The role of local government units in increasing access to therapeutic rehabilitation services for patients with musculoskeletal diseases

Karolina Sobczyk*¹, Mateusz Grajek*², Joanna Woźniak-Holecka³

¹Department of Health Economics and Management, Faculty of Health Sciences in Bytom, Medical University of Silesia in Katowice, Katowice, Poland. ORCID: 0000-0003-1632-7246

²Department of Public Health, Faculty of Health Sciences in Bytom, Medical University of Silesia in Katowice, Katowice, Poland. ORCID: 0000-0001-6588-8598

³Department of Health Promotion, Faculty of Health Sciences in Bytom, Medical University of Silesia in Katowice, Katowice, Poland. ORCID: 0000-0002-4468-063X

*Correspondence:
Karolina Sobczyk, PhD
Piekarska 18
41902 Bytom, Poland
ksobczyk@sum.edu.pl

Abstract
Chronic diseases of the osteoarticular and muscular system belong to a group of health problems that lead to a limitation of the organism's efficiency, making it difficult or impossible
for individuals to function normally. Of the forms of treatment used for chronic diseases of the osteoarticular system, rehabilitation is by far the most common. These activities are mainly financed by the National Health Fund, as well as by social insurance. A complementary role is played by local governments that finance medical rehabilitation for their residents in the form of health policy programmes, implemented as public health tasks. An important argument in favour of rehabilitation at the self-governmental level is the long waiting time for medical rehabilitation services financed by the National Health Fund.

The aim of the paper was to show the role of local government in increasing access to therapeutic rehabilitation services for patients with musculoskeletal diseases. The paper discusses such issues as the importance of musculoskeletal diseases for the efficiency of individuals, organization and financing of guaranteed services in curative rehabilitation, as well as increasing access to these services at the local government level.

**Keywords:** health policy programs, local government units, public health, health economics.

**Background**

Chronic diseases of the osteoarticular and muscular system belong to a group of health problems that lead to functional limitation, making it difficult or impossible for individuals to function normally. As indicated by studies, in the population of people over 65 years of age, diseases of the osteoarticular and muscular system were the cause of half of the cases of functional limitation [1]. According to other data, the problem nationally affects more than 30% of women and 8% of men over 50 years of age [2]. The significant impact of osteoarticular and muscular diseases on the general health of the population is mainly convinced by the global scale of the problem. In 2015, the recorded number of people in the world suffering from ailments of the osteoarticular and muscular system exceeded 1.3 billion. In this number the most numerous were people experiencing low back pain - nearly 540 million people and patients suffering from osteoarthritis - about 240 million cases [3].

Diseases in the group of problems related to the musculoskeletal system have a very significant impact on the quality and conditions of life of people experiencing health problems of this kind. They are the most common cause of disability and also have a significant impact on the psycho-physical condition of people who suffer from them. Their impact in the social dimension is even greater because they strongly burden not only the patients themselves, but also their immediate environment, including family members. This is related to the characteristics of this group of diseases, which, although they have different etiologies and courses, are often associated with similar consequences, such as pain and reduced mobility,
which may take on a chronic or acute form. These symptoms tend to increase with age and are significantly associated with lifestyle factors such as physical inactivity and obesity. Both the prevalence of unfavorable health behaviors and the process of progressive aging of the population and the steadily growing number of elderly people make the risk of an increasing burden of musculoskeletal diseases in the population high, which, in turn, raises the need for primary prevention activities, but also increases the demand for secondary prevention, concerning people with already diagnosed health problems, especially in terms of rehabilitation and prevention of disease aggravation and complications, including further deterioration of the quality of life of affected individuals [4].

Local governments, through the implementation of their own tasks of health promotion and protection, implement public health tasks, as defined by the Law of 11 September 2015 on public health [5]. These tasks include the development, financing and implementation of health policy programs, including those related to therapeutic rehabilitation.

The aim of the paper was to show the role of local government in increasing access to therapeutic rehabilitation services for patients with musculoskeletal diseases. The paper discusses such issues as the importance of musculoskeletal diseases for the efficiency of individuals, organization and financing of guaranteed services in curative rehabilitation, as well as increasing access to these services at the local government level.

**Organization of therapeutic rehabilitation services at the national level**

Among the forms of treatment used for chronic diseases of the osteoarticular system, rehabilitation procedures are by far the most common. According to the content of the Regulation of the Minister of Health of November 6, 2013 on guaranteed services in the field of medical rehabilitation, persons insured in the National Health Fund are guaranteed the possibility to benefit from medical rehabilitation services [6]. These services are provided in conditions:

- outpatient services, including outpatient rehabilitation care (medical rehabilitation consultation) and outpatient physiotherapy (physiotherapy visit, physiotherapy treatment);
- home, including rehabilitation medical advice and home physiotherapy (physiotherapy visit, physiotherapy treatment);
- a center or a day-care center covering systemic rehabilitation (including for specific patient groups), cardiological and pulmonological rehabilitation, as well as
rehabilitation of children with developmental age disorders, persons with hearing and speech impairment and persons with visual impairment;

- inpatient rehabilitation, including general, neurological and cardiac rehabilitation.

Rehabilitation of patients with osteoarticular diseases in this case falls within the scope of systemic rehabilitation. The entity that provides inpatient rehabilitation services is obliged to provide patients with free drugs, foodstuffs for special nutritional purposes and medical devices, if they are necessary for the performance of the service [7].

For rehabilitation in outpatient settings a referral can be issued by any health insurance physician. Within the guaranteed benefits one patient is entitled to no more than 5 procedures per day in a 10-day therapeutic cycle, including physical therapy, kinesitherapy and massage [6].

A referral for rehabilitation in a home setting can be issued by a PCP or a specialist. This benefit is provided for one patient for up to 80 treatment days per calendar year and includes no more than 5 treatments a day. If justified by medical reasons and the need to achieve the treatment goal, the duration of rehabilitation can be prolonged by a decision of the physician ordering the procedures, with a written consent of the director of the appropriate voivodship unit of the NFZ [6].

A referral for general rehabilitation in a day-care center or department can be issued by a PCP or selected specialists indicated in the Regulation on the Guaranteed Medical Rehabilitation Services. The duration of the above-mentioned benefit is from 15 to 30 treatment days for one patient, covering on average 5 procedures a day. If justified by medical reasons and the need to achieve a treatment goal, the duration of rehabilitation can be extended by a decision of a physician conducting rehabilitation, with a written consent of the director of a relevant voivodeship department of the National Health Fund [6].

A referral for inpatient general rehabilitation can be issued by a specialist from selected departments or outpatient clinics as specified in the regulation on guaranteed benefits in inpatient rehabilitation. This rehabilitation for a single patient lasts up to 6 weeks. If justified by medical reasons and the need to achieve a curative goal, the duration of rehabilitation can be prolonged by a decision of a physician running the rehabilitation, with a written consent of the director of a relevant voivodship unit of the NFZ [6]. The above-mentioned services are settled within separate groups of benefits defined in the Uniform Patient Groups (UGP) catalog. In this case, the services are financed within the Group based on the assessment of the severity of the patient's clinical condition according to medical scales specified in the Regulation of the
President of the NFZ concerning the conclusion and performance of agreements within this type of services [8].

Among the guaranteed services offered to adult patients with musculoskeletal diseases are also those in the field of spa treatment, which is an integral part of secondary prevention, including [9]:

- Adult inpatient spa treatment (21 days),
- spa sanatorium treatment of adults (21 days),
- spa rehabilitation for adults in a hospital or spa sanatorium (28 days),
- Adult outpatient spa treatment (6-18 days).

The services of spa in-patient treatment and spa rehabilitation in a hospital are fully financed by the NHF and their duration can be extended once upon the request of the spa physician with the consent of the voivodeship branch of the NHF referring for the treatment. It is not possible to extend the duration of spa rehabilitation services for adults in a sanatorium and of spa sanatorium treatment. Patients in this case incur partial payment for board and lodging for each day of stay. The level of financing by the patient depends on the conditions of accommodation and the billing season [9].

Therapeutic rehabilitation services can also be provided in the framework of disability prophylaxis carried out by the Social Insurance Institution (ZUS). In case of musculoskeletal disorders the insured can undergo rehabilitation on an outpatient or inpatient basis. The benefits include [10]:

- various forms of physical rehabilitation, i.e. individual kinesitherapy, group kinesitherapy and exercises in water;
- physical therapy (heat therapy, cryotherapy, hydrotherapy, treatment with high and low frequency electromagnetic fields, ultrasound treatment, laser therapy, classical and vibration massage);
- Psychological rehabilitation, including but not limited to psycho-education and relaxation training;
- Health education in the field of proper nutrition, knowledge of risk factors for civilization diseases, knowledge of health risk factors at work, basic rights and obligations of an employer and an employee, continuation of rehabilitation at home after the rehabilitation period (instruction).

**Organization of therapeutic rehabilitation services at the local government**
The public health tasks are financed from the funds at the disposal of the minister in charge of health, other ministers or central government administration bodies, executive agencies and other state organizational units (including the National Health Fund) and local governments [5]. In addition, local self-government units can obtain funds for implementation of PPZs from European funds as well as under public-private partnership.

Pursuant to the Act on Health Care Providers, the NFZ may transfer funds to subsidize health policy programs implemented by TSUs within the scope of providing health services other than those specified in the lists of guaranteed benefits. This co-financing may not exceed [7]:

- 80% of the funds provided for the program of TSUs with a population of 5,000 or less,
- 40% of the funds provided for the program of TSUs with a population of more than 5,000.

The Act on Public Health Care Services obliges the NHF to include in the fund financial plan a reserve for financing PPZ in the amount not exceeding 0.5% of the costs of health care services defined for a given department in the draft financial plan. However, the creation of this reserve cannot result in a decrease in the cost of financing by the NHF's OW of health care services for insured persons [7]. In 2017 and 2018, it was possible for the NFZ to subsidize the benefits provided under the PPZ in cases where these were health care benefits other than those specified in the lists of guaranteed benefits, so these were mainly vaccine programs. As of 2019, an amendment to the regulations introduced a change in the scope of subsidizable benefits provided as part of PPZ, so that now these are benefits included in the lists of guaranteed benefits, including primarily screening for cancer and other civilization diseases. Services offered as part of health policy programs in the area of curative rehabilitation may also be subsidized by the NFZ [11].

The vast majority of health policy program projects planned by local governments in the area of rehabilitation include an information and education campaign, as well as comprehensive rehabilitation of program participants. Within this path of the patient in the program, especially in large provincial programs, there are [12, 13, 14, 15]:

1) First medical visit performed by a physician specialized in medical rehabilitation, including: subjective examination (medical history) and physical examination, analysis of
the medical documentation provided by the patient, determination of the absence of contraindications to participation in the Program, obtaining from the patient the necessary declarations and consent to participate in the Program, planning of an individual rehabilitation plan, issuance of medical recommendations in writing, possible recommendation of a surgical/neurosurgical/orthopedic or other indicated consultation along with issuance of an appropriate referral and indication of the health care provider where the patient may receive the service.

2) First physiotherapy consultation, including interview with the patient, assessment of health condition on the VAS scale, conducting health assessment questionnaire HAQ, WHOQOL-BREF quality of life assessment and IPAQ physical activity assessment with recording the results in an Excel sheet, weight measurement with calculation of BMI, health education on secondary prevention of the disease unit diagnosed in the patient;

3) Educational activities designed to enhance the return to work process by enabling the patient to understand their disease and the treatment process, including health education meetings, nutrition education, and psychoeducation

4) Individual rehabilitation plan adapted to the needs resulting from the patient's health condition and the scope of physiotherapeutic assistance needed, taking into account the criterion of comprehensiveness, earliness and continuity of the rehabilitation process, including: kinesitherapy and physical therapy procedures selected by the medical rehabilitation doctor according to individual indications of the patient, minimum 2 procedures a day, including one kinesitherapy, maximum 5 procedures a day, minimum 3 kinesitherapies in the form of individual work with a patient for the whole rehabilitation cycle;

6) Second physiotherapy consultation provided 2 months after completion of educational activities and individual rehabilitation plan;

7) Follow-up medical visit by a medical rehabilitation specialist 2 months after completion of educational activities and individual rehabilitation plan.

In addition, training activities for medical staff are implemented under selected programs. Their purpose is to increase the qualifications of medical personnel in the field of modern techniques of rehabilitation of chronic diseases of the musculoskeletal system. The contents of the trainings concern, among others, complexity of management in rehabilitation of patients with chronic diseases of the musculoskeletal system, latest guidelines and recommendations concerning the discussed issues, modern methods of physiotherapy and occupational therapy, application of questionnaires and other health assessment tools in medical
rehabilitation, as well as the necessity of including health education and psycho-education in rehabilitation of these patients [14, 15].

Summary

The consequences of diseases of the osteoarticular and muscular system, in particular those of a chronic nature, significantly affect the reduction of physical fitness of individuals, including the ability to undertake employment and limitations in carrying out the activities of daily life. Actions proposed in local government health policy programmes are an important element of preventing disability and exclusion from the labour market of the inhabitants of particular communes, poviats and voivodeships, affected by the problem of the above mentioned group of diseases, and their undertaking is justified by epidemiological data and financial data in the scope of expenses incurred by Social Insurance Institution (ZUS) due to social insurance benefits. The restoration of full or maximum physical and mental capacity, as well as the ability to undertake professional activity and participate actively in the social life of patients with chronic diseases of the locomotor system is possible thanks to comprehensive rehabilitation measures. A significant argument supporting the necessity of rehabilitation at the self-governmental level is the long waiting time for medical rehabilitation services.

References:

6. Ordinance of the Minister of Health of 6 November 2013 on guaranteed benefits in the field of medical rehabilitation (Journal of Laws 2013, item 1522).


8. Order no. 130/2016/DSOZ of the President of the National Health Fund of 30 December 2016 on defining the conditions for conclusion and implementation of contracts in the types of therapeutic rehabilitation and health programs in the scope of services - treatment of children and adults with coma.

9. Regulation of the Minister of Health of 23 July 2013 on guaranteed benefits in the field of spa treatment [Journal of Laws 2013, item 931].


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