regulation of inventories and their turnover, the introduction of new business models and proper software. In this group of indicators of effective management, for the most part, there are managed components. It is also worth noting that pharmacy networks have con-

siderably more opportunities to increase business activity.

Profitability as a dynamic indicator depends to a large extent on the level of prices on pharmaceutical products and many factors that affect them. In particular, a significant increase in drug prices arose after the devaluation of the national currency, since in the pharmaceutical market of Ukraine, according to 2018, the number of registered foreign drugs exceeds domestic drugs by 2.3 times [32].

In addition, in the range of pharmacy a significant proportion of medicines for which there is a trade surplus (out of almost 10 thousand registered medicinal products registered in the country more than 3000 titles are included in the List of basic medicines, trade surcharges on which are regulated) [33]. Along with this, pharmacies have a large assortment of care products for patients, dressing materials, medical equipment, medical cosmetics and other goods for which there is market pricing. The state authorities and the population are dissatisfied with the high prices for medicines.

The efficiency of the use of assets characterizes the ratio of income and net profit of the pharmacy (network) to the capital employed. Accordingly, this indicator of the management effectiveness is affected by the high level of costs, the existence of factors limiting demand, the speed of the implementation of certain drugs and VMP, sources of income, etc.

In general, pharmacies and their networks should find a balance between sources of income and costs, use the possibility of regulating the structure of the product range, taking into account the profitability of individual groups, reducing the off-the-line assortment positions, reducing inefficient expenditures. However, the unmanaged and threatening factors of profitability management, in this case, are the benefits of consumers to the purchase of cheap pharmaceutical products, limited to the purchase of expensive innovative medicines.

The examples given above indicate some difficulties in ensuring the profitability of pharmacies and their networks, which is the result of high competition, the regulation of trade surcharges, participation in social programs, the existence of receivables, etc. However, pharmacy networks also have advantages in this regard, as they have increased opportunities for investment attraction and flexible pricing for medicines and VMPs.

Different approaches to assessing the effectiveness of management are proposed, but more often than others, allocate selective, complex, fragmentary or selective approaches. However, practically no one approach is used isolated. There is also an approach, the essence of which is the effective use of human resources, where important categories such as the integration of activities, the satisfaction

of team members, morality, social climate, that are emphasized social orientation [34].

A general definition of the effectiveness of pharmacy or network management can be done by all indicators or those that require special attention during a certain period and are a priority. Calculations of quantitative criteria are performed according to the formulas presented in the literature [8, 12]. Also important is the allocation of comparative indicators. Using common approaches to assessing the effectiveness of organization management by quantitative indicators and the choice of comparison criteria [7, 9, 35-37], with regard to pharmacies (networks), the following should be singled out:

- comparison with planned indicators (if the pharmaceutical organization has developed a system of strategic, tactical and operational planning, then, respectively, control criteria are determined, and some indicators can be used to assess the effectiveness of management);
- Comparison of performance with normative data, but such a comparison is more perceptible for the analysis of the performers work (for example, the number of pharmaceuticals sold by the pharmacist, the number of manufactured extemporal drugs by the pharmacist, etc.), but not managers;
- comparison of performance indicators with similar indicators of another pharmaceutical organization. Now it is the most receptive for pharmacy networks, where you can compare the performance of individual outlets. Comparisons with competitors of individual pharmacies or networks are possible only by selective publicly available data. In order to assess the effectiveness of management, internal and external conditions of activity should also be taken into account: for pharmacies, for example, it is an equivalent location, the same type of contingent of visitors and regular clients, etc.;
- the dynamics analysis of management efficiency indicators in time is quite common and perceptible.

CONCLUSIONS AND PROSPECTS FOR FURTHER RESEARCH

The main problem in ensuring the effective management of pharmacies (pharmacy networks) in Ukraine is the contradiction between their social tasks as health care facilities and business interests. The most common risks for achieving optimal efficiency of pharmacy management (pharmacies' networks) are the high level of competition in the pharmaceutical market, legislative changes, the existence of demand limitation factors, the relatively low level of drug consumption, and rising costs for organizations. Increasing the efficiency of pharmacy management

(pharmacy networks) promotes the use of innovative management methods and models (budget, strategic, anti-crisis, adaptive, marketing management), information technologies, social and motivational factors, etc.

The obtained results will allow further study of management capabilities in improving the performance of organizations as a whole.

Conflict of interests: authors have no conflict of interests to declare.

REFERENCES

1. Гурышев, А. П. Оценка эффективности деятельности предприятия через использование финансовых и нефинансовых показателей / А. П. Гурышев // Менеджмент в России и за рубежом. – 2007. – № 5. – С. 99–104.
2. Дудукало, Г. О. Аналіз методів оцінювання ефективності управління діяльністю підприємства. – 2019. [Електронний ресурс]. – Режим доступу : <http://www.economy.nauka.com.ua/?op=1&z=1031>
3. Квятковська, Л. А. Комплексний підхід до оцінки ефективності управління підприємством / Л. А. Квятковська, Л. Д. Воробйова // Вісник НТУ «ХПІ». Серія : Актуальні проблеми управління та фінансово-господарської діяльності підприємства. – Х. : НТУ «ХПІ», 2013. – 50 (1023). – С. 67–75.
4. Макаренко, М. В. Формування механізму управління ефективним функціонуванням підприємства / М. В. Макаренко // Актуальні проблеми економіки. – 2005. – № 1. – С. 126–135.
5. Морщенок, Т. С. Огляд підходів до визначення економічної сутності поняття «ефективність» / Т. С. Морщенок, О. М. Біляк. – 2014. [Електронний ресурс]. – Режим доступу : http://www.zgia.zp.ua/gazeta/evzdia_8_082.pdf
6. Николаева, Т. И. Системная оценка эффективности коммерческой деятельности предприятий торговли / Т. И. Николаева // Маркетинг в России и за рубежом. – 2000. – № 4. [Електронний ресурс]. – Режим доступу : <http://www.mavriz.ru/articles/2000/4/231.html>
7. Огарков, А. А. Эффективность: способы ее определения и достижения / А. А. Огарков. – 2019. [Електронний ресурс]. – Режим доступа : <https://psycho.ru/library/2964>
8. Эффективность производственно-хозяйственной и инвестиционной деятельности предприятия. – 2011. [Електронний ресурс]. – Режим доступа : <http://beintrend.ru/2011-06-17-09-00-18>
9. Young, W. Can businesses move beyond efficiency? The shift toward effectiveness and equity in the corporate sustainability debate / W. Young, F. Tilley // Business Strategy and the Environment. – 2006. – Vol. 15, № 6. – P. 402–415. <https://doi.org/10.1002/bse.510> <https://search.crossref.org/?q=Young%2C+W.+Can+businesses+move+beyond+efficiency%3F+The+shift+toward+effectiveness+and+equity+in+the+corporate+sustainability+debate+%2F+W.+Young%2C+F.+Tilley+>
10. Дмитрик, Е. Будущее уже наступило. Все в интернет! / Е. Дмитрик // Еженедельник Аптека. – 2016. – № 1070 (49). [Електронний ресурс]. – Режим доступу : http://www.business-inform.net/export_pdf/business-inform-2018-6_0-pages-387_392.pdf
11. Крутий віраж українського фармринку-2017 // Еженедельник Аптека. – 2017. – № 1078 (7). [Електронний ресурс]. – Режим доступу : <https://www.apteka.ua/article/magazine/1078>
12. Пестун, І. В. Маркетингове управління в системі забезпечення населення ліками: монографія / І. В. Пестун, З. М. Мнушко. – Х.: НФаУ, 2013.
13. Франчайзинг з «Аптека D.S.»: підсумки 2017 року // Еженедельник Аптека. – 2018. – № 3 (1124). [Електронний ресурс] – Режим доступу : <https://www.apteka.ua/article/magazine/1124>
14. Шелепко, С. Эффективные форматы маркетинговых активностей в аптеке. Оценка эффективности маркетинговой активности / С. Шелепко // Еженедельник Аптека. – 2014. – № 934 (13). [Електронний ресурс] – Режим доступу : https://www.apteka.ua/article/magazine/934/page/3_
15. Arindam, B. Measuring the efficiency of indian cement companies utilizing data envelopment analysis during the pre and post recession period / B. Arindam // Serbian J. of Management. – 2018. – № 13 (2). [Електронний ресурс]. – Режим доступу : http://www.sjm06.com/13_2_2018.html; <https://doi.org/10.5937/sjm13-14685>
16. Financial and Economic Criteria for Evaluating the Performance of Pharmacies / Ali Imani, Mona Moghim, Ali Janati et al. // Asian J. of Pharmaceutical Res. and Healthcare. – 2016. – Vol. 8 (S1). – P. 42–48. [Електронний ресурс]. – Режим доступу : www.jprhc.in/index.php/ajprhc/article/download/238/165; https://doi.org/10.18311/ajprhc/2016/7722
17. Чернобай, Л. І. Теоретичні основи ефективності керівництва підприємством / Л. І. Чернобай, О. І. Дума // Бізнес Інформ. – 2018. – № 8. – С. 198–204. [Електронний ресурс]. – Режим доступу : http://www.business-inform.net/export_pdf/business-inform-2018-8_0-pages-198_204.pdf
18. Прохоренко, Є. Фармацевтичний ринок в очікуванні змін / Є. Прохоренко, Д. Кірсанов // Еженедельник Аптека. – 2018. – № 25 (1146). [Електронний ресурс]. – Режим доступу : <https://www.apteka.ua/article/462055>

19. Дмитрик, Е. Инфраструктура аптечного ритейла : на пороге изменений / Е. Дмитрик // Еженедельник Аптека. – 2019. – № 4 (1175). [Електронний ресурс]. – Режим доступу : <https://www.apteka.ua/article/487942>
20. Пашков, В. Монополізація аптечних мереж : наслідки та перспективи / В. Пашков // Еженедельник Аптека. – 2018. – № 26 (1147). [Електронний ресурс]. – Режим доступу : <https://www.apteka.ua/article/magazine/1147>
21. Приходько, О. Перспективи розвитку малого підприємництва на ринку роздрібної торгівлі лікарськими засобами / О. Приходько // Еженедельник Аптека. – 2019. – № 5 (1176). [Електронний ресурс]. – Режим доступу : <https://www.apteka.ua/article/magazine/1175/page/2>
22. Руденко, В. Законопроект 8591 напряму зачіпає інтереси власників аптечних мереж та працівників аптек / В. Руденко. – 2019. [Електронний ресурс]. – Режим доступу : <http://kievvlast.com.ua/mind/zakonoproekt-8591-napryamu-zachipae-interesi-vlasnikiv-aptechnih-merezh-ta-pratsivnikiv-aptek>
23. Кіт, Л. З. Технології та критерії розвитку мережевих фармацевтичних бізнес-структур / Л. З. Кіт // Соціально-економічні проблеми сучасного періоду України. – 2016. – № 5 (121). – С. 95–103.
24. Кіт, Л. З. Чинники впливу на розвиток мережевих аптечних підприємницьких структур / Л. З. Кіт // Регіональна економіка. НАН України. ДУ «Ін-т регіональних досліджень ім. М. І. Долішнього НАНУ». Львів. – 2017. – № 4. – С. 110–120.
25. ВООЗ представила результати оцінки програми «Доступні ліки». Надано рекомендації // Еженедельник Аптека. – 2018. – № 41 (1162). [Електронний ресурс]. – Режим доступу : <https://www.apteka.ua/article/476315>
26. Кірсанов, Д. Програма «Доступні ліки»: про що говорять цифри / Д. Кірсанов // Еженедельник Аптека. – 2018. – № 26 (1147). [Електронний ресурс]. – Режим доступу : <https://www.apteka.ua/article/462948>
27. У програмі «Доступні ліки» бере участь близько 3 тис. аптек – Держказначейство // Еженедельник Аптека. – 2019. – № 2 (1173). [Електронний ресурс]. – Режим доступу : <https://www.apteka.ua/article/486357>
28. Постанова Кабінету Міністрів України від 9.11.2016 р. № 862 «Про державне регулювання цін на лікарські засоби» (зі змінами). [Електронний ресурс]. – Режим доступу : <https://zakon.rada.gov.ua/laws/show/862-2016-%D0%BF>
29. Кравченко, О. С. Місце бюджетного управління в загальній системі управління торговельним підприємством / О. С. Кравченко, О. С. Брагіна // Бізнес Інформ. – 2014. – № 1. – С. 154–158. [Електронний ресурс]. – Режим доступу : http://nbuv.gov.ua/UJRN/binf_2014_1_30
30. Тарнавська, Н. П. Концептуальні положення моделі управління гнучкістю підприємства / Н. П. Тарнавська, І. О. Демків // Бізнес Інформ. – 2017. – № 2. – С. 307–317. [Електронний ресурс]. – Режим доступу : http://www.business-inform.net/export_pdf/business-inform-2017-2_0-pages-307_317.pdf
31. Болотіна, Є. В. Управлінські технології комунікативного менеджменту / Є. В. Болотіна, І. П. Фоміченко, В. О. Шашко // Бізнес Інформ. – 2018. – № 9. – С. 212–219. [Електронний ресурс]. – Режим доступу : http://www.business-inform.net/export_pdf/business-inform-2018-9_0-pages-212_219.pdf
32. Літвінова, О. В. Теоретичні та науково-практичні підходи до управління інтелектуальними ресурсами розробників і виробників лікарських засобів в умовах інноваційного розвитку: автореф. дис. ... д-ра фармац. наук. – Х., 2018.
33. Постанова Кабінету Міністрів України від 13 грудня 2017 р. № 1081 «Про внесення змін до Національного переліку основних лікарських засобів». [Електронний ресурс]. – Режим доступу : <http://consultant.parus.ua/?doc=0AWO9493D7>
34. Румянцева, З. П. Общее управление организацией. Теория и практика: учебник. – М.: ИНФРА-М, 2001.
35. Дацько, Я. Маркетинговий аудит – засіб підвищення конкурентоздатності підприємств / Я. Дацько // Маркетинг в Україні. – 2006. – № 2. – С. 47–51.
36. Кларк, Б. Продуктивность маркетинга, маркетинговый аудит, системы оценки маркетинговой деятельности: комплексное рассмотрение / Б. Кларк, Н. Морган, Р. Гуннер // Маркетинг Дайджест. – 2004. – № 6. – С. 5–9.
37. Крюков, А. Ф. Анализ методик прогнозирования кризисной ситуации коммерческих организаций с использованием финансовых индикаторов / А. Ф. Крюков, И. Г. Егорычев // Менеджмент в России и за рубежом. – 2001. – № 2. – С. 91–98.

REFERENCES

1. Guryshov, A. P. (2007). *Menedzhment v Rossii i za rubezhom*, 5, 99–104.
2. Dudukalo, H. O. (2019). *Analiz metodiv otsiniuvannia efektyvnosti upravlinnia diialnistiu pidpriemstva*. Available at: <http://www.economy.nayka.com.ua/?op=1&z=1031>

3. Kviatkovska, L. A., Vorobiova, L. D. (2013). *Visnyk NTU «KhPI». Seria: Aktualni problemy upravlinnia ta finansovo-hospodarskoi diialnosti pidpryiemstva*, 50(1023), 67–75. Kharkiv: NTU «KhPI».
4. Makarenko, M. V. (2005). *Aktualni problemy ekonomiky*, 1, 126–135.
5. Morshchenok, T. S., Biliak, O. M. (2014). *Ohliad pidkhodiv do vyznachennia ekonomichnoi sутностi poniatia «efektyvnist»*. Available at: http://www.zgia.zp.ua/gazeta/evzdia_8_082.pdf
6. Nikolaeva, T. I. (2000). *Marketing v Rossii i za rubezhom*, 4. Available at: <http://www.mavriz.ru/articles/2000/4/231.html>
7. Ogarkov, A. A. (2019). *Effektivnost: sposoby ee opredeleniya i dostizheniya*. Available at: <https://psycho.ru/library/2964>
8. *Effektivnost proizvodstvenno-khoziaistvennoi i investitcionnoi deiatelnosti predpriatiia*. (2011). Available at: <http://beintrend.ru/2011-06-17-09-00-18>
9. Young, W., & Tilley, F. (2006). Can businesses move beyond efficiency? The shift toward effectiveness and equity in the corporate sustainability debate. *Business Strategy and the Environment*, 15(6), 402–415. <https://doi.org/10.1002/bse.510> <https://search.crossref.org/?q=Young%2C+W.+Can+businesses+move+beyond+efficiency%3F+The+shift+toward+effectiveness+and+equity+in+the+corporate+sustainability+debate+%2F+W.+Young%2C+F.+Tilley>
10. Dmytryk, E. (2016). *Ezhenedelni Apteka*, 1070(49). Available at: http://www.business-inform.net/export_pdf/business-inform-2018-6_0-pages-387_392.pdf
11. Krutyi virazh ukrainskoho farmrynu–2017. (2017). *Ezhenedelni Apteka*, 1078(7). Available at: <https://www.apteka.ua/article/magazine/1078>
12. Pestun, I. V., Mnushko, Z. M. (2013). *Marketynhove upravlinnia v systemi zabezpechennia naselennia likomy*. Monohrafia. Kharkiv, NPhaU.
13. Franchaizynh z «Apteka D.S.»: pidsumky 2017 roku. (2018). *Ezhenedelni Apteka*, 3(1124). Available at: <https://www.apteka.ua/article/magazine/1124>
14. Shelepkо, S. (2014). *Ezhenedelni Apteka*, 934(13). Available at: <https://www.apteka.ua/article/magazine/934/page/3>
15. Arindam, B. (2018). Measuring the efficiency of Indian cement companies utilizing data envelopment analysis during the pre and post recession period. *Serbian Journal of Management*, 13(2), 201–213. Available at: http://www.sjm06.com/13_2_2018.html; <https://doi.org/10.5937/sjm13-14685>
16. Imani, A., Moghimi, M., Golestan, M., & Jalilian, H. (2016). Financial and Economic Criteria for Evaluating the Performance of Pharmacies. *Asian Journal of Pharmaceutical Research and Health Care*, 8(1), 42. Available at: www.jprhc.in/index.php/ajprhc/article/download/238/165; <https://doi.org/10.18311/ajprhc/2016/7722>
17. Chernobai, L. I., Duma, O. I. (2018). *Biznes Inform*, 8, 198–204. Available at: http://www.business-inform.net/export_pdf/business-inform-2018-8_0-pages-198_204.pdf
18. Prohorenko, Ye., Kirsanov, D. (2018). *Ezhenedelni Apteka*, 25(1146). Available at: <https://www.apteka.ua/article/462055>
19. Dmitrik, E. (2019). *Ezhenedelni Apteka*, 4(1175). Available at: <https://www.apteka.ua/article/487942>
20. Pashkov, V (2018). *Ezhenedelni Apteka*, 26(1147). Available at: <https://www.apteka.ua/article/magazine/1147>
21. Prykhodko, O. (2019). *Ezhenedelni Apteka*, 5(1176). Available at: <https://www.apteka.ua/article/magazine/1175/page/2>
22. Rudenko V. (2019). *Zakonoproekt 8591 napryamu zachipayе interesи vlasnikiv aptechnih merezh ta pracivnikiv aptek*. Available at: <http://kievlast.com.ua/mind/zakonoproekt-8591-napryamu-zachipae-interesi-vlasnikiv-aptetih-merezh-ta-pratsivnikiv-aptet>
23. Kit, L. Z. (2016). *Sotsialno-ekonomiczni problemy suchasnoho periodu Ukrayiny*, 5(121), 95–103.
24. Kit, L. Z. (2017). *Rehionalna ekonomika*. NAN Ukrayiny. DU «In-t rehionalnykh doslidzhen im. M. I. Dolish-noho NANU», 4, 110–120. Lviv.
25. VOOZ predstavyla rezulatty otsinky prohramy «Dostupni liky». Nadano rekomendatsii. (2018). *Ezhenedelni Apteka*, 41(1162). Available at: <https://www.apteka.ua/article/476315>
26. Kirsanov, D. (2018). Programa «Dostupni liki»: pro sho govoryat cifri. *Ezhenedelni Apteka*, 26(1147). Available at: <https://www.apteka.ua/article/462948>
27. U prohrami «Dostupni liky» bere uchast blyzko 3 tys. aptek –Derzhkaznacheistvo. (2019). *Ezhenedelni Apteka*, 2(1173). Available at: <https://www.apteka.ua/article/486357>
28. Postanova Kabinetu Ministriv Ukrayiny vid 9.11.2016 r. № 862. (2016). «Pro derzhavne rehuliuвannia tsin na likarski zasoby» (zi zminamy). Available at: <https://zakon.rada.gov.ua/laws/show/862-2016-%D0%BF>
29. Kravchenko, O. S., Brahina, O. S. (2014). *Biznes Inform*, 1, 154–158. Available at: http://nbuv.gov.ua/UJRN/binf_2014_1_30

30. Tarnavskaya, N. P., Demkiv, I. O. (2017). *Biznes Inform*, 2, 307–317. Available at: http://www.business-inform.net/export_pdf/business-inform-2017-2_0-pages-307_317.pdf
31. Bolotina, Ye. V., Fomichenko, I. P., Shashko, V. O. (2018). *Biznes Inform*, 9, 212–219. Available at: http://www.business-inform.net/export_pdf/business-inform-2018-9_0-pages-212_219.pdf
32. Litvinova, O. V. (2018). Teoretychni ta naukovo-praktychni pidkhody do upravlinnia intelektualnymy resursamy rozrobnykiv i vyrabnykiv likarskykh zasobiv v umovakh innovatsiinoho rozvytku. *Extended abstract of candidate's thesis*. Kharkiv.
33. Postanova Kabinetu Ministriv Ukrayny vid 13 hrudnia 2017 r. N 1081. (2017). «Pro vnesennia zmin do Natsionalnoho perekliku osnovnykh likarskykh zasobiv». Available at: <http://consultant.parus.ua/?doc=0AWO9493D7>
34. Rumiantseva, Z. P. (2001). *Obshchee upravlenie organizaciei. Teoriia i praktika. Uchebnik*. Moscow, Russia: INFRA-M.
35. Dadko, Ya. (2006). *Marketynh v Ukraini*, 2, 47–51.
36. Klark, B., Morgan, N., Gunner, R. (2004). *Marketing Daidzhest*, 6, 5–9.
37. Kriukov, A. F., Egorychev, I. G. (2001). *Menedzhment v Rossii i za rubezhom*, 2, 91–98.

Адреса для листування:

61168, м. Харків, вул. Валентинівська, 4.
E-mail: irynapestun@ukr.net.

Надійшла до редакції 19.09.2019 р.

Національний фармацевтичний університет
Пестун І. В. (ORCID – <https://orcid.org/0000-0002-4114-3564>)
Мнушко З. М. (ORCID – <https://orcid.org/0000-0003-2210-716X>)
Тіманюк І. В. (ORCID – <https://orcid.org/0000-0003-3569-0323>)