



## Methods of management and motivation in personnel management of the center of physical therapy and improving the quality of services for patients with orthopedic profile at the outpatient stage

Vitomskiy V.V., Lazarieva O.B., Fedorenko S.M., Vitomska M.V.

National University of Physical Education and Sport of Ukraine

DOI: <https://doi.org/10.34142/HSR.2019.05.01.02.02>

### Abstrakt

**Objective:** to identify the main approaches in the management and motivation of the staff of the center to improve the effectiveness of physical therapy in orthopedic disorders, to form ways to take these features into account in managing the process of physical therapy.

**Methods:** theoretical analysis and generalization of literary sources, method of systematization of scientific information.

**Results:** It is advisable to use a fairly wide range of management techniques in the management of staff to provide physical therapy services, since it is about the impact on a rather complex system - the team of physical therapists, which in turn have a controlling influence on the not less complex systems - patients. The use of management methods can potentially contribute to a number of positive changes in the activities of the staff of physical therapists. The additional impact of these methods will be directed at the patient, in particular, in improving the quality of services. The work of a physical therapist is rather debilitating both from the physical side and from the psychological one. Therefore, the motivation of the staff is important in the management of physical therapists, as well as other employees of the Center for the provision of physical therapy services to patients with orthopedic profile. The study of the problem of motivation has a significant theoretical and practical significance, since the most valuable resource in the current conditions of the market of physical therapy services is personnel, not equipment. Therefore, the responsibility of the leader of a successful center for the provision of physical therapy services is that the motivational goals of the employees are largely correlated with the interests of the center and led to the final result to success, which can be characterized as achieving a useful result immediately to all participants in the system "the head is a physical therapist - a patient." In a team of physical therapy center, as in any enterprise, there are different types of workers, and the choice of one concept of motivation is mainly determined by the majority of employees of a certain type in the team. The paper outlines the features of the selection and use motivational concepts for the staff center physical therapy. The theory of motivation is considered. Economic and non-economic motivational factors are allocated within the framework of the center for providing physical therapy services, the model of motivation of the personnel is given.

**Conclusion.** The quality and performance of physical therapists in today's market conditions depends not only on professionalism and competence, but also on management, motivation, satisfaction of their needs and loyalty.

**Key words:** management, physical therapy, specialist, personnel, consumer, needs, motivation, quality.

### Анотація

**Вітомський В.В., Лазарева О.Б., Федоренко С.М., Вітомська М.В. Методи менеджменту та мотивації в управлінні персоналом центру фізичної терапії та підвищенні якості послуг для хворих ортопедичного профілю на амбулаторному етапі.**

**Мета:** визначити основні підходи в управлінні та мотивації персоналу центру для підвищення результативності фізичної терапії при ортопедичних порушеннях, сформулювати шляхи врахування цих особливостей у керуванні процесом фізичної терапії.

**Методи дослідження:** теоретичний аналіз та узагальнення літературних джерел, метод систематизації наукової інформації.

**Результати.** У менеджменті персоналу для надання послуг фізичної терапії доцільно застосовувати досить широкий ряд методів менеджменту, оскільки мова йде про вплив на досить складну систему – колектив фізичних терапевтів, котрі у свою чергу здійснюють керуючий вплив на не менш складні системи – пацієнтів. Використання методів менеджменту потенційно може сприяти виникненню ряду позитивних змін у діяльності колективу фізичних терапевтів. Окрім того додатковий вплив цих методів буде спрямований і на пацієнта, а саме у вигляді підвищення якості послуг. Робота фізичного терапевта є досить виснажливою як з фізичної сторони, так і з психологічної. Тому важливим у менеджменті фізичних терапевтів, а також й інших працівників центру з надання послуг фізичної терапії пацієнтам ортопедичного профілю, є мотивація персоналу. Вивчення проблеми мотивації має вагомий теоретичний і практичний значення, оскільки найбільш цінним ресурсом у сучасних умовах ринку послуг фізичної терапії є персонал, а не устаткування.

**Висновок.** Якість та продуктивність роботи фізичних терапевтів у сучасних ринкових умовах залежить не тільки від професіоналізму та компетентності, але і від методів менеджменту, мотивації, задоволеності їх потреб та лояльності.

**Ключові слова:** управління, фізична терапія, фахівець, персонал, споживач, потреби, мотивація, якість.

### Аннотация

**Витомский В.В., Лазарева Е.Б., Федоренко С.Н., Витомская М.В. Методы менеджмента и мотивации в управлении персоналом центра физической терапии и повышении качества услуг для больных ортопедического профиля на амбулаторном этапе**

**Цель:** определить основные подходы в управлении и мотивации персонала центра для повышения результативности физической терапии при ортопедических нарушениях, сформировать пути учета этих особенностей в управлении процессом физической терапии.

**Методы исследования:** теоретический анализ и обобщение литературных источников, метод систематизации научной информации.

**Результаты.** В менеджменте персонала для оказания услуг физической терапии целесообразно применять достаточно широкий ряд методов менеджмента, поскольку речь идет о влиянии на достаточно сложную систему - коллектив физических терапевтов, которые в свою очередь осуществляют управляющее воздействие на не менее сложные системы - пациентов. Использование методов менеджмента потенциально может способствовать возникновению ряда позитивных изменений в деятельности коллектива физических терапевтов. Кроме того дополнительное влияние этих методов будет направлено и на пациента, а именно в виде повышения качества услуг. Работа физического терапевта достаточно изнурительная как с физической стороны, так и с психологической. Поэтому важной составляющей в менеджменте физических терапевтов, а также и других работников центра по предоставлению услуг физической терапии пациентам ортопедического профиля, является мотивация персонала. Изучение проблемы мотивации имеет большое теоретическое и практическое значение, поскольку наиболее ценным ресурсом в современных условиях рынка услуг физической терапии является персонал, а не оборудование. **Вывод.** Качество и производительность работы физических терапевтов в современных рыночных условиях зависит не только от профессионализма и компетентности, но и от методов менеджмента, мотивации, удовлетворенности их потребностей и лояльности.

**Ключевые слова:** управление, физическая терапия, специалист, персонал, потребитель, потребности, мотивация, качество.



## Introduction

The purpose of management in the service sector is to ensure the profitability of the enterprise through the efficient use of human resources and rational organization of service process aimed at identifying and meeting the needs of the population [1, 2, 3].

The tasks of management in the service sector include the following [1, 2]:

- defining goals and identifying ways to achieve them;
- rallying people around common goals;
- organization of processes of development and provision of services;
- ensuring high quality of service;
- continuous training and development of staff;
- ensuring the effectiveness of communication between staff and the client;
- development and application of different ways of evaluating the activity of employees and the enterprise as a whole;
- the creation of their own traditions and the use of experience [1, 2].

The standard sequence of implementation of management functions is in the form of "goal definition" - "planning" - "decision" - "organization" - "motivation" - "control" [4, 5]. At the level of the physical therapy center, the first four functions will largely relate to the development of a business plan and the design of the institution, the creation of a management system. In the future, it is especially important to apply management methods to the function of "motivation" in order to adjust the work of the center and improve the quality of services.

The management of the staff providing physical therapy services plays an important role in improving the level of services provided and, accordingly, in improving the dynamics of the patient's condition.

Most executives recognize the fact that the productivity of staff depends not only on the professionalism and competence of employees, but also on how they relate to the work performed. The high level of satisfaction and loyalty encourages the employees to make more efforts for the qualitative and timely execution of their work, thereby increasing the productivity of the enterprise and contributing to the achievement of its strategic goals. Reducing the level of satisfaction and loyalty of staff on the contrary, slows down the development of the enterprise, reduces the productivity of employees and increases the likelihood of leaving valuable personnel from the organization [6]. Therefore, recognition of the role of methods of management

and motivation of the workforce, timeliness of recognizing the first signs of negative changes, implementation of measures to remedy the situation, as well as introduction of a system of monitoring of satisfaction and loyalty of personnel are important in the work of the center for providing physical therapy services. This is the key to continuous growth in the quality of services and management system.

**The purpose:** to identify the main approaches in the management and motivation of the staff of the center to improve the effectiveness of physical therapy in orthopedic disorders, to form ways to take these features into account in managing the process of physical therapy.

## Material and methods

В роботі було використано теоретичний аналіз та узагальнення літературних джерел, метод систематизації наукової інформації. Всього було проаналізовано 26 наукових джерел, на основі яких було визначено основні положення сучасних тенденцій вивчення проблематики з обраного напрямку досліджень.

## Results

In management theory, the following features are distinguished for classifying management methods by the direction of influence on a managed object; a way of taking into account the interests of employees; the form of influence; the nature of the influence [2, 7, 8]. In the management of personnel for the provision of physical therapy services, it is advisable to apply a wide range of management methods, since it is an impact on a fairly complex system - a team of physical therapists, which in turn exert a controlling influence on equally complex systems - patients.

Thus, in the direction of influence on a managed object, there are methods of direct influence that directly affect the managed system, and methods of indirect influence that create the conditions for influence on the managed management system [7, 9, 10]. Thus, in the center for the provision of physical therapy services for patients with orthopedic profile, methods of direct impact can be represented by orders, orders, instructions, instructions and protocols of management, regulations, tariffs, and methods of indirect influence are implemented in practice in the selection of the team with different features and subsequent formation the general psychological climate.

The next group of management methods, which is very relevant in the field of physical therapy



services, is formed in a way that takes into account the interests of employees. According to this feature distinguish [7, 8]:

- material impact methods - take into account the property and financial interests of employees;
- methods of power influence - aimed at adjusting and organizing the functions, duties and rights of employees, instructing and normalizing their activities;
- methods of moral influence - aimed at increasing socio-economic activity.

In particular, the methods of material influence are applied in the form of economic incentives, financial responsibility. So in the center for the provision of physical therapy services for patients with orthopedic profile methods of power influence can be represented by staffing, instructions, protocols for the provision of individual services and procedures, orders, orders, reprimands. Methods of moral influence are also of great importance in the work of the center for physical therapy. So they include ethical standards, moral incentives to work with patients.

The form of influence distinguishes quantitative (costing, prices, material incentives, etc.) and qualitative methods (instructions, instructions, moral incentives, methods of selection of the team by psychophysiological factors) [7, 11].

According to the nature of the influence distinguish [4, 7, 12]:

- economic management methods. It is conditioned by various economic factors, by means

of which the collective and individual satisfaction of needs at all levels is achieved;

- technological methods of management - floated on employees through the documents that determine the technology, in particular physical therapy for various pathologies of the musculoskeletal system;

- socio-psychological methods of management - a set of specific ways of influencing interpersonal relationships and relationships, social processes that arise in labor collectives. For the successful operation of the organization (the center of physical therapy) in the conditions of market relations, it is first of all necessary to activate the social activity of all workers by increasing initiative, creative purpose, self-discipline. This is achieved through interest management and through interest. Psychological and social management methods are aimed at creating this overall satisfaction.

- administrative (organizational and managerial) methods of management are mostly unambiguous, that is, they exclude variability of tasks and ways of their solution. Organizational influence is based on: organizational regulation, organizational normalization and organizational design.

The use of management methods promotes a number of positive changes in the activity of the team of physical therapists (Fig. 1). In addition, for the physical therapy process, the additional impact of these methods will also be directed to the patient, namely improving the quality of services.

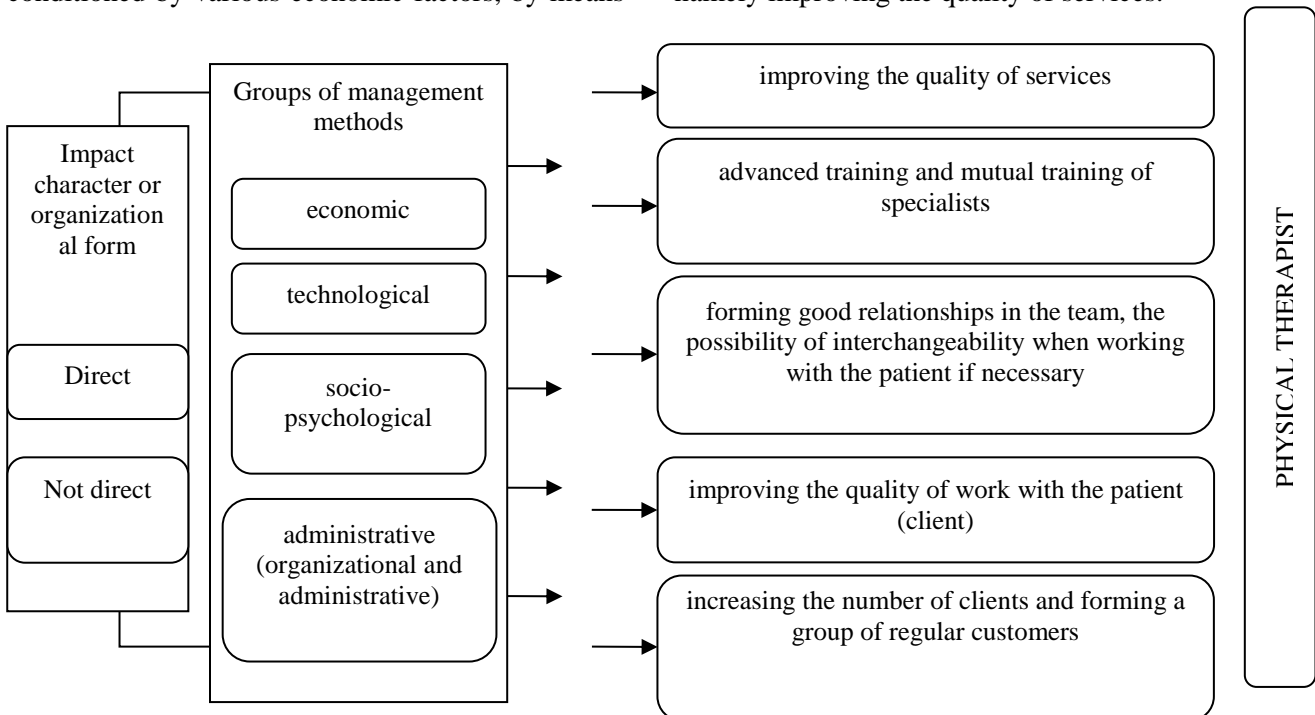


Fig. 1. The influence of management methods on the activity of physical therapist



The work of a physical therapist is quite exhausting, both physically and psychologically. This is due to the need to show exercise to the patient or to exercise at the same time as the patient, the need to assist the patient in load-fixing and resistance adjustment, as well as during, for example, massage procedures, myofascial release. The psychological burden is that working with patients in most cases involves the receipt, perhaps more than necessary, of complaints from the patient about his condition, information about the inability to perform even an easy motor task. Therefore, the motivation of the staff is important in the management of physical therapists, as well as other staff members of the center for providing physical therapy services to orthopedic patients.

On the other hand, the market for physical therapy services is in a state of constant competition. As a result, each specialist's value is increased in achieving the goals of the physical therapy center. An important task for the managerial part is to direct the team towards achieving the goals of the physical therapy center, since both the economic growth in general and the good dynamics of the patient's condition depend on the availability of highly skilled workers and the ability to encourage them to high productivity. In order to increase the efficiency of the employees of the center for the provision of physical therapy services, it is important to work on the motivation of employees, its effective practical application, as well as the improvement of methods. This is the responsibility of the management function of the same name "motivation".

The study of the problem of motivation is of considerable theoretical and practical importance, since the most valuable resource in the current conditions of the market of physical therapy services is staff, not equipment. That is why the staff is one of the most important factors in the progressive development and maximization of income in this field of activity.

The most common motivating factors include wage size, a sense of accomplishment, job advancement, creative and business growth, recognition of work performance and approval of work results, a high level of responsibility, good relationships with colleagues and a supervisor, opportunity or prospect solution of social and household problems. Therefore, the responsibility of a successful center for providing physical therapy services is that employees' motivational goals are closely aligned with the interests of the center and ultimately lead to success, which can be described as achieving beneficial results for all system members at once. - Physical therapist patient.

Motivation is one type of management activity that provides a process of encouraging oneself and other employees to pursue activities that are aimed at achieving personal or organizational goals [13, 14, 15].

The most effective implementation of the motivation function requires an understanding of what drives the employee to perform the work qualitatively. There are a number of concepts to consider: need, reward and motives.

Needs are what arise and are within a person and manifest in an individual form. This is a special state of the individual's psyche, an awareness of their dissatisfaction, a sense of lack of something, a reflection of the discrepancy between the internal state and external conditions. This is something that a person always wants to get rid of (satisfy their needs, muffle or not respond to them). There is a need for both the conscious and the unconscious, and most of them are periodically renewed [4].

Reward is all that a person considers valuable for himself. But the concept of value in people is specific, and therefore a different assessment of the reward and its relative value. A manager deals with two main types of remuneration: internal and external. The internal reward is given by the work itself. For example, this is a sense of achievement, meaningfulness and significance of the work performed, self-respect. External remuneration is given by the organization, for example: salary, promotion, symbols of status and prestige, praise and recognition, and additional payments [8].

The motive is the intrinsic desire of a person to satisfy his needs, which depends on many internal and external factors, as well as on the action of other motives that arise in parallel with this. The motive not only drives the person to act, but also determines what and how to do it. Thus, motive causes actions to eliminate problems, but in different people these actions can be completely different, even if they are caused by one problem. Motives are conscious: a person can influence their motives, suppress their influence, or even eliminate them [4].

The motivational potential of an employee is a component of the labor potential that characterizes the employee's willingness to maximize the work return, development of competitiveness, realization of the acquired knowledge, abilities, abilities and skills in work [14]. The literature presents different theories of motivation and interpretation of types of motivation of staff. Therefore, the basic theories of motivation need to be considered in order to develop the mechanisms of motivation of the employees of the center of physical therapy for patients with orthopedic profile.





The available substantive theories of motivation are based on the study of human needs, which is the main motive for his behavior and activity. They seek to explain that in a person or his or her environment, he or she shapes and supports a particular behavior or course of action. They are an attempt to identify and classify the needs of the people who drive them to act [4].

According to the theory of the hierarchy of needs of Abraham Maslow, the basis of behavior are human needs, which can be divided into primary (physiological, security needs) and secondary (needs for belonging and love, recognition, expression). According to Maslow's theory, all these needs can be arranged in a strict hierarchical sequence in the form of a pyramid, which is based on primary needs and the apex is secondary [13].

The value of the hierarchy of construction lies in the priority for the person of the needs of the lower levels, this affects its motivation [13, 16]. However, in K. Alderfer's theory, the set of human needs is regarded as a continuum - a set of equal, one-tier needs [17].

Based on the orientation of motivation in the subordinates in the theory of Mak-Gregor [4, 13, 14] ("X" and "Y"), two portraits of man, which are opposite to each other, were distinguished. Theory X forms the basis for the management and control of traditional management (through control) when the manager informs the subordinates of their obligations and applies penalties or rewards in the work process. The manager's actions are based on the fact that the person has to work immediately and avoids it whenever possible; most people should be forced to work, control and control them, emphasizing punishment; a person wants to avoid responsibility, does not have strong ambitions, prefers to be managed, and wants, first of all, safety and peace.

Theory "X" thus corresponds to negative motivation and considers only satisfaction of primary (basic) needs, without touching high ones [4].

The opposite theory is "Y" - the basis of so-called "complicity management" (management through motivation). This theory is based on the following assumptions [4, 13, 18, 19]:

- work is a natural process, and ordinary people do not feel hostility to work as much as they do in the process of playing or resting. A person may perceive work as a source of pleasure or punishment depending on working conditions;

- control and the threat of punishment - not the only way to get people to work diligently: when people are involved in organizational goals, they try to work hard, using self-control and self-government. Social

needs and the desire to work well outweigh the human motives;

- a person's desire for a certain purpose depends on the reward, and the most important reward is the satisfaction of his self-love and the desire for self-expression;

- in certain conditions, a person is not only ready to take responsibility, but also strives for it. Most people want to use their knowledge and experience, to take responsibility;

- the ability to resourcefulness, imagination, creativity in solving problems of the organization is widespread among employees;

- in modern production, the potential of the average worker is not fully utilized and should be maximally disclosed.

Theory "Y" corresponds to positive motivation, concerns unmet and higher needs. It contributes to reducing the cost of staff control because it is focused on self-control and collaboration [4].

In practice, hired specialists who are represented in the theory of D. McGregor form opposite groups of people and require the use of different motives for behavior and stimulation to work [2, 13], as well as the recruitment of staff to work in a center for the provision of physical therapy services.

Clelland [4, 13, 14] argued that motivation should be based on the needs of achievement, participation, power. The need to achieve is the desire to achieve the goal more effectively than in the past. Employees with this need work a lot and qualitatively, but they do not like to share their work, they want to achieve goals and results personally. The need for participation is manifested in a person in the form of a sense of need for friendly relations with the team and the environment. Employees with this need strive to build and maintain good relationships, have support and a good appreciation for the work they have done on the part of the environment, and they are concerned about them. The desire of the authorities will manifest in the person in the desire to have control over the resources, processes and people in the organization. Such people are divided into two groups: "power for the sake of power" and "power for the sake of achieving the goal of the organization" [2, 9, 13].

This theory in the organization of the management of workers of the center for the provision of physical therapy raises the question of the need to determine the distribution of responsibilities and tasks (should there be one performer or group?), The distribution of power (who should increase the level of power? Also important is the theory of expectation (hope), which is based on



V. Vrum's writings and states that an active need is not the only indispensable condition for motivating an employee to fulfill the chosen goals. A person should hope that his or her type of behavior will actually lead to satisfying the need or getting what is desired. An employee's expectation is similar to an employee's assessment of the likelihood of an event occurring [13, 14, 21]. In the current conditions of market relations, the theory of justice has probably only increased its importance. This theory provides an alternative understanding of how people measure and channel their strength and energy to accomplish their goals and objectives. According to the theory of fairness, employees subjectively calculate the ratio of the remuneration they receive to the effort they spend, and then compare it with the remuneration of other employees who do similar work or spend the same amount of effort.

In the case of imbalance in comparison and injustice, there is a psychological strain. As a result,

a situation arises in which, in order to establish fairness, it is necessary to eliminate the existing difference, which is performed by reducing the number of efforts or increasing the remuneration received [13, 21, 22].

There are all types of workers in the staff of the physical therapy services center, as in any enterprise, and the choice of one concept of motivation is the main one determined by the majority of workers of a certain type in the team. However, applying only one concept can lead to a mismatch between management methods and individual employees' motivation, in particular the retention of professionals with work experience and creativity in the physical therapy process. Therefore, the process of selecting and using motivational concepts for the staff of the center of physical therapy is quite complicated and creative (Fig. 2).

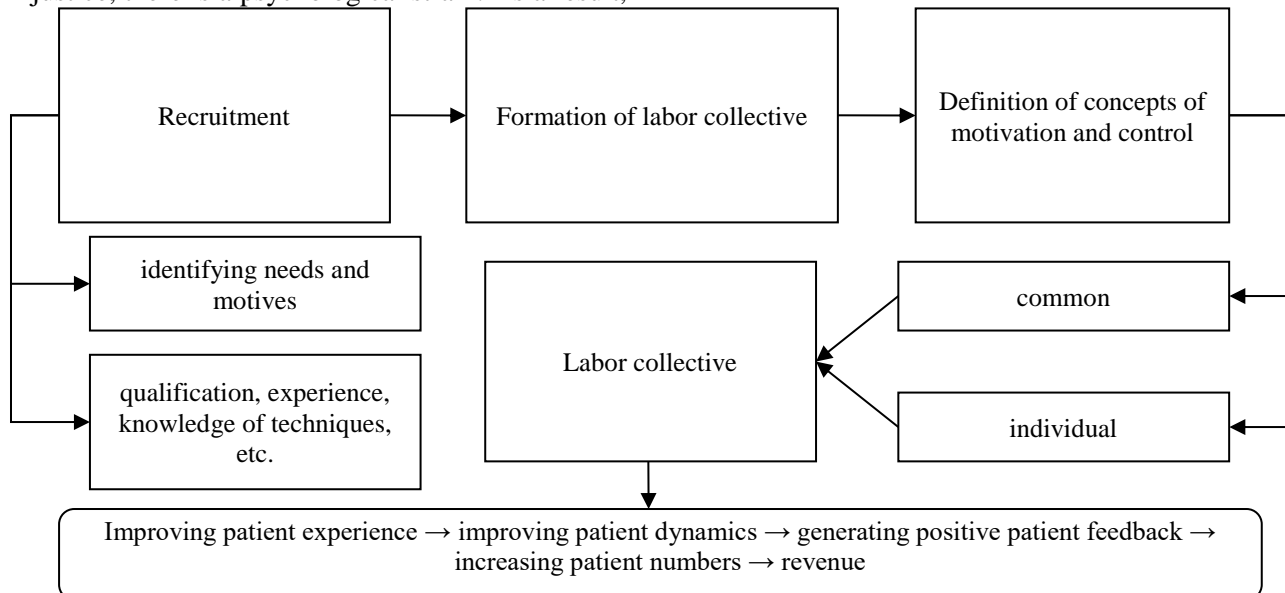


Fig. 2. The scheme of definition and use of motivational concepts in the center for the provision of physical therapy services for patients orthopedic profile

Generally speaking, in the aspect of a physical therapy center, motivation can be seen as a process of encouraging employees to perform effectively in order to achieve the goals of the center by meeting the needs of the center's staff and patients. And the choice of incentives for motivation will depend on the characteristics of specialists and the team as a whole. It should also be noted that motivation should be based on the following requirements [15]:

- providing equal opportunities for employment and job promotion;

- reconciliation of the level of remuneration for its results and recognition of personal contribution to the overall success;

- protection of health of workers;
- possibility of creative realization of the employee;

- maintaining an atmosphere of trust in the team.

In general, the motivational mechanism is a complex of organizational-economic, logistical and socio-psychological tools and methods of stimulating effective work to ensure the achievement of the goal of motivational policy [9, 15]. Considering the theories of motivation considered, the following motivational factors can be identified within the



physical therapy center - economic (Fig. 3) and not economic (Fig. 4). In particular, the following should be included in the economic category: pay, hourly wages, availability of bonuses for performing the largest number of procedures or over-fulfillment of the plan, payment for training, additional payments for absence of absenteeism for work, purchase of a course of rehabilitation services by the client, or

active participation in shaping the patient's wish to switch to prevention and wellness use of physical therapy classes after meeting the goals set previously, preferential use of the center's equipment for workers and possibly their families ents expansion in load center. The need to develop and regulate these incentives is further emphasized by the following theories of motivation.

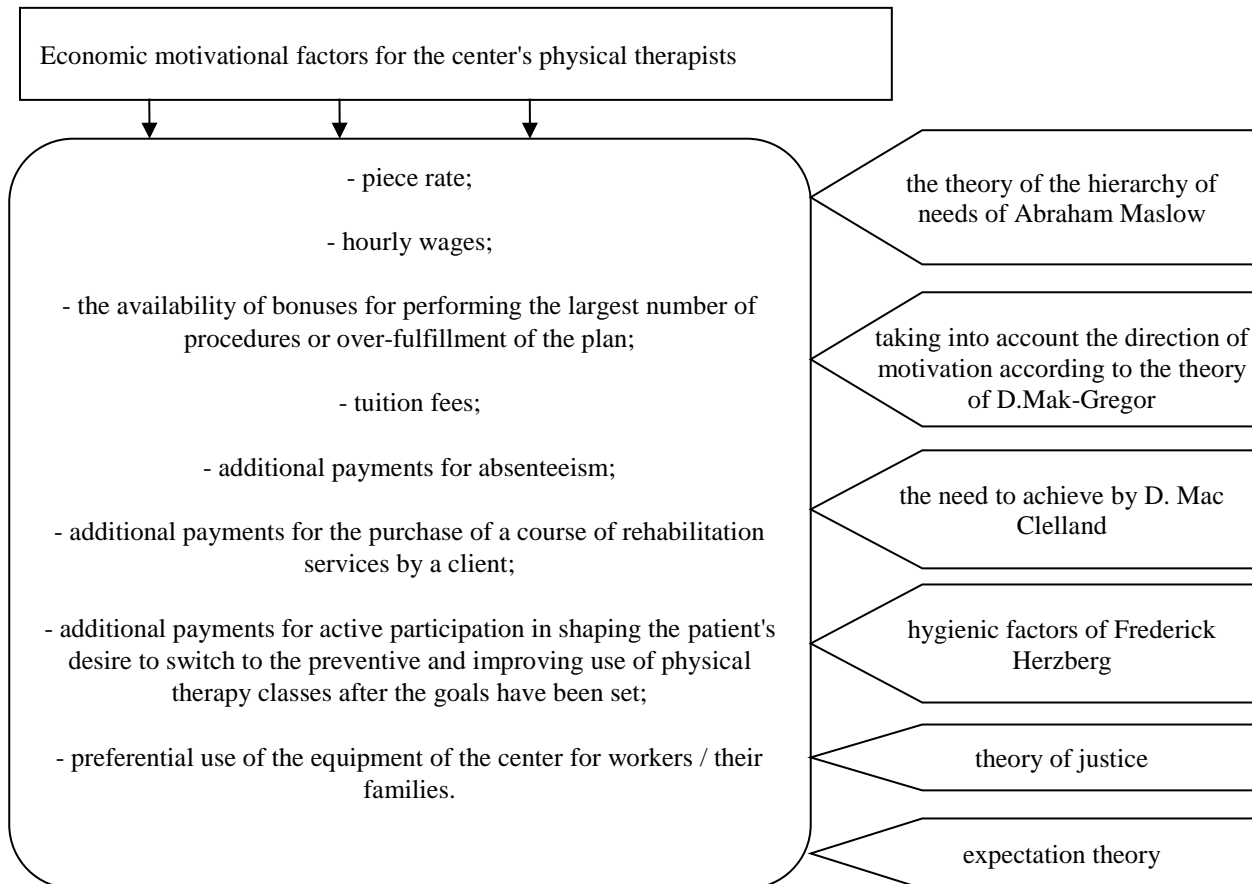


Fig. 3. Economic motivational factors for specialists of the center of physical therapy

We emphasize that an incentive (a motivating factor) becomes a motive only when it is realized by the person perceived by it. For example, for an incentive to motivate the behavior and activity of a particular employee, it is necessary that he or she be aware of it as a fair remuneration for the work. Then trying to earn a premium will help increase labor efficiency. However, for some employees who do not expect to receive a reward (low professional training, indiscipline, etc.), this possible reward does not translate into a motive, remaining at the level of potential incentive [14].

Non-economic measures include job enrichment, promotion, formulation of a convenient or flexible work schedule, a sense of accomplishment among employees (for example, on the basis of recognition of the patient's work efficiency and approval of work results), availability of self-improvement opportunities, availability of a high-level provision. responsibility for the patient's health, participation in decision-making regarding the content of the physical therapy program and decisions at the center level.

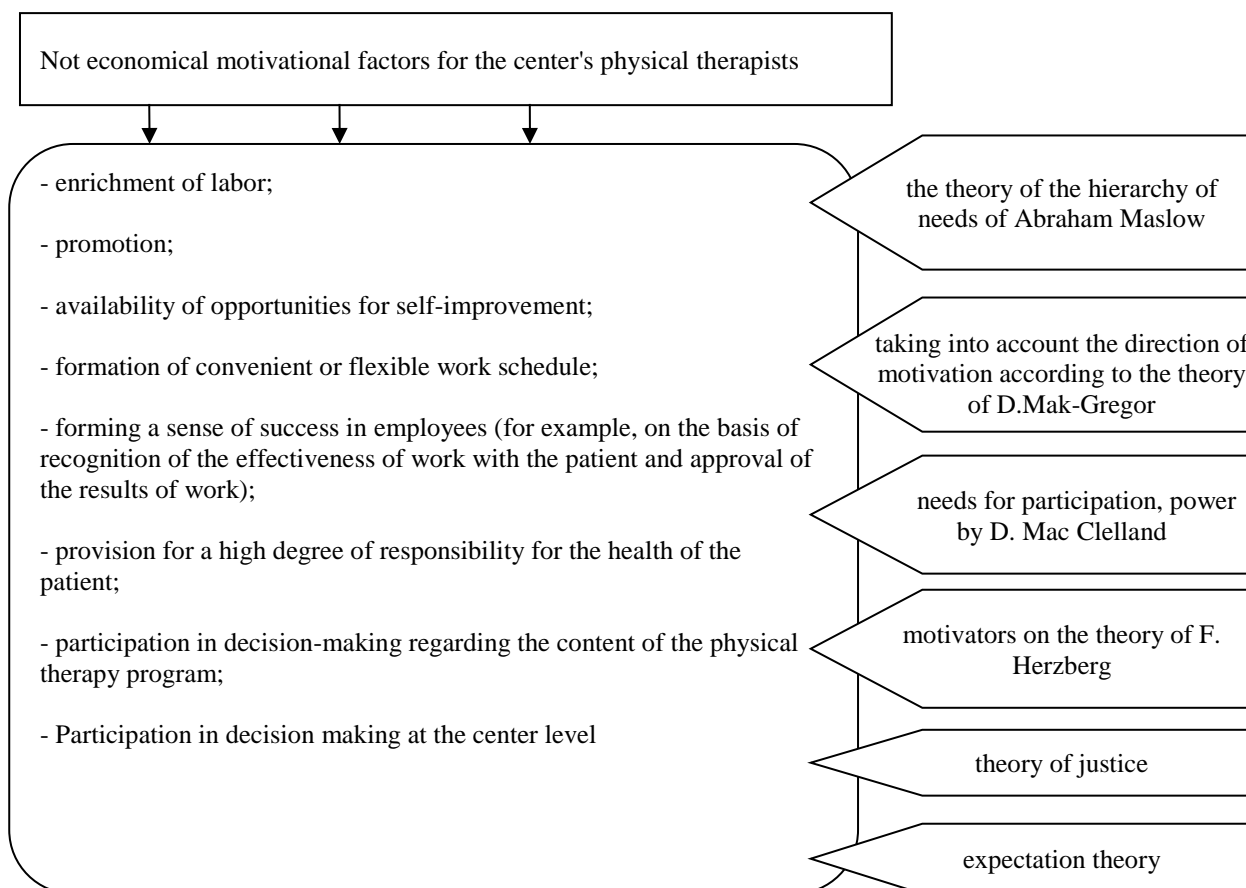


Fig. 4. Non-economic motivational factors for specialists of the center of physical therapy

## Discussion

Note that the theory of enrichment of labor recommends to ensure that each worker has at least 6 factors, the courts together provide its attractiveness:

- responsibility for productivity;
- awareness of the importance and necessity of the work being done;
- possibility of independent allocation of resources in the process of work, control over resources;
- availability of feedback, possibility to receive information on the results of work;
- the possibility of professional growth, gaining new experience, advanced training (work should not be monotonous);
- the possibility of an employee's influence on working conditions [11, 12, 23].

Formulating a high level of responsibility for a patient's health is first and foremost an equivalence of the role of the physician and the physical therapist at the institution level, their survey results, the role in the development of the physical therapy program, and sometimes with regard to rehabilitation issues in general.

Thus, these measures eliminate the state of organization of work when the doctor examines and provides a fairly standard, rather than individualized, set of exercises for the patient, and the physical therapist performs only mechanical work. In addition, such activities also play a role in enriching the work of physical therapists. The role of the doctor diminishes in the aspect of selection of physical exercises, remains necessary in matters of making a team decision on contraindications, dosing of load.

Forming a sense of accomplishment and meeting the needs of self-improvement in employees is possible at the expense of:

- participation in conferences;
- continuous training;
- objective comparison of previous work with the past;
- recognition of even small achievements in the work of specialists (introduction of new physical exercises in protocol complexes; high assessment of patient's work results and his satisfaction);
- introduction along with material rewards and non-material ones (for example, honors, certificates, diploma, photo on the plaque of honor, the title of "employee of the month"; measures should be formed also taking into account the psychology of





personality, the collective, since for some people sincere gratitude from the manager may be more important than money).

The implementation of a number of economic and non-economic motivating factors is possible during collective meetings. In particular, it is correct to emphasize at the meeting the successful resolution of the tasks of a physical therapy program by a certain physical therapist, mastering a new method or technique of intervention by a physical therapist, availability of innovations from an employee or group, identifying colleagues' views on tactics for complex patient or administrative decisions.

Also important are peer learning meetings, which can be delivered in the form of lectures with presentations, hands-on workshops, with further discussion of key and unclear issues.

Thus, according to the results of the literature analysis [24, 25, 26], the model of the personnel motivation system can be represented as a sequence of actions (Fig. 5).

It should be noted that the use of both economic and non-economic motivational factors, incentives contributes to an increase in the wealth of motivation of the staff (diversity of motives as a result of the diversity of needs relevant to the employee, which induces him to work) [14].

This is the result of open interaction when an environmental subject (such as a manager) gives rise to motives that induce a person to act.



Fig. 5. Model of staff motivation

## Conclusions

The quality and productivity of physical therapists in today's market conditions depends not only on professionalism and competence, but also on the level of satisfaction of their needs and loyalty. In addition, the work of a physical therapist is quite exhausting, both physically and psychologically. Therefore, the motivation of the staff is important in the management of physical therapists, as well as other staff members of the center for providing

physical therapy services to orthopedic patients. The study of the problem of motivation is of considerable theoretical and practical importance, since the most valuable resource in the current conditions of the market of physical therapy services is staff, not equipment. The application of management methods and concepts of motivation can contribute to a number of positive changes in the activities of the team of physical therapists, which will reflect on the quality of services, the dynamics of the patient's



condition and the achievement of the goals of the physical therapy program.

### Acknowledgements

The work was carried out in accordance with the plan of NDF NUFVSU for 2016-2020 on the theme: 4.2. "Organizational and theoretical and

methodological foundations of physical rehabilitation of persons of different nosological, professional and age groups", state registration number 0116U001609.

### Conflict of interest

The authors state no conflict of interest.

### References

1. KHlebovich DI. *Service Marketing: Tutorial*. Irkutsk: Izd-vo IGEA;2001. 264 p. (in Russian)
2. Morhulets OB. *Service Management: [tutorial]*. Kyiv: Tsentr uchbovoi literatury;2012. 384 p.(in Ukrainian)
3. Shkanova OM. *Marketing services: Tutorial*. Kyiv: Kondor; 2003. 304 p. (in Ukrainian)
4. Shatun VT. *Fundamentals of Management: A Manual*. Mykolaiv: Vyd-vo MDHU im. Petra Mohyly; 2006. 376 p. (in Ukrainian)
5. Vesnin VR. *Management: textbook*. Moskva: TK Velbi; Prospekt; 2006. 504 p. (in Russian)
6. Zybareva OV, Homba LA. Monitoring of satisfaction and loyalty of the personnel of the modern enterprise as the basis of the transformation of the system of its stimulation. *Publishing house Education and Science s.r.o.* [updated 2019 June 15; cited 2019 June 15]. Available from: [http://www.rusnauka.com/18\\_DNI\\_2010/Economics/68889.doc.htm/](http://www.rusnauka.com/18_DNI_2010/Economics/68889.doc.htm/)
7. Shchebpykina AO, Hrybova DV. *Fundamentals of management. Teaching Manual on Discipline*. Kyiv: Osvita; 2007. 378 p. (in Ukrainian)
8. Vinohradska OM, Vinohradska NS, Shevchenko VS. *Management: A manual for students of all forms of education of the specialty 0501 - "Economics and Business"*. Kharkiv: KhNAMH;2008. 160 p. (in Ukrainian)
9. Griffin R, Yatsura V. *Fundamentals of Management: Textbook*. Lviv: BaK;2001. 624. (in Ukrainian)
10. Tebekin AV. *Strategic management: a textbook for applied baccalaureate*. Moskva: Izdatelstvo IURait; 2017. 333 p. (in Russian)
11. Vasiuta VB, Bulbakh LI. Motivation of work of the personnel at the enterprise in the modern conditions of management. *Efektivna ekonomika*. 2016;6:8. [updated 2019 June 15; cited 2019 June 15]. Available from: <http://77.121.11.9/bitstream/PoltNTU/932/1/4a03c7a7cc1ccdc882d17322bf6fc48b-By%20Docs88.COM.pdf/> (in Ukrainian)
12. Spivak VA. *Organizational Behavior and Personnel Management*. SPb.: Izdatelstvo Piter; 2002. 416 p. (in Russian)
13. Horenko AI. Theoretical bases of motivation of hired workers. *Visnyk Kharkivskoho natsionalnoho tekhnichnoho universytetu silskoho hospodarstva imeni Petra Vasylenka*. 2016;177:79-91. (in Ukrainian)
14. Kolot AM. *Motyvatsiia personalu: [pidruchnyk]*. Kyiv:KNEU;2002. 337p. (in Ukrainian)
15. Olikhovska MV, Mazur AO. Management of personnel motivation at the enterprises of the hotel and tourist complex. In: *Zbirnyk materialiv Vseukrainskoi naukovo-praktychnoi konferentsii "Aktualni problemy ekonomiky ta upravlinnia v umovakh systemnoi kryzy"*; 2016; Lviv: MAUP; 2016. Ch.2; 577-82. (in Ukrainian)
16. Maslow AH. *Motivation and Personality*. N.Y.: Harper & Row; 1970. 369 p.
17. Oklander MA, Zharska IO. *Povedinka spozhyvacha: [navchalnyi posibnyk]*. Kyiv: Tsentr uchbovoi literatury; 2014. 208 p. (in Ukrainian)
18. Raichenko AB. *General Management*. Moskva: INFRA-M; 2005. 384p. (in Russian)
19. Vynohradskyi MD, Vynohradska AM, Shkanova OM. *Management in the organization: teaching. manual*. Kyiv: KONDOR; 2007. 598 p. (in Ukrainian)
20. Herzberg F, Mausner B, Bloch Snyderman B. *The motivation to work*. New York: John Wiley;1959. 157.
21. Shcheblykina IO, Hrybova DV. *Fundamentals of Management: [tutorial]*. Melitopol: VB «MMD»; 2015. 479. (in Ukrainian)
22. Voronkova VH, Belichenko AH, Popov OM. *Human Resources Management: Philosophical Principles: [Tutorial]*. Kyiv: VD «Profesional»; 2006. 576 p. (in Ukrainian)
23. Osetskiy VL, Tatomyr IL. The progress of the system of motivation of labor: from materialization to post-materialist values. *Ekonomichna teoriia*. 2011;2:47-57. (in Ukrainian)
24. Stakhiv OV. Assessment of the motivation potential of the personnel of the enterprise in the context of implementation of the requirements of the international standard of quality management ISO 9001. *Ekonomika ta derzhava*. 2007;7:79-81. (in Ukrainian)
25. Stakhiv OV. Implementation of personnel motivation system and implementation of motivational monitoring. *Problems of a systemic approach to the economy enterprises*. 2008;3(7):12 p. [updated 2019 June 15; cited 2019 June 15]. Available from: <http://jrn1.nau.edu.ua/index.php/EPSAE/article/viewFile/4108/4253/> (in Ukrainian)
26. Stakhiv OV. Monitoring the motivation of employees as a means of increasing the competitiveness of the enterprise. *Demohrafiia ta sotsialna ekonomika*. 2008;2:134-143. (in Ukrainian)



### Information about the authors

**Vitomskiy V.V.**

[vitomskiyvova@rambler.ru](mailto:vitomskiyvova@rambler.ru)

<https://orcid.org/0000-0002-4582-6004>

National University of Physical Education and Sport of Ukraine

Phizkultury Street, 1, Kiev, 03680, Ukraine.

**Lazarieva O.B.**

[helenka1972@gmail.com](mailto:helenka1972@gmail.com)

<https://orcid.org/0000-0002-7435-2127>

National University of Physical Education and Sport of Ukraine

Phyzkul'tury str. 1, Kyiv, 03680, Ukraine.

**Fedorenko S. M.**

[fesco\\_klinik@ukr.net](mailto:fesco_klinik@ukr.net)

<https://orcid.org/0000-0002-6266-5361>

National University of Physical Education and Sport of Ukraine

Phyzkul'tury str. 1, Kyiv, 03680, Ukraine.

**Vitomska M.V.**

[marinavitomskaya@gmail.com](mailto:marinavitomskaya@gmail.com)

<https://orcid.org/0000-0002-5163-3954>

National University of Physical Education and Sport of Ukraine

Phyzkul'tury str. 1, Kyiv, Kiev, 03680, Ukraine.

### Інформація про авторів

**Вітомський В. В.**

[vitomskiyvova@rambler.ru](mailto:vitomskiyvova@rambler.ru)

<https://orcid.org/0000-0002-4582-6004>

Національний університет фізичного виховання і спорту України

вул. Фізкультури, 1, Київ, 03680, Україна.

**Лазарєва О. Б.**

[helenka1972@gmail.com](mailto:helenka1972@gmail.com)

<https://orcid.org/0000-0002-7435-2127>

Національний університет фізичного виховання і спорту України

вул. Фізкультури, 1, Київ, 03680, Україна.

**Федоренко С. М.**

[fesco\\_klinik@ukr.net](mailto:fesco_klinik@ukr.net)

<https://orcid.org/0000-0002-6266-5361>

Національний університет фізичного виховання і спорту України

вул. Фізкультури, 1, Київ, 03680, Україна.

**Вітомська М. В.**

[marinavitomskaya@gmail.com](mailto:marinavitomskaya@gmail.com)

<https://orcid.org/0000-0002-5163-3954>

Національний університет фізичного виховання і спорту України

вул. Фізкультури, 1, Київ, 03680, Україна

*Received: 16.06.2019*

*Принята в редакцію: 16.06.2019*