Minister of Health
Republic of Poland

Appendix to Resolution No. 196/2021 of the Council of Ministers of 27 December 2021

ZDROWA PRZYSZŁOŚĆ (HEALTHY FUTURE)

STRATEGY FRAMEWORK FOR THE DEVELOPMENT OF THE HEALTH SYSTEM FOR 2021-2027, WITH AN OUTLOOK TO 2030 – SELECTED PARTS

MINISTRY OF HEALTH

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INTRODUCTION

Maintaining health is not only a prerequisite for remaining socially or economically active, but also one of the key dimensions of a good quality of life and social inclusion. Increasing healthy life expectancy ultimately improves the quality of life. Health is a prerequisite for economic development due to the fact that a healthy population translates into higher productivity and longer professional activity. The health of Poles is systematically improving, but in many aspects, especially in relation to diseases of affluence, the progressing ageing of the population and epidemiological threats, there are deficits to be eliminated, which requires, for instance, comprehensive support in the form of the implementation of system solutions[1].

For years, the health system in Poland has been assessed negatively by Poles, as shown by regular surveys. More than half of Poles are dissatisfied with the way health care works. Slightly less than 50% of the respondents believe that problems with the availability and quality of services provided under general health insurance are partly caused by insufficient investment in health care and partly by the fact that the funds allocated for this purpose are poorly used.

For years, measures have been taken in our country to improve the accessibility of health services and, above all, to increase health expenditures. The amendment to the Act on health care services financed from public funds of 2018 introduced a gradual increase in the expenditure on health care, which is expected to reach 6% of GDP in 2023. The Polish Deal programming document provides for a further increase in expenditure of up to 7% of GDP by 2027. Despite efforts made to reform the health system between 2015 and 2019, a very limited improvement in the availability of health services can still be observed. The shortage of services is caused by not only insufficient funding for health care but also demographic processes. Moreover, there are also problems related to increasing staffing shortages and ageing health care staff. The problems in the sector have been exacerbated by the growing ineffectiveness of primary health care and the overgrowth of the most expensive form of care, i.e. hospitals. There is a growing conviction that the Polish health system is approaching the limits of its capacity to respond to new challenges, which can lead to the system collapsing under the pressure of demographic and epidemiological phenomena. It is therefore essential to develop a well-planned and coherent health system development policy, which will be revolutionary and strategic in nature and which will be implemented over several years.

The main strategy document defining the directions of development of Poland is the "Strategy for Responsible Development for the Period up to 2020 (including the perspective up to 2030)". The document adopted by the Council of Ministers on 14 February 2017 as a development strategy within the meaning of the Act of 6 December 2006 on the Principles of Development Policy (Dz. U. [Journal of Laws] of 2021, item 1057) sets out development objectives in the area of medium-and long-term economic policy. This strategy set new principles,objectives and priorities for the economic, social, health and spatial development of Poland. It includes the concept of "health in all state policies", which has also been adopted in many international forums. It means that everyone benefits from good health because it improves employee productivity, enhances learning capacity, strengthens families and communities, supports self-sustaining habitats and environments, and contributes to the improvement of security, reduction of poverty, and better social security.

The strategy document "Zdrowa Przyszłość (Healthy Future). Strategy Framework for the Development of the Health System for 2021-2027, with an outlook to 2030" (hereinafter: "Healthy Future") is a public policy within the meaning of the concept of Poland's development management system implemented on the basis of the Act on the Principles of Development Policy. A public policy is a document that defines the basic determinants, objectives and directions of the social, economic and spatial development of the county in a given field or area, which arise directly from the development strategy. "Healthy Future" identifies the main challenges and provides directions of change and development of the health system.

This document is a continuation of "Policy Paper on Health Care for 2014-2020. National Strategy Framework"

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[1] *Health life expectancy in Poland in the years 2009-2019:* link: https://stat.gov.pl/obszary- tematyczne/ludnosc/trwanie-zycia/trwanie-zycia-w-zdrowiu-w-polsce-w-latach-2009-2019,4,1.html (p. 20: Table 3 and Figure 3).

(hereinafter: "Policy Paper"), which presented a long-term vision of the development of the health system in Poland, as well as strategic objectives and tools for their achievement in years 2014-2020. The "Policy Paper" was the first document in Europe to describe the state of the national health system in such detail.

As one of the EU Member States, Poland is obliged to develop and implement this strategy document. To receive EU funds for the implementation of certain actions under the cohesion policy funds, all member states are required to meet the baseline conditions for the perspective for 2021-2027 in specific areas. In the area of health, a national or regional strategy framework for health policy was identified as a baseline condition consisting of 3 elements:

1) mapping of health and long-term care needs, including with respect to medical and care staff;
2) measures to ensure the effectiveness, sustainability, availability and affordability of health services and long-term care, with a particular focus on those who are excluded from health and long-term care systems, including those who are the hardest to reach;
3) measures to promote community and family services through deinstitutionalisation, including preventive care and primary health care, home care, and community services.

This strategy document fulfils the last two criteria of the baseline condition.

The issue of providing an adequate level of health care is an element emphasised in many international documents. Ensuring a healthy life for all people of all ages and promoting well-being constitutes objective no. 3 of "2030 Agenda for Sustainable Development", i.e. the UN strategy document for the coming years. At the EU level, the document that sets out the main challenges for the Community in the coming years is "European Green Deal for the EU and its citizens". It is a new strategy for growth that aims to transform the EU into a fair and prosperous society, living in a modern and competitive economy that achieves zero net greenhouse gas emissions in 2050 and where economic growth is decoupled from the use of natural resources. It also aims to protect, preserve and enhance the natural capital of the EU and to protect the health and well-being of citizens from environmental risks and negative environmental impacts.

The outbreak of the pandemic caused by the SARS-CoV-2 virus in 2020 curtailed planned reform efforts, hampered the economic development of countries and, above all, placed an enormous strain on the health system. The pandemic exacerbated the problems that health care in Poland had been facing for years.

"Healthy Future" is the most important health care strategy document for the country. It outlines the main actions and necessary directions for change that need to be taken to ensure that citizens have access to quality health services. The set objectives and tools provide a strategy framework for the activities of all institutions in health care. It includes the assumptions of the socio-economic programme "Polish Deal", where the health system is one of the main areas, and the guidelines of the National Recovery and Resilience Plan. It also refers to other key documents prepared by the Ministry of Health, especially the National Health Programme and the National Oncology Strategy.

The document also implements postulates developed through extensive public consultations conducted as part of the national debate on the directions for change in health care "Together for Health" among health care experts and practitioners. A team led by Prof. Piotr Czauderna and a team responsible for giving opinions on changes in health care led by Prof. Tomasz Hryniewiecki played a significant role in developing the assumptions for this document.

This strategy document is a comprehensive response to new challenges facing the broadly defined socio-economic policy of the modern state, including, in particular, in the area of health. The expected outcome of the proposed public policy is an increase in healthy life expectancy and an improvement in the health of the population. The above objective cannot be achieved without the provision of adequate medical care to improve the health of citizens through changes in the health system, improvements in the quality of and access to health services and better adjustment of health care to changing demographic trends.
Thus, the vision guiding the implementation of this document is a friendly, modern and efficient health system contributing to the well-being of the population.

In the first part, the document presents the demographic and epidemiological situation and an overview of the health sector in Poland: organisation of the health system, organisation of health services, coordinated care and deinstitutionalisation, preventive care, human resources, infrastructure, information technology, innovation, R&D in medicine, quality, science, and the response to emergencies. The diagnosis drew on a number of different sources, including the map of health needs.

In the following section, the document identifies the most relevant strategic determinants of policy implementation in health care. Then, it defines a vision and objectives grouped into areas: patient, processes, development, and finance. To implement this vision, 15 objectives were identified. They will be implemented through the six directions of intervention set out to achieve these objectives. To facilitate the implementation of the objectives, the directions of intervention were divided into eighteen tools. Both the objectives and the directions of intervention are interlinked and arise from the diagnosis.

One of the desirable directions for the development of the health care system identified in "Healthy Future" is deinstitutionalisation. Detailed solutions were adopted first for two areas: mental health care and care for the elderly. Two documents setting out the strategic framework for the process have been prepared for them and attached as appendices to "Healthy Future". These areas were chosen due to the demographic and epidemiological situation in Poland. They are identified by the EU institutions as one of the priority areas requiring immediate action. There are further plans to extend the deinstitutionalisation process to other social groups and disease areas.

The strategic framework for deinstitutionalisation consists of a diagnostic section, including demography and epidemiology, a description of the health situation, needs and a broad description of the support currently available, i.e. health care in the health system, divided into outpatient, hospital, home and day care.

In the field of care for the elderly, improving the quality of life, related to the health of patients and their caregivers in the local community, was identified as the main objective. For the purposes of its implementation, the following strategic areas were identified:

1) development of human resources,
2) development of forms of day care,
3) development of forms of home care,
4) development of innovative forms of care,
5) support for informal caregivers,
6) coordination of community care.

Actions in the above-mentioned area, especially those financed from EU funds, will be undertaken in line with analogous actions for the deinstitutionalisation of social services indicated in the Strategy for the Development of Social Services developed by the minister responsible for social policy.

In the field of mental health care, the main objective is to improve the quality of life of the population related to mental health and to ensure appropriate conditions of care in the mental health system. The above objective will be achieved through investment in:

1) human resources - to improve the staff situation and the quality of education in psychiatry, as well as the staff of other specialities involved in mental health care;
2) system - to change the organisation of the provision of mental health services and increase the availability of mental health services;
3) infrastructure - to adapt health care providers to a community-based model of mental health care;
4) health of the population - to promote mental health and prevent suicides and self-destructive behaviours.

Each strategic area has a specific objective and specific actions assigned to it for the purposes of its implementation.

Separate sections are devoted to the coordination, implementation, monitoring and evaluation system and indicators for achieving the objectives of the draft strategy document.

"Healthy Future" sets out the strategic framework for necessary actions. At the operational level, it will be complemented, e.g., by national and voivodeship transformation plans, which will replace regional priorities of health policy and will be an important element in the operationalisation of the conclusions drawn from the map of health needs.

The document also includes actions to be financed from both national and EU funds. The way in which budget funds and EU funds are managed and the way in which stakeholders may apply for financing from these funds are governed by separate regulations.
The implementation of the document does not affect changes in regulations with respect to the management of financial flows and their volume. This is what distinguishes "Healthy Future" from the "Policy Paper", which only provided the basis for spending EU funds.

OBJECTIVES OF THE HEALTH POLICY, DIRECTIONS OF INTERVENTION AND TOOLS FOR THEIR IMPLEMENTATION

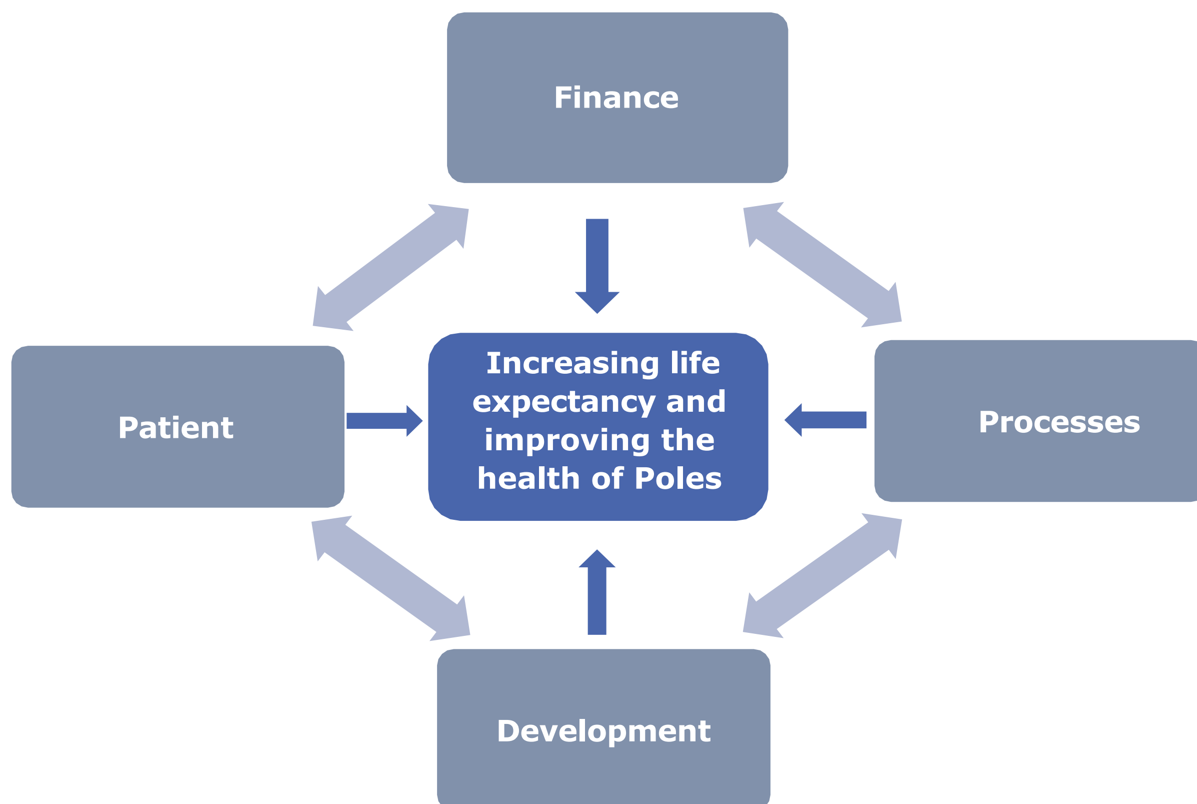
The main directions for change in the health system were developed, taking the identified needs into account. They were developed using the concept of a balanced scorecard adapted to the realities of the public health system. The use of the balanced scorecard as a strategic management tool in the public health system provides a comprehensive view of the system, identifies objectives and necessary directions for change and is a tool for monitoring and evaluating their implementation. In this concept, the organisation, or in this case the system, is considered from four perspectives: finances, development of organisational resources, processes and, finally, the end user, i.e. in the case of the health system - the patient. With respect to each of the perspectives, objectives, initiatives and indicators of their achievement, together with target values, are set and together they constitute the implementation of the vision and the achievement of the overarching goal - the mission for which the system was created.

Access to health care services is one of the basic elements of social security. It is regulated, e.g., by Article 68 sec. 2 of the Constitution of the Republic of Poland, which grants citizens the right to health care and equal access to health care services financed from public funds. Caring for the health of citizens is dictated by humanitarian considerations and a concern to improve the quality of life of individuals. Health is a prerequisite for economic development due to the fact that a healthy population translates into higher productivity and longer professional activity.

Mission

Providing equal and adequate access
to quality health services
through a friendly, modern and efficient health system

Figure 70. Diagram showing the main areas of changes in the health system



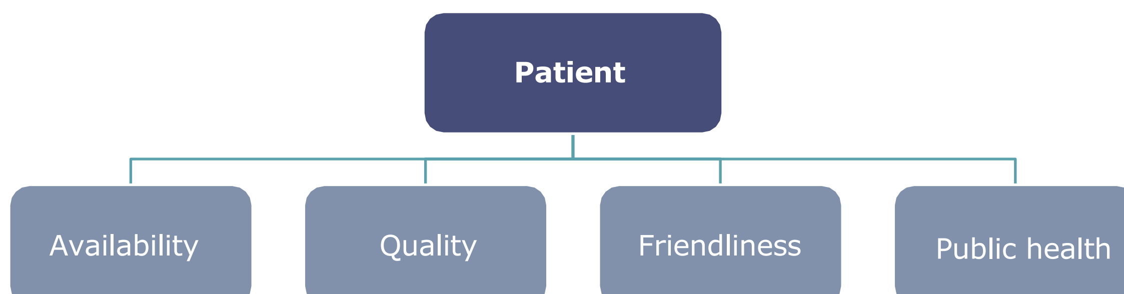
Vision

Increasing life expectancy and improving the health of Poles

PATIENT

From the perspective of the mission of the health system, the patient perspective is the central link of the balanced scorecard. It is the patient who is the ultimate beneficiary of health services, and healthy life expectancy is the best measure of the effectiveness of the system. The achievement of this effect is affected by various factors. The most important characteristics related to the provision of health services to the patient include **quality**, **availability**, and **friendliness**. The effective prevention of diseases and deterioration of health through actions taken in the area of **public health** should also be overlooked.

Figure 71. Diagram presenting the elements of the Patient area



The following objectives were set in the *Patient* area:

- ***Objective 1.1 [Availability] Ensuring equal access to health services in a quantity and at a time adequate to the legitimate health needs of the population***
- ***Objective 1.2 [Quality] Improving the safety and clinical effectiveness of health services***
- ***Objective 1.3 [Friendliness] Increasing patient satisfaction with the health care system***
- ***Objective 1.4 [Public health] Developing preventive care, promoting health and health-oriented attitudes***

Availability

The public health system should guarantee the availability of services in a quantity and at a time adequate to the legitimate health needs and on the basis of equal access depending only on the patient's health and not limited by geographical considerations, financial status or architectural barriers. Achieving this objective with limited funds and other resources (including human resources and infrastructure) will not be easy. In this context, it is very important to increase the supply of services, e.g., by **removing limits** in selected groups of services, especially those for which limited availability results in the deterioration of the patient's health and, consequently, in the provision of services at more expensive levels of the system (e.g. in hospitals). It should also be stressed that problems related to the availability of services are often a consequence of staffing or infrastructure shortages, hence the long-term availability of services is strongly linked to the development of staff and infrastructure in the health system. Therefore, in light of demographic change, efforts aimed at the **deinstitutionalisation** of care, e.g. through the **development of home and community care** and increased use of **telemedicine solutions, are of particular importance.** These solutions are often characterised by greater cost efficiency, fewer barriers to access and, at the same time, fewer requirements for the use of specialist human resources and infrastructure. The **introduction of pharmaceutical care services**, including, for example, the continuation of prescriptions or support for patients with minor ailments can also be a solution to improve availability.

Actions should also be taken to reduce inequalities in access to services. An important element here is the identification of **basic regions of security** (based on the maps of health needs) and **taking initiatives to eliminate the so-called "white areas"** and problems related to the availability of services through investments in infrastructure and a **system of incentives for the relocation of medical staff**, including through the establishment of mechanisms of preferential financing for the development of health care providers, especially PHC/OSC clinics in areas with limited access to services. Architectural barriers contributing to inequalities in access to services should also be taken into account. They can be eliminated through **infrastructure upgrades** to implement accessibility standards. The development of digital services (such as **e-registration**) increasing transparency, removing information barriers for patients, service providers and the payer, and creating opportunities for better identification of health needs, coordination of the treatment process and prevention of wasted resources (e.g. as a result of patients missing appointments) is an important element, as well.

Another important aspect is the availability of pharmacotherapy, including in particular **market availability** and **reimbursement availability**. In this context, it is very important to further develop **tools to monitor the drug distribution chain,** overcome insufficient availability, **systemically inform** medical professionals, **pharmacists and patients** about possible limitations of availability and to react to such events at an early stage. Moreover, the events of the last few years show that it is appropriate to **support the development of the production of active substances** in the country, enhancing the country's drug security in crisis situations. It is also still necessary to increase the access of patients to **modern drug technologies** with proven effects, including in particular long-term technologies.

Quality

The health system should *provide services of high clinical quality*, i.e. guaranteeing safety and high efficacy supported by the current state of scientific knowledge and standards of medical art. A very important element of ensuring high quality in the public health system is the introduction of long-awaited system quality-focused solutions. The basis for quality improvement in the health system is transparent monitoring of irregularities. For this purpose, it is necessary to develop legislative solutions favouring transparency, i.e. providing legal security for medical professionals making necessary efforts to save the patient's health and life, as well as enabling patients to claim compensation efficiently for the consequences of mistakes made by such medical professionals. Key solutions here are the so-called **no-fault *clause***, the creation of an **adverse event register** and an adverse event **compensation fund** for patients. The key role of further development of **accreditation**,

including in particular the introduction of compulsory accreditation for hospitals and diagnostic laboratories providing services in the public health system and the development and dissemination of accreditation at other levels of the system, should also be emphasised. Another important element is the inclusion of health care providers in a compulsory **system for monitoring and reporting on the quality of treatment** that enables the evaluation of individual service providers to be compared based on objective criteria (*benchmarking*). This solution is supported by the development of **pay-for-quality mechanisms** by the payer. In the area of pharmacotherapy, actions to **reduce antibiotic resistance**, the establishment of the **system for monitoring and supporting the effectiveness of pharmacotherapy** enabling, among other things, the monitoring of the achievement of therapeutic goals and the continuity of treatment, as well as adverse effects, as well as the identification and prevention of polypragmasy, are of particular importance from the point of view of quality.

Friendliness

Contact with the public health system should be characterised by a high level of friendliness in order to foster engagement and positive attitudes towards the treatment process and improve well-being at the difficult time associated with deteriorating health. At every stage of contact with public health care, the patient should navigate the system easily and intuitively (he or she should be navigated by it) and have access to reliable information about the treatment process and be actively involved in it. A key tool to improve the friendliness of the system is the **development of ICT tools** (e-services, hotline, telemonitoring centres) to support the **process of patient navigation** and the **exchange of information** in the system, including the provision of information on available services (including those funded under the social assistance systems), notification of scheduled appointments, etc. Another important element is the establishment of a **system to monitor patient satisfaction** with the health care services provided, taking into account the patient's opinion on the treatment, provision of information and extent of information provided (e.g. through the development of IKP and the use of hotlines). It is also crucial to **increase the role of patients** in shaping the health system by enhancing the role of social dialogue and their participation, e.g., via patient organisations and the Patient Ombudsman.

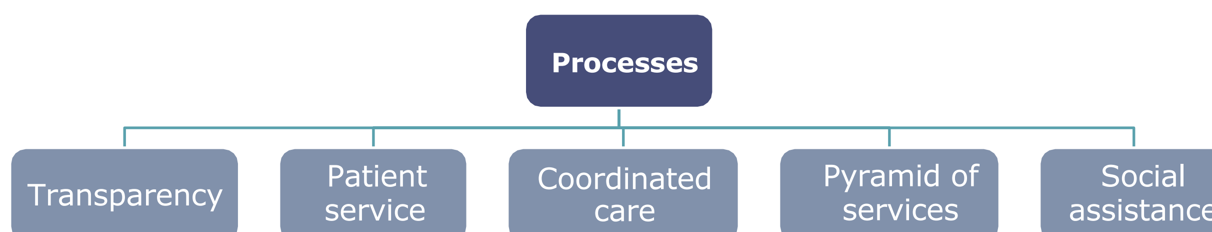
Public health

In addition to factors related to the treatment process, according to the "prevention is better than cure" principle, it is very important to prevent diseases and limit their development through effective public health actions, including health education, promotion of healthy lifestyles, development of preventive care, vaccination and screening tests that enable people to remain healthy or make it possible to detect changes at an early stage, where there is a greater chance of recovery and a reduced risk of complications. The first element contributing to the achievement of this objective is the development, updating and implementation of **national health programmes** for key chronic diseases of affluence, in particular addictions, obesity, occupational diseases, etc. Very important actions taken under the health programmes include the **implementation of prevention programmes**, the **promotion of health and health-oriented attitudes** (especially among children, adolescents and the elderly, as well as in the area of mental health) and the strengthening of activities in the area of **environmental health** (especially in the scope of education, monitoring of risks in workplaces, promotion of healthy food, improvement of environmental conditions, and reduction of health risks such as environmental or behavioural risks). An important element supporting preventive care is **preventive routine health checks** and **screening programmes** in high-risk groups, together with mechanisms encouraging patients to make use of such programmes. In addition, **health education** activities increasing knowledge of health and factors affecting it, as well as shaping health-oriented attitudes and skills for navigating the health system, need to be intensified. It is also necessary to take actions aimed at making improvements in the area of vaccination, including its **development through the expansion of the vaccination programme**, the introduction of an electronic vaccination card and the expansion of the catalogue of persons authorised to qualify patients for vaccination and administer vaccines.

PROCESSES

The achievement of the objectives set out in the patient area depend on the effective organisation of processes. The proper organisation of the system supports the effective fulfilment of health objectives through the appropriate allocation and use of limited resources. In this perspective, there are 5 key areas: **transparency**, **patient service**, **care coordination**, **pyramid of services**, and **social assistance.**

Figure 72. Diagram presenting the elements of the Processes area



The following objectives were set in the *Proceses* area:

- ***Objective 2.1 [Transparency] Ensuring the transparency of procedures***
- ***Objective 2.2 [Patient service] Improving patient service processes***
- ***Objective 2.3 [Care coordination] Developing coordinated care***
- ***Objective 2.4 [Pyramid of services] Optimising the pyramid of services***
- ***Objective 2.5 [Social assistance] Exploiting the potential of synergies between health and social assistance systems***

Transparency

Ensuring the transparency of procedures is important from the point of view of patients, medical professionals, service providers, the payer, and the regulator. It helps all participants navigate the system, harmonises relationships between them, rationalises expectations, enhances security and facilitates settlements. From this perspective, a key action is the implementation of process innovation and the **standardisation of procedures** carried out in cooperation with medical consultants and scientific societies and preceded by a **regulatory review** and its **implementation** (reflected in settlement mechanisms). In particular, in the scope of **organisational standards of care, medical IT standards, the provision of telemedicine services, as well as diagnostic and therapeutic management** of more common disease entities. Another important element is transparency in reporting, which includes **organising record-keeping and reporting standards** (in particular those related to **medical registers**), eliminating redundant and duplicate reporting obligations, ensuring further automation of reporting processes, as well as improving the quality of data (and expanding the scope of data where appropriate), and **establishing transparent rules for the use and exchange of health data** for diagnostic and therapeutic purposes, as well as for the purposes of managing the health system, conducting research and carrying out research and development works.

Patient service

An important trend in the development of modern health care systems is "*patient-centredness*" - an approach that places the patient at the centre of the health care system in a way that ensures access to information, respects his or her dignity and allows him or her to participate in the decision-making process with respect to his or her treatment. Patient-centredness should also be the foundation of the public health system in Poland, hence the *improvement of patient service processes* has a special place on the list of objectives.
It is therefore essential to **develop, implement** and **monitor patient service standards** that will be universal in the entire public health system and to **award bonuses** for maintaining a high standard of patient service. It is

also important to provide **training to the staff of health care providers** (both medical and administrative employees) in the field of patient service. The **development of ICT tools** supporting patient service, as well as the process of monitoring it, is also integral to improving patient service in the public health system.

Coordination

The treatment process often requires the patient to consult several specialists and service providers. Therefore, the cooperation between the entities involved in the treatment process and the coordination of this process often becomes a key factor that ensures success. However, a lack of coordination and appropriate patient management through the system can undo the positive health effects often achieved with considerable effort and resources. For this reason, an important direction for the development of the Polish health system is the *development of coordinated care*. In this area, it is necessary to **develop the existing coordinated care models based on health value and create and implement new ones**, including comprehensive bariatric care, care for patients with cardiovascular diseases, diabetes and COPD and those who suffered a stroke. In the case of chronic diseases, it is also necessary to **establish a treatment process coordinator**, i.e. an entity responsible for the coordination of patient care and the continuation of treatment at an appropriate level (PHC, OSC, SD) depending on the diagnosis and severity of the disease. Coordination should integrate all entities involved in the process of supporting people in need of assistance with activities of daily living. In the context of the ongoing coronavirus epidemic, the scale of infections and possible complications, a **programme of comprehensive postcovid care and rehabilitation** is also likely to be necessary. It is crucial to strengthen the cooperation and functional links between the different levels of care, e.g. by **strengthening the consultative function** of OSC and hospital treatment for PHC, strengthening the integration of PHC and OSC and **implementing ICT tools to support communication and exchange of medical records**. Another important element is the creation of the **National Cancer Network** and the **National Cardiology Network** ensuring better coordination of care. The pilot project of the National Cancer Network yielded very promising results and should therefore be further developed. Not only did it succeed in improving access to medical practitioners and necessary tests, but there also was a several-fold increase in correct and complete test packages, which is crucial for proper oncology diagnosis. However, the aim of the National Cardiology Network is to build a programme that will enable unlimited access for cardiac patients to diagnosis and therapy, the coordination of treatment, the implementation of primary and secondary preventive care programmes and, thus, a reduction in mortality from cardiovascular diseases, which are still the main causes of death in Poland.

Pyramid of services

For the effective functioning of the system in terms of processes, it is necessary to provide services at the level that will be optimal from the point of view of costs (both for the system and for the patient) and health effects, the so-called "pyramid of services".

Starting with services provided closest to the patient, an important direction is the **development** of modern **community care** services and **home care** models using **telemedicine tools**. A key step in optimising the pyramid of services is to **increase the role of PHC** by allowing the contracting of PHC teams with expanded composition and competence (also in the field of specialist care and physical therapy), rewarding entities involved in preventive care and care for patients with chronic diseases, and increasing the competence of nurses (especially in the field of preventive care, vaccination and advice on uncomplicated health problems). An important direction is reducing the number of hospitalisations by increasing the competence of OSC, especially **transferring one-day surgical procedures** (also those performed with the involvement of an anaesthetist) to outpatient care, along with optimising the valuation of services, and expanding the catalogue of outpatient diagnostic specialist packages to reduce the number of non-invasive hospitalisations. Moreover, it is important to create system conditions for the **specialisation of hospital outpatient clinics** in the field of peri-hospital and highly specialist care dedicated to patients at risk of frequent rehospitalisation and with complex health problems and to limit the services provided by these clinics to patients whose needs can be met at lower levels of care. A very important element in the optimisation of the pyramid of services is implementing further **reforms of night and holiday health care (NHHC)** to relieve hospital emergency departments, introducing a three-tier system of care. The first level is a teleconsultation with a medical practitioner or a nurse supported by self-diagnostic tools as a form of first contact to address basic health problems, e.g. to issue a prescription or refer a patient to a higher level of care. The second level of NHHC involves a network of 24-hour outpatient clinics (in each district) to which the patient will be referred after teleconsultation. The third level, appropriate only for life-threatening emergencies, is the ED; in the absence of such circumstances, the patient will be redirected to the

lower level of NHHC. Finally, an important element in the optimisation of the pyramid of services will be the **redefinition of the hospital network**, including the modification of network eligibility and funding criteria, as well as the introduction of mandatory **mechanisms for monitoring clinical quality, patient service and management effectiveness** and related bonus mechanisms.

Social assistance

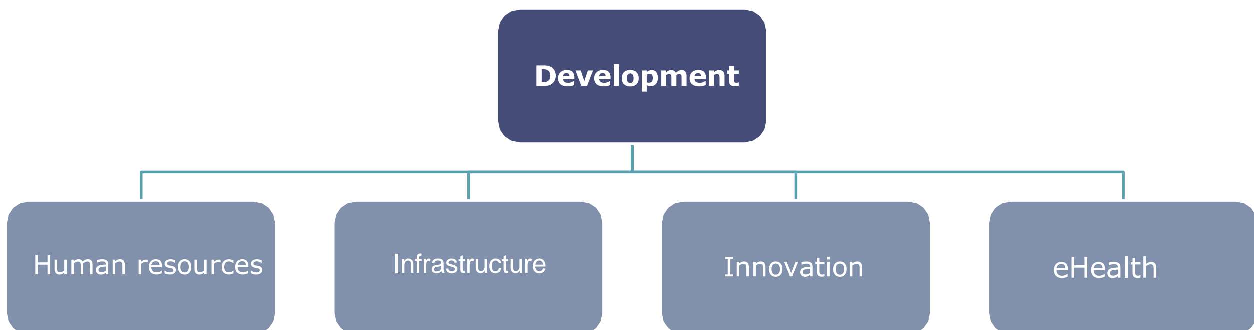
The health system is interconnected with the social assistance system. Therefore, proper cooperation between these two systems is essential to ensure the effective functioning of each of them individually and exploit the potential for synergy between them. The first step to achieving it is to **review social assistance services** and **improve the flow of information** in order to improve the management of the systems, especially to improve coordination and eliminate the duplication of services.

Important elements of care at the interface of the health system and the social assistance system include the organisation of support for people with dementia and disabilities, **the elderly** and **caregivers of people who need assistance with activities of daily living**. The **development of long-term care**, requiring, among other things, the deinstitutionalisation of care and an increase in the number of places in long-term care facilities, where necessary, by **converting parts of hospitals** with underused hospital beds in other wards into long-term care facilities, is also a challenge in the context of demographic trends.

DEVELOPMENT

Resources of the health system are its key element. Therefore, their development is a prerequisite for the improvement of the health system and, consequently, the well-being of the population.
In this area, **human resources**, **infrastructure**, **eHealth** and **innovation** are of particular importance.

Figure 73. Diagram presenting the elements of the Development area



The following objectives were set in the *Development* area:

- ***Objective 3.1 [Human resources] Supporting the development of the health system in the context of changing health needs***
- ***Objective 3.2 [Infrastructure] Developing and upgrading health infrastructure in line with the health needs of the population***
- ***Objective 3.3 [Innovation] Developing and disseminating modern and innovative solutions in health care***
- ***Objective 3.4 [eHealth] Developing and disseminating digital eHealth services***

Human resources

Human resources of the health system determine both the quality of the services provided and their availability. For this reason, it is crucial to *support the development of human resources in the health system in the context of the changing health needs* of the population in order to ensure the proper functioning of the system both in the short and long term. In this context, the key area is the **education system for medical, organisational, administrative and management staff in the health system**. In this area, it is very important to systematically **increase the limits of admissions to medical studies** and the number of training places, provide specialist education in fields relevant from the point of view of the epidemiological and demographic needs of the country, increase the flexibility of the education process in medical professions (e.g. by limiting the number of specialities), increase the use of modern technologies in the area of improving surgical and diagnostic techniques (especially in postgraduate education) and their uniform dissemination across the country, **develop non-medical skills in medical professions** and promote education in these fields. An important element of the promotion of medical studies is the introduction of a **system of loans and scholarships for medical students and specialist registrars**, which will be forgiven after a specified period of working in the public health system. Loans will also be provided to medical practitioners who have passed speciality examinations or returned from abroad. Apart from the elements relevant to the education of staff, it is very important to create good conditions for the current employees working in the health system, which includes **supporting the professional development of health system staff**, **improving working conditions and implementing a remuneration policy** to encourage graduates to stay in the country. Finally, it is also essential to develop **mechanisms for planning the distribution of medical staff** and redressing imbalances through an appropriate **system of incentives** to motivate medical staff to take up jobs in locations with staffing shortages. There will also be a fast path to enter the profession for nurses who are qualified but who are not working in their profession. There are also plans to further increase the salaries of young medical practitioners, especially in priority areas.

Infrastructure

An important determinant of the quality, availability and effectiveness of health services is the building and technical infrastructure of the health system. For this reason, the *development and modernisation of the health system infrastructure adapted to the changing health needs of the population* is a key priority of the health policy. The main actions in this area include investments in **building and technical infrastructure** and its **upgrades, as well as in the replacement and development of medical apparatus and equipment** to support organisational and process innovations that increase the effectiveness and quality of care. A particular priority in this context is investment the aim of which is to adapt health care providers to the **implementation of standards of availability** and care for the elderly. It is also very important to provide **infrastructure support to medical universities**, which will enable them to achieve their goals related to the development of staff working in the health system. In the context of an ongoing epidemic, it is also crucial to **adapt the infrastructure of the health system to take quick, effective and efficient actions** in emergencies and to **ensure the continuity and safety of health services** at all levels of the health system, including by adapting health care providers to the provision of services under a tight sanitary regime and using telemedicine.

Innovation

Developing and disseminating modern and innovative solutions in health care is another important direction of the strategy of development of resources in the health system.

Innovative solutions in health care make it possible to increase the effectiveness and efficiency of treatment and the use of human or infrastructure resources. A very important direction in this area is the development and dissemination of solutions combining the elements of telecommunications, IT and medicine, including technologies that optimise the time and work of medical practitioners and other medical professionals, self-diagnosis solutions and telemedicine solutions that are under-used. In the context of the **development of telemedicine**, it is important to adapt health care providers to the provision of "remote" health services by providing the necessary equipment and efficient connections, establishing **telemonitoring centres**, **educating** medical professionals and patients, eliminating regulatory inadequacies in this area and introducing clear **standards** for the provision of health services. **Increasing the scientific potential of the health sector** is also an important direction. In this context, it is important to **develop medical registers in a coordinated manner** and increase the quality and openness of the data they contain, which is an important resource in the health system the potential of which is not exploited enough. Moreover, it is crucial to strengthen the **role of and finance research**, **non-commercial clinical trials** (especially in the area of COVID-19) and **R&D works,**

among other things, by **establishing the Biomedical Hub** and the **Polish Plasma Fractionator**. Apart from the above, it is essential to intensify efforts in the area of the **development and application of artificial intelligence** and advanced analytical methods in health care, in particular in predictive, diagnostic and treatment processes, as well as for the effective management of the health system.

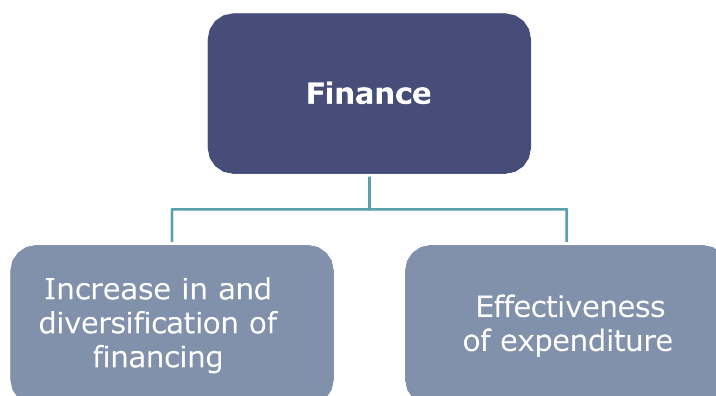
eHealth

The *development and dissemination of digital eHealth services* is a priority direction for the development of the Polish health system. As the experience related to the COVID- 19 epidemic has shown, in case of an emergency, not only do digital services facilitate the use of the health system and improve its functioning but they also directly help to save the health and lives of patients. In the coming years, it is necessary to further develop e-services, e.g., by **implementing** central **e-registration** for selected health services (the function is planned to be launched by the end of 2021), expanding the catalogue of EMD and keeping all medical documentation in electronic form, as well as developing and disseminating the existing solutions such as **IKP**, e-referral, promoting and disseminating the reporting of medical events to the eHealth Platform and the exchange of EMD between service providers, thanks to which medical professionals can easily and quickly access a patient's treatment history and selected types of medical records relating to him or her, which is an extremely important support in providing other health services to the patient and continuing treatment. It is also important to implement a **system for communication and exchange of information** between system participants (patients, medical professionals, pharmacists, health care providers, payer), including tools enabling the consultation of the diagnostic process and facilitating the coordination of services, as well as the elimination of irregularities of functions supporting the assurance of the quality of the services provided (e.g. by providing information on the risk of drug abuse, drug sensitivity or undesirable drug interactions), enabling the consultation of the diagnostic process and facilitating the coordination of services and the elimination of irregularities. The development of digital services must also be supported by actions to **develop the digital skills of patients and medical staff** in order to fully exploit their potential. It should also be stressed that eHealth solutions must be developed in cooperation with the representative of medical professions and patients to ensure that they are designed according to their needs and possibilities.

FINANCE

A prerequisite for achieving the objectives set in the other areas is securing the financing. Given the low level of financing of the health system that persisted over the years (compared to other EU member states/OECD countries) and the growing health needs of the population, it is necessary to **increase financing and diversify its sources** while ensuring an increase in the **effectiveness of expenditure**. The projects, objectives and actions set out in the document will be implemented while maintaining the macroeconomic stability of Poland, including, in particular, in the public finance sector.

Figure 74. Diagram presenting the elements of the Finance area



The following objectives were set in the *Finance* area:

- ***Objective 4.1 [Increase in and diversification of financing] Increasing public expenditure on health care***
- ***Objective 4.2 [Effectiveness of expenditure] Rationalising the mechanisms of expenditure***

Increase in and diversification of financing

A key challenge of the health policy is to ***increase public expenditure on health care***. The determinant here is the statutory commitment to **increase public expenditure on health to at least 6% of GDP** by 2023 and 7% by 2027, which would bring it closer to the average of OECD countries/EU member states. The statutory commitment to increase public expenditure on health to at least 6% of GDP by 2023 and 7% by 2027, will coincide with the requirement to pursue a fiscal policy that takes into account the constraints related to the applicable financial rules, including in particular the stabilising financial rule referred to in Article 112aa of the Public Finance Act. However, given demographic trends, it should be pointed out that further increases in health expenditures are necessary and inevitable. An important aspect related to the financing of health is the diversification of its sources and the decoupling of the system from budget subsidies. In this context, **health-promoting fees**, such as the so-called "sugar fee on beverages", are an important element, which on the one hand provide additional funds for health care and on the other hand promotes health-oriented attitudes. Fees restricting the use of OTC medicines, dietary supplements or products containing harmful trans-fatty acid isomers can serve a similar function. Another important element of the diversification of financing is the use of resources from the European Fund for Strategic Investments (EFSI) available under the EU cohesion policy (ERDF, ESF+, Cohesion Fund, Just Transition Fund), as well as funding instruments such as the National Recovery Plan, the EU4Health programme, and other foreign funds (Swiss, Norwegian and, possibly in the future, British mechanisms).

The possibility of introducing additional forms of insurance, in particular **care insurance** to finance long-term care, and **mechanisms for offenders** driving under the influence of alcohol and drugs to contribute to the costs of treating victims' injuries borne by the public health system should also be thoroughly analysed.

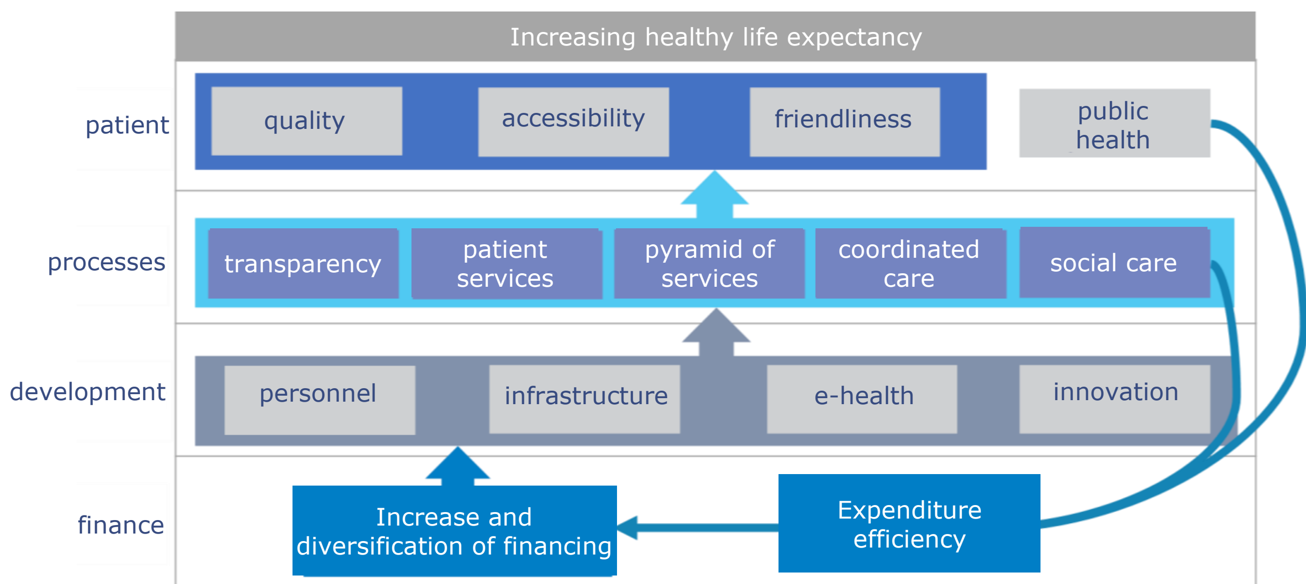
Effectiveness of expenditure

The final objective included in the balanced scorecard is to ***rationalise the mechanisms of expenditure***. In this context, it is crucial to develop **mechanisms of paying for quality and/or health effects** based on objective indicators and the provision of services according to the adopted standards. Another important action is to **review the list of guaranteed services**, the list of reimbursed medicines, medical devices and foods for particular nutritional uses in terms of their health effectiveness and to develop mechanisms for evaluating interventions in the health system in terms of their innovative nature and health value. It is also very important to develop tools to **counter abuse** in the health system. It is also very important to improve the operational efficiency of health care providers. In this context, the **reform of the hospital sector**, which absorbs a significant proportion of health expenditures and generates significant debt, is crucial. Moreover, it is necessary to **professionalise management** in the hospital sector by **improving the skills of health care managers** who have the necessary managerial competencies and knowledge of the specific nature of the health system and ensuring their continuing education. Another key element of the reform is the **implementation of a compulsory benchmarking system** for hospitals covering their financial and operational efficiency and the quality of services provided.

DIRECTIONS OF INTERVENTION

The objectives set out in the Balanced Scorecard identify the most important priorities for change in the health system. At the same time, the proposed actions often serve more than one purpose. For example, the development of infrastructure can contribute to improved availability, actions in the area of public health or processes can lead to improved effectiveness of expenditure (e.g. by preventing diseases or providing treatment at a more cost-effective system level), and the development of digital eHealth services can increase the friendliness of the system. Therefore, 6 directions of intervention were identified in order to achieve the objectives.

Figure 75. Diagram showing the relationship between changes occurring in the health system



The objectives will be fulfilled through the following directions of intervention:

- ***Direction of intervention 1: Developing preventive care, promoting health and health-oriented attitudes***
  - ***Tool 1.1 Implementing prevention programmes***
  - ***Tool 1.2 Implementing and carrying out actions to support the health of working persons***
  - ***Tool 1.3 Supporting actions shaping and developing health-oriented attitudes and projects promoting healthy lifestyles***
- ***Direction of intervention 2: Improving the quality, friendliness and effectiveness of health services through the standardisation and reorganisation of health care***
  - ***Tool 2.1 Improving the quality, friendliness and effectiveness of health services***
  - ***Tool 2.2 Supporting and developing coordinated care, including care for the elderly***
  - ***Tool 2.3 Supporting the deinstitutionalisation of care, including the development of community forms of care***
- ***Direction of intervention 3: Improving the accessibility and effectiveness of health care through the development and modernisation of health system infrastructure***
  - ***Tool 3.1 Providing infrastructure support to health care providers***
  - ***Tool 3.2 Strengthening efforts to adapt health care providers to the implementation of accessibility standards***
  - ***Tool 3.3 Providing infrastructure support for the emergency medical and emergency response system***
- ***Direction of intervention 4: Supporting the development of human resources in the health system in the context of adapting resources to the changing needs of the population***
  - ***Tool 4.1 Developing and supporting the education of medical practitioners***
  - ***Tool 4.2 Developing and supporting the education of nurses and midwives***
  - ***Tool 4.3 Developing and supporting education in other health care professions***
  - ***Tool 4.4 Developing and supporting the education of organisational/administrative/management staff in the health system***
- ***Direction of intervention 5: Developing digital services in the public health system***
  - ***Tool 5.1 Developing public digital eHealth services***
  - ***Tool 5.2 Developing digital skills of patients and medical staff and taking actions to increase the digital maturity of health care institutions***

- ***Direction of intervention 6: Developing and disseminating modern and innovative technologies in the health sector***
  - ***Tool 6.1 Developing and disseminating telemedicine solutions***
  - ***Tool 6.2 Developing the concept of using artificial intelligence tools in health care***
  - ***Tool 6.3 Increasing the scientific and R&D potential of the health sector***

Direction of intervention 1. Developing preventive care, promoting health and health-oriented attitudes

As indicated in the diagnostic section, disease prevention is actions that prevent the occurrence of diseases. Their aim is to eliminate or minimise the impact of the disease or disability or, if this is not possible, to delay the progression of the disease or disability[255]. The division of preventive care and its detailed definition are included in the diagnostic section of the document.

Taking preventive measures brings, in the short or long term, tangible benefits to the population in the form of:

1) improving health awareness of the population;
2) improving the health of the population;
3) increasing the detection of diseases at an early stage;
4) reducing the number of people who suffer from complications resulting from disease and permanent disability, reducing the incidence of diseases and the number of deaths;
5) reducing medical costs and financial losses to the economy (sickness benefits, production losses).

It is also important to focus on primary preventive care by making available public health interventions. The first step in doing so is to identify the health risks affecting specific populations, identified at the most basic level possible. To this end, the functions of existing public health institutions (mainly National Institute of Public Health – National Institute of Hygiene – National Research Institute (NIZP-PZH-PIB) and Chief Sanitary Inspector (GIS)) should be expanded and supplemented by the monitoring of health risks responsible for a significant number of cases of (e.g. smoking, alcohol abuse, obesity, air pollution).

With respect to the most common health problems in people over the age of 40, the first such extensive preventive examination programme in Poland, entitled "Profilaktyka 40 Plus", will be launched. The programme will cover more than 20 million patients over the age of 40. The preventive examination programme will be available to all people, whether they are employed, self-employed or unemployed but have health insurance. It should be mentioned that such preventive examinations must be carried out regularly in order to detect diseases of affluence at an early stage. The need to provide effective preventive care to employees is also emphasised in the macroeconomic aspect, especially in the context of an ageing population and the need to maintain longer working lives.

The main determinant of the effectiveness of the health system is its ability to improve the health of the population. However, it depend on a number of factors.

[255] Porta M. (ed), *A dictionary of epidemiology*. Oxford University Press, Oxford 2014: 224-225.

CHALLENGES - AREAS TO BE SUPPORTED

- Update and/or development of health programmes/health policy programmes for key diseases of affluence.
- Promotion of health and health-oriented attitudes - with a particular focus on actions for children, adolescents and the elderly, as well as mental health.
- Intensive health education, including behavioural intervention programmes in risk groups (obesity, stimulants, sedentary lifestyle, exposure to excessive stress).
- Expansion of the scope of the vaccination programme
- Implementation of screening programmes in high-risk groups.
- Development and dissemination of preventive routine health checks for adults implemented in PHC facilities.
- Inclusion of patients over the age of 40 in the preventive laboratory diagnosis under the "Profilaktyka 40 Plus" programme in the area of the most common health problems.
- Effective prevention of bacterial infections and antibiotic resistance.
- Raising the role of secondary preventive care (education of medical staff).
- Integration of health and social assistance systems to strengthen the commitment to health promotion in each facility providing social services.
- Strengthening and integration of mechanisms for identifying and monitoring the occurrence of health risks.

Direction of intervention 1 will be implemented using the following tools:

1) Tool 1.1 Implementing prevention programmes;
2) Tool 1.2 Implementing and carrying out actions to support the health of working persons;
3) Tool 1.3 Supporting actions shaping and developing health-oriented attitudes and projects promoting healthy lifestyles.

Tool 1.1. Implementing prevention programmes

In view of the demographic and epidemiological changes, the main challenges for Polish health care include inadequate public health measures, disease prevention, prevention of antibiotic resistance, and insufficient commitment of Poles to their own health.

The actions taken in the tool in question will contribute to the development and implementation of solutions focused on comprehensive prevention of diseases, which result from the identified health needs and the health of Poles and relate to the most significant problems and health risks resulting primarily from diseases of affluence (including, in particular, addictions, obesity, occupational diseases, cardiovascular diseases, COPD, diabetes, cancer, mental disorders, back pain, oral diseases, reproductive disorders). Diseases of affluence are common diseases that occur globally. The development and spread of such diseases result from the progress of modern civilisation, which is why they are sometimes referred to as "diseases of the 21st century". It is necessary to take appropriate action to reduce and detect them at an early stage.

The epidemic threat and the epidemic resulting in numerous infections with the SARS-CoV-2 virus have led to reduced physical activity and increased stress levels, compounding the risk of developing the most common diseases of affluence such as cardiovascular and metabolic diseases. The COVID-19 pandemic, overlapping with the epidemic of chronic non-communicable diseases, creates a negative synergy effect. Representing the biggest challenge today, it also has negative health effects in the area of non-communicable diseases and mental health (due to social isolation, uncertainty, fear of getting sick, and stress). Therefore, bearing in mind the consequences of the current epidemic, it is appropriate to implement the "Profilaktyka 40 PLUS"

programme, thanks to which it will be possible to carry out a preventive laboratory diagnosis for patients over the age of 40 with respect to the most common health problems. Due to its main objective, i.e. prevention of diseases with reduced reporting to doctors in 2020, due to the coronavirus pandemic and thus the need to intensify prevention activities in the period after the intensified phase of the pandemic (in 2020), it is assumed that the Prevention 40 Plus programme will operate in 2021.

It should be pointed out that preventive examinations should be carried out regularly in order not to overlook initially minor health problems and to react early enough before they become serious and much more difficult to diagnose and treat. Many diseases, especially at their early stages, do not cause distressing symptoms. Therefore, thanks to preventive examinations, it is possible to detect disease very early and avoid lengthy and sometimes ineffective treatment if the diagnosis is made too late.

Patients will be able to benefit from the "Profilaktyka 40 PLUS" package of preventive examinations without a referral from a medical practitioner. The "Profilaktyka 40 PLUS" programme includes diagnostic tests in the form of packages dedicated separately to men and women and a joint package. Participation in the "Profilaktyka 40 PLUS" programme is voluntary.
It is assumed that diagnostic tests included in a package will be carried out once per patient. Information about the opportunity to undergo diagnostic tests and a survey to assess risk factors and carry out a test package will be available on IKP (more than 4 million people over the age of 40 have an Patient Online Account (IKP) [256] out of 20,174,070 [257] people over the age of 40).

It is also important to implement screening programmes in high-risk groups and increase the number and scope of these tests, paying attention to the main health problems of the Polish population.

The implementation of prevention programmes including elements such as risk factors, early detection of diseases and rehabilitation should continue. Implemented prevention programmes should be developed and updated in accordance with the latest medical knowledge. In case of health problems for which there are no comprehensive programmes, effective solutions should be developed.

The pandemic also changed the health situation of children and adolescents, who were exposed to increased stress due to isolation and lack of physical activity. Therefore, this group of patients should be provided with psychiatric or psychological care in order to exclude or prevent negative effects in the area of mental health.

Improving the quality of implemented prevention programmes and making them more accessible to the general public, especially groups at risk of social exclusion, are a challenge, which should be met by ongoing and new prevention programmes.

In addition, as part of primary preventive care, development measures should be taken through the expansion of the vaccination programme. In the context of epidemic threats, it is particularly important to extend the scope of the vaccination programme on an ongoing basis. The current SARS-CoV-2 virus pandemic shows the importance of vaccination and the availability of vaccines in preventive care.

Effective measures to prevent bacterial infections (including, in particular, the phenomenon of increasing antibiotic resistance) are also an important aspect of preventive care. Measures to prevent the drug resistance of microorganisms should be continued, and an antibiotic policy should be developed in Polish hospitals to make their use more rational. In this context, it is vital to educate the population on the principles of antibiotic use and promote them among professionals and the general public.

An important element in the effective implementation of preventive actions is the proper identification and monitoring of health risks. In this area, it is essential to strengthen actions in the area of analysing the health of local populations and identifying health risks based on secondary data and dedicated research and then initiate and coordinate actions to reduce the identified risks and monitor the effectiveness of such actions.

Actions in the area of public health development should include the education of medical staff and the integration of health and social assistance systems to strengthen the commitment to health promotion in each facility providing social services.

It is also important to gradually increase funding for actions in the area of health promotion and disease prevention at all levels of the health policy implementation.

The development of research activities and the design of new solutions in the field of public health, particularly with regard to changing the health habits and attitudes of Polish people, should also be strengthened.

[256] Data provided by the Centre for eHealth - as at 2 July 2021
[257] Data provided by Statistics Poland (GUS) – as at 31 December 2020

The horizontal objective for the implementation of actions as part of the tool in question should be to make PHC the foundation of the health system in Poland, providing the residents with effective care in the area of diagnosis, treatment and prevention of the most common diseases in the population.

Tool 1.2. Implementing and carrying out actions to support the health of working persons

The directions for action in the field of occupational medicine are set out in the Act of 27 June 1997 on the Occupational Medicine Service. Given the potential of the tasks carried out by occupational medicine specialists and the obligation to carry out regular examinations in this area, it is crucial to expand actions taken to support preventive health care.

The main aim of the projects implemented as part of this tool should be to strengthen the potential of the health of the working population by developing and disseminating preventive routine health checks for adults carried out as part of occupational medicine or PHC.

Comprehensive support for the health of working persons also involves efforts towards the development of a new model of preventive examinations for working persons. Projects should be launched to develop and implement standards for comprehensive preventive care targeting all aspects of employees' health. The tool should also include the development of health-promoting actions in workplaces, including the identification of risk factors in workplaces, the prevention of harmful conditions, rehabilitation, and retraining of employees.

The aim of the actions taken under the tool in question is to restore the persons covered by the support to full or maximum attainable physical or mental fitness, as well as the ability to work and to take an active part in social life. The actions implemented should support the rehabilitation system, providing faster access to rehabilitation services and providing support to health care providers providing rehabilitation services.

Tool 1.3. Supporting actions shaping and developing health-oriented attitudes and projects promoting healthy lifestyles

As indicated earlier, the issue of health education and health promotion plays an important role in preventive care and public health.

Despite the implementation of a number of measures promoting healthy lifestyles from an early age, it is still necessary to invest in citizens' health through education, as well as the promotion and development of health-oriented attitudes. The promotion of healthy lifestyles, including physical activity and proper nutrition, should be the result of coordinated and large-scale actions taken not only by public authorities and health care providers but also by patient organisations in local communities. An extremely important element should be the development of education raising citizens' awareness of their personal responsibility for their health. It is also vital to promote self-diagnostic attitudes, including those using tests and devices available now and in the future.

The pandemic caused by the SARS-CoV-2 virus in 2020 has shown the importance of health education and how important it is for every citizen to take responsibility for his or her own health and follow the recommendations of medical and sanitary services.

In this context, the aim of actions taken under this tool should be to support health education provided in nursery schools and schools. Patients' skills in navigating the health care system, knowledge of patient rights, health behaviours and their impact on their health and the quality of their life need to be strengthened.

The aim of the projects implemented should be to promote healthy lifestyles, e.g., by creating educational tools (e.g. simulating the course of a disease with or without treatment/vaccination), taking actions and launching information campaigns to promote healthy lifestyles and projects to shape and develop health-oriented attitudes. The measures taken should incorporate the latest technology and use the most common and cutting-edge sources of communication, primarily the Internet and interactive learning platforms.

It is also crucial to ensure that the projects implemented take into account and make use of large-scale awareness campaigns, as well as research and analysis to support health-oriented attitudes.

Direction of intervention 2. Improving the quality, friendliness and effectiveness of health services through the standardisation and reorganisation of health care

A very important direction of intervention is the improvement of processes and the organisation of the health system contributing to the achievement of the objectives of quality, friendliness and effectiveness of the health system.

The first important issue related to the quality and effectiveness of the health services provided is the continuous monitoring of indicators determining treatment outcomes, the equality of access to medical services, the quality of services and, in the case of public entities, their operational and financial efficiency as well.

Optimisation (in health care) is also needed as it can have the greatest impact on the improvement of the effectiveness of the health system. Optimisation measures should ensure that funds allocated to health care are spent more efficiently, thus avoiding the threat of increasing expenditure without changing the effectiveness of the system.

It is also necessary to establish a system for reporting adverse events and taking preventive and corrective actions on this basis, as well as introducing solutions to improve the safety of patients and medical staff. The aim of introducing solutions in this area is to improve the quality of curative care by reducing the incidence of adverse events.

The quality of health care can also be increased using external evaluation systems, such as accreditation standards. It is necessary to continue the dissemination of standards among heath care providers.

The coordination and integration of patient care become particularly important with respect to people who need assistance with activities of daily living and those with mental disorders. These two areas should largely be covered by deinstitutionalisation, which is the recommended direction of change advocated by WHO, EU and OECD and in this document.

The socio-demographic processes that are taking place and their expected course necessitate taking urgent actions to ensure that people in need of support in their daily lives have access to comprehensive health services under new models of care. The actions taken should rationalise costs and increase the proportion of deinstitutionalised services by pursuing the objective of supporting the patient's functioning in the community in the most effective way. This process should also be integrated into the social assistance system.

Deinstitutionalised forms of care should play an increasingly important role in improving access to health care. This is due to the fact that, on the one hand, they increase the accessibility of services and make them "patient- and family-friendly" and, on the other hand, they complement traditional, institutional forms of care. In this context, the dynamic development of infrastructure, especially equipment but - in same cases - building infrastructure as well (e.g. construction of day care centres) is essential.

With the support provided, patients should be able to benefit from high-quality services that meet the changing demands of demographics, health and civilisation. The results of the intervention should be providing greater health security for people requiring care in their daily lives and improving the quality of their lives and providing greater opportunities to carry out various forms of activities, including opportunities to function in society and deepen social bonds.

The SARS-CoV-2 pandemic that took place in 2020 also showed how important it is to create a coordinated long-term care system based on deinstitutionalisation. In fact, institutional long-term care based on social assistance institutions - nursing homes and health care institutions - health care and treatment facilities were one of the areas highly exposed to the spread of the epidemic. It is therefore all the more urgent and necessary to support and develop care at home.

Another important step towards coordination is to make changes to night and holiday health care. Hospitals should operate according to the principle of the three stages of contact with patients. The first level is the initial diagnosis and e-registration of the patient; the second level is the network of district 24-hour outpatient clinics; the third level is the intervention of an ambulance and transport to the hospital emergency department.

CHALLENGES - AREAS TO BE SUPPORTED

- Developing a system for monitoring and comparing the quality of the services provided (along with patient information services) and the operational and financial efficiency of health care providers operating in the public health system.
- Developing and implementing organisational standards for patient care and service and diagnostic and therapeutic pathways for common disease entities.
- Implementing mechanisms of paying for quality and/or health effects, including mechanisms of awarding bonuses for performing services according to standards.
- Developing an adverse event monitoring system and a patient compensation fund.
- Strengthening the role of PHC and OSC by implementing comprehensive solutions and coordinating activities in both areas. Carrying out the reorganisation of the network of hospitals and NHHC.
- Introducing the Act on Quality in Health Care and Patient Safety to implement accreditation and quality monitoring mechanisms at every level of the health system.
- Supporting and developing the accreditation system for health care providers.
- Developing new models of coordinated care based on health value.
- Establishing the National Cancer Network and a National Cardiology Network to enable better coordination of care.
- Developing infrastructure necessary for the provision of health services in deinstitutionalised forms.
- Developing care services by integrating health services and social assistance and adapting services to local needs.
- Developing community and long-term care.
- Developing modern home care models using telemedicine tools.
- Organising assistance for caregivers of people in need of help with activiting of daily living.
- Organising support for people with cognitive disorders and other chronic diseases resulting in memory impairment.
- Developing social dialogue in the area of health and the idea of social responsibility of health institutions by promoting and establishing cooperation between public administration overseeing the health system and patient organisations and organisations representing stakeholders working in and for health care.

Direction of intervention 2 will be implemented using the following tools:

1) Tool 2.1 Improving the quality, safety, friendliness and effectiveness of the health care system;
2) Tool 2.2 Supporting and developing coordinated care, including care for the elderly;
3) Tool 2.3 Supporting the deinstitutionalisation of care, including the development of community forms of care.

Tool 2.1. Improving the quality, safety, friendliness and effectiveness of the health care system

Ensuring effective support for the health care system requires strengthening the actions taken so far, which have brought tangible benefits in the form of improved quality of health services provided and improved quality of management in health care providers.

To improve the effectiveness of the health system, it is necessary to take measures that will optimise or increase the supply of high-quality health services, i.e. safe, effective and cost-effective medical technologies, and develop cooperation with social partners. The objective of this tool should be to eliminate any threats to citizens' sense of health security, to increase the friendliness and operational and financial efficiency of health care providers providing, in particular, hospital services.

The actions supported should improve the effectiveness of health care providers, especially hospitals. The projects implemented should lead to an increase in the efficiency and quality of management and supervisory processes, including through the professionalisation of management and the preparation of tools enabling the objective comparison of clinical quality, patient service level and management efficiency of entities, and support restructuring and modernisation processes and the implementation of organisational innovations.

So far, the strengthening of the accreditation process in health care has been a key element in supporting quality in this area. Citizens' expectations about quality in health care are largely related to hospital care and its outcomes. Thanks to ESF funding, it was possible to increase the number of hospitals with accreditation and to support the accreditation process of entities providing PHC services. The need to develop high-quality services in the local community also requires the continuation of efforts to promote accreditations. The aim should be both to make accreditations mandatory in hospital treatment and to promote them at other levels of the system.

One of the measures to improve the quality of health services in PHC is the implementation of coordinated care. To make this possible, the first step should be to assess the readiness of facilities to introduce coordinated care, for instance, on the basis of the Scirocco Exchange model[258] that has been validated and used in the EU, to develop logical models for the purpose of their implementation and adaptation to the proposed changes and to enable the transfer of knowledge and good practice between PHC facilities. To improve quality, friendliness and transparency, it is also necessary to develop actions aiming at the standardisation of health services, e.g. by developing and implementing organisational standards of care, patient service, diagnostic and therapeutic recommendations, treatment guidelines and diagnostic and therapeutic pathways for common disease entities in cooperation with consultants, experts and scientific societies, and making payment mechanisms conditional on the provision of services in accordance with standards.

It is also crucial to implement pilot projects to improve quality in health care providers with respect to the optimisation of medical and administrative procedures and to use modern instruments supporting the management of processes and cooperation within the internal structure in hospitals.

An important step in improving safety in the health system is to prevent medical errors and adverse events. In this context, it is vital to introduce legislative solutions related to the monitoring of non-compliance in the area of the liability of medical professionals, create a compensation fund for patients to make it easier for them to claim compensation for medical errors, and establish a register of adverse events enabling the monitoring of adverse events and supporting the implementation of corrective actions.

One of the elements supporting the quality and effectiveness of the health care system should be the improvement of the quality of data entered and collected in the system. It is, therefore, necessary to review reporting obligations imposed on health care providers, eliminate redundant or duplicate reporting obligations and supplement the scope of data collected where it is necessary to improve the functioning of the system. It is essential to professionalise the preparation and keeping of medical and reporting records, which will make it possible to relieve medical staff of this task without losing the quality and completeness of medical data and information. A particularly important issue is the organisation and improvement of the quality of data collected in medical registers. It is also crucial to streamline the flow of data between the health and social assistance systems in order to improve their efficiency. In addition, increasing the openness of health data for research and development purposes with respect for patient rights is another important direction. It is therefore essential to develop transparent rules for the provision, use and exchange of data included in public and medical registers. This process should involve all stakeholders of the health system in order to develop a set of data that will be useful for all institutions.

[258] https://akademia.nfz.gov.pl/scirocco-exchange/.

In view of the above tasks, the Act on Quality in Health Care and Patient Safety will be introduced. Owing to the act, it will be possible, e.g., to implement accreditation and quality monitoring mechanisms at every level of the health system and build the national adverse event monitoring system. In many countries, this system has significantly contributed to the improvement of solutions in the area of medical activities and the organisation of work, ensuring the protection and safety of persons reporting such events.

Support in the area of improving the effectiveness of the health care system should also address strengthening the capacity of health system institutions to implement sanitary, preventive and anti-epidemic actions. It is essential to implement analytical techniques that enable advanced epidemiological research. This is particularly important due to the COVID-19 pandemic. An important objective of these actions should be to develop the skills of sanitary inspection staff.

The transparency and effectiveness of the system can also be improved by taking actions aimed at the development of social dialogue and the idea of social responsibility of health system institutions, involving, among other things, the cooperation between the health system administration and patient organisations.

To achieve the above-mentioned objective, it is necessary to empower patients in the system and support patient organisations by taking planned actions aiming at increasing the skills of patients. Only patients who are familiar with the health system and who know their rights can be active participants. Patient involvement in the strategy implementation process strengthens the potential of the system and will be an important element in the evaluation of the strategy.

Tool 2.2. Supporting and developing coordinated care, including care for the elderly

The main objectives of coordinated care are to improve the design and provision of patient-oriented health care, to increase the quality of services for the elderly and people with chronic diseases and disabilities, to reduce fragmentation, close the gap and remove the excess/increase the effectiveness of the use of existing resources[259]. The challenge in introducing coordinated care is to develop such rules for cooperation and organisation of patient care that they take local circumstances into account. It is important to keep in mind that coordinated care is an ongoing process that requires constant monitoring and ongoing response to new challenges.

Coordinated health care should be one of the basic directions of changes planned in the health care management system in Poland in the coming years. Actions in this area should focus on the development, testing and implementation of new instruments ensuring proper coordination of the treatment process, especially in chronic diseases.

Coordinated care is mainly recommended as a solution helping people with chronic diseases and the elderly. It is intended to integrate all entities involved in the treatment of patients suffering from a given disease and to improve and accelerate this process by creating appropriate organisational standards[260].

The aim of this tool should be, first and foremost, to develop, test and implement new instruments to ensure proper coordination of the treatment process.

The aim of the actions taken should be to:

1) improve access to high-quality health care provided in the vicinity of the patient's place of residence and in the local community;
2) ensure the continuity and integration of health care for a population of people in care and active patients;
3) improve medical quality and patient satisfaction with health care;
4) improve the effectiveness of the health system and the financial stability of the system and its components.

Actions should be dedicated to the elderly and those needing assistance with activities of daily living.

The above-mentioned actions should be accompanied by a range of complementary activities carried out under other tools, e.g. training for health care professionals in the field of deinstitutionalised forms of care and the organisation of the health care and social assistance system, the establishment and development of a network

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[259] Kozieł A., Kononiuk A., Wiktorzak K., *Opieka koordynowana, definicja, międzynarodowe doświadczenia jako inspiracja dla Polski*, Zdrowie Publiczne i Zarządzanie. Zeszyty Naukowe Ochrony Zdrowia, 2017,15(3).

[260] Czauderna P., Gałązka-Sobotka M., Wątek M., Golubiewski K., Janas J., Maciejczyk A., Woch M., Bartoszewicz A. (2020), *ZDROWIE DLA GOSPODARKI – GOSPODARKA DLA ZDROWIA: Nowoczesna droga do równowagi systemu i obywatela w zdrowiu*, p. 44.

of geriatric academic/geriatric consultation centres, as well as the development and promotion of telemedicine solutions.

One of the first steps in the development of coordinated care in Poland was the introduction of the pilot project of the National Cancer Network, which yielded very promising results and should therefore be further developed. Not only did it succeed in improving access to medical practitioners and necessary tests, but there also was a several-fold increase in correct and complete test packages, which is crucial for proper oncology diagnosis. The next step in the development of coordinated care in Poland should be to establish a national cardiology network, the aim of which will be to build a programme that will enable unlimited access for cardiac patients to diagnosis and therapy, the coordination of treatment, the implementation of primary and secondary preventive care programmes and, thus, a reduction in mortality from cardiovascular diseases, which are still the main cause of death in Poland.

Tool 2.3. Supporting the deinstitutionalisation of care, including the development of community forms of care

This document takes a specific approach to deinstitutionalisation. Specific objectives and directions of action will be indicated in the appendices to the document that contain strategies for the deinstitutionalisation of health care.

Support provided under the tool should be dedicated to two groups in particular: people with mental health problems - children, adolescents and adults - and the elderly and those in need of assistance with activities of daily living.

The planned support in the field of mental health of children and adolescents should cover the implementation of the community psychiatric care model, including infrastructure support, training, prevention, education and treatment programmes, additional services, coordination support.

Support for adults, on the other hand, should include the implementation of community psychiatric care - the development and support of mental health centres (including infrastructure support), support for the reprofiling of single-speciality psychiatric hospitals towards the provision of specialist and long-term services (infrastructure support), the development of medical procedure standards, and therapeutic programmes for patients.

The tool should also include actions dedicated to the elderly and those in need of assistance with activities of daily living, as well as their caregivers, including:

- pilot project of Day-Care Centre for Memory Support for people with dementia and other chronic diseases resulting in memory impairment;
- support for people with dementia, e.g. through educational campaigns;
- support for the operation or establishment of new health care facilities in deinstitutionalised forms, including Day-Care Centre for Medical Care in accordance with the adopted standard;
- support for other forms of care for people requiring assistance with activities of daily living, including the elderly;
- support for caregivers, especially family members of people requiring assistance with activities of daily living.

Infrastructure support for entities providing services in the form of institutionalised and deinstitutionalised services may also prove necessary. Such support should include the co-financing of the expansion and adaptation of infrastructure to the specific needs of patients, the construction of new facilities, as well as the provision of necessary medical and rehabilitation equipment to facilities, including the establishment of rental shops for specialist equipment necessary to provide care at home.

Direction of intervention 3: Improving the accessibility and effectiveness of health care through the development and modernisation of health system infrastructure

An extremely serious problem of health care is insufficient accessibility. There is increasing urgency to improve the architectural accessibility of health care providers, including outpatient clinics and hospitals, which should be provided with equipment facilitating communication (with the deaf and speech-impaired people) and free movement (signs, ramps, lifts). The accessibility of medical facilities, i.e. outpatient clinics and hospitals, is a prerequisite for ensuring the right to equal treatment for every citizen. New or modernised hospital and outpatient clinic buildings generally meet the criteria of architectural accessibility. However, in the case of older buildings, it is necessary to make additional improvements to ensure that people with special needs can move

around a health care facility without difficulty.

The accessibility of health care services is the amount of time the patient has to wait to receive health services. Long waiting times for the provision of health care services, especially by specialist medical practitioners, delay diagnosis and treatment, which affects the incidence and mortality rates for the majority of diseases of affluence, e.g. cancer.

Accessibility is also considered in terms of geographical accessibility. As far as health care in Poland is concerned, there are still large regional disparities in the accessibility of health care, incidence and the number of deaths. Residents of rural areas and small towns have limited access to medical facilities which are located around metropolises.

The accessibility of public health care for those who, for various reasons, remain outside the public health insurance system is also a serious problem. Access of excluded (uninsured) groups to free health care in the public system remains an unresolved problem. This issue is currently the subject of regulatory works carried out by the Ministry of Health and the Ministry of Finance. The aim of the proposed changes is to ensure health care coverage for every Polish citizen. This is a holistic document dedicated to all social groups, especially disadvantaged ones.

One of the key elements of the health system, affecting the quality, accessibility and effectiveness of health care services is the condition of health infrastructure.

Modern health care providers will ensure better access to medical services and higher quality and safety of health services. Reducing hospitalisation times is largely possible thanks to the use of modern technology in diagnosis and therapy. Early diagnosis and initiation of treatment allow patients to quickly return to daily activities.

Actions taken in recent years to improve hospital infrastructure, especially hospital wards, have yielded visible results and significantly improved the quality of services provided. However, the dynamic development of the above-mentioned area is not always accompanied by the simultaneous development of functional units providing services in relation to the above-mentioned wards, such as laboratories. In this context, in the financial perspective for 2021-2027, it is also necessary to provide support to the above-mentioned areas.

As far as health care in Poland is concerned, there are still large regional disparities in the accessibility of health care, incidence and the number of deaths. Investments in infrastructure are therefore needed to even out geographical disparities in access to health and social care.

As shown by the results of the inspection of the infrastructure of health care providers conducted by the Ministry of Health in 2020, 29% of the areas of hospital wards are in optimal technical condition. Nevertheless, when planning support for the health system in a multi-year perspective, it should be kept in mind that infrastructure that currently shows no significant signs of wear and tear will also need to be upgraded in four to five years' time to adapt to changing health needs and technological trends.

In addition to ageing building infrastructure, there is also a problem with ageing equipment and apparatus. Operating equipment with a high degree of wear and tear can negatively affect the quality, efficiency and effectiveness of health services and thus the financial efficiency of health care providers.

The biggest challenge that comes with any new investment in medical equipment is ensuring that resources are allocated efficiently so that these investments are optimal for society as a whole (i.e. they are aimed at maximum utilisation and, at the same time, reduce inequality in access to services across the country). It is important to note that medical equipment is one of the components of comprehensive medical care, and to be used effectively, it requires appropriately qualified staff.

Another element that needs to be implemented is the restructuring of public hospitals, including financing investments, improving the quality of public hospital management, improving the skills of management staff and reorganising the hospital treatment system.
Its aim should be to improve the financial situation of public hospitals on a sustainable basis and to improve the supervision and management of these units, which will translate into an increase in the quality of health care services provided to patients.

The reorganisation of the strategic infrastructure in health care and health care providers through support for health care infrastructure will affect the quality, accessibility and safety of the health care services provided. The programme to upgrade and modernise infrastructure should be based on providing funds to local authorities to make investments in health facilities operating in their areas.
It is important to support the conversion of hospital beds into long-term care facilities in order to exploit the

existing potential of hospitals to provide necessary care and treatment services in order to meet the needs of the ageing population.

A significant challenge facing the Polish health system is its maladjustment to the structure and needs, especially in the area of long-term and psychiatric care. These areas require taking decisive action to increase the existing potential of their infrastructur and human resources . Due to the increasing needs for long-term care, in addition to modernisation actions, some hospital beds need to be converted into long-term care, palliative care and hospice beds. As far as psychiatric care is concerned, the burden should definitely be shifted to community-based forms; nevertheless, support in institutional structures should also be secured and for this purpose, it is necessary to make investments in infrastructure.

The quality and effectiveness of the health system are also about providing prompt and effective assistance in to people who are in a medical emergency. The possibility of saving lives and speeding up recovery depend on the effective provision of help to the injured and their rapid diagnosis. This is very important in the context of the course of further treatment of patients (e.g. number of procedures performed, length of hospital stay, duration of rehabilitation) and their professional activity and, consequently affects treatment costs and the amount of social insurance benefits paid due to the patients' incapacity for work (disability pensions, rehabilitation benefits, special leaves). Therefore, not only does the creation of a comprehensive, effective and efficient emergency medical system condition a longer healthy life for the population but also generates savings in the public health care and social security system.

The system of the State Emergency Medical Services needs to be strengthened both at the out-of-hospital level, i.e. in terms of equipping emergency medical teams with means of sanitary transport (ambulances), and at the in-hospital level, i.e. in terms of hospital emergency departments, trauma centres, trauma centres for children, as well as organisational units of hospitals (hospital wards) that specialise in providing health services necessary for the emergency medical services.

CHALLENGES - AREAS TO BE SUPPORTED

- Introducing unlimited services in the area of outpatient specialist care (OSC).
- Upgrading the building and technical infrastructure of hospitals, the deteriorating condition of which can significantly reduce the quality of health services provided.
- Modernisation of units cooperating with hospital wards, in particular genetics, pathomorphology and histopathology laboratories.
- Eliminating the disparities in the accessibility of health services by making investments in building and equipment infrastructure.
- Adapting the resources and structure of infrastructure resources to the demographic changes, particularly with regard to the care for the elderly - long-term care, geriatric care, care and treatment facilities.
- Improving the accessibility of health care facilities.
- Investing in the replacement of medical apparatus and equipment - due to the continuous development of medical technology and still insufficient quality and number of specialist apparatus used.

- Restructuring hospitality, including:

1) implementing system solutions in the are of quality and treatment outcomes (concentration of highly specialist treatment) and increasing the availability of services provided;
2) implementing a coherent policy on the provision of health services - meeting the health needs of citizens in an optimal manner according to the map of health needs and transformation plans;
3) implementing effective restructuring mechanisms to improve the profitability and financial stability of hospitals;
4) making investments - taking coordinated actions aimed at strengthening the capacity of reorganised hospitals, allocating additional resources for the development of modern infrastructure of hospitals, particularly highly specialist care, including from the National Recovery and Resilience Plan;
5) coordinating and optimising the use of the financial base of the system and introducing mechanisms stimulating the integration and coordination of hospital services;
6) forming purchasing groups - taking a better negotiating position with respect to suppliers;
7) using available human resources more effectively (concentration);
8) reinforcing the management staff of managers and promoting modern health care management systems, tools and methods, enhancing management skills, and reinforce the capacity of restructuring staff;
9) supporting critical infrastructure in health care, including highly specialist care centres, developing infrastructure for the provision of care and treatment services, providing support for the infrastructure of the emergency medical services or replacing hospital beds.

- Eliminating disparities in access to the State Emergency Medical Services system infrastructure and to the organisational units of hospitals specialising in providing health services necessary for the emergency medical services in a way that is appropriate to the risks characterising various areas of the country and that provides necessary medical care at a comparable level, regardless of the location.
- Preparing health care infrastructure to quickly, effectively and efficiently undertake and carry out actions in case of emergencies - epidemic and pandemic.
- Supporting building and technical infrastructure and purchasing essential equipment for institutions fighting on the front line of the battle against the COVID-19 pandemic.
- Purchasing and distributing an adequate number of COVID-19 vaccines and monitoring the course and effectiveness of vaccination.
- Accessibility of public transport to health care providers.

Direction of intervention 3 will be implemented using the following tools:

1) Tool 3.1 Providing infrastructure support to health care providers;
2) Tool 3.2 Strengthening efforts to adapt health care providers to the implementation of accessibility standards;
3) Tool 3.3 Providing infrastructure support for the emergency medical and emergency response system.

Tool 3.1 Providing infrastructure support to health care providers

Under this tool, investment projects (construction works, equipment, replacement of medical equipment) should be implemented for the benefit of health care providers, in particular those providing services in the area of hospital treatment, OSC, and PHC.

Despite significant improvements, infrastructure investments have only partially met the needs of health care providers in this area. The infrastructure still mostly does not meet standards and needs to be upgraded; it also needs to be adapted to the needs of people with disabilities.

In addition, compared to many other EU countries, in Poland, there are delays in the introduction of modern technologies for the treatment of diseases, especially cancer. Due to the scale of investment needed, only some service providers are able to provide a wide range of diagnostic tests in the place of providing services.

Investment needs should be based on epidemiological data and compared to the available infrastructure and its wear and tear. In this context, it is important to emphasise that the basic tools used in the [process of planning investments in the health infrastructure are:

- operationalised map of health needs, which are used, among other things, to rationally allocate resources;
- IOWISZ - Instrument for the Assessment of Investment Applications in the Healthcare Sector used to assess the advisability of investments in this area.

To meet the needs arising from the current epidemiological and demographic situation, the aim of the actions carried out under this tool should be to provide infrastructure support to health care providers and organisational/functional units cooperating with them and providing services in the area of:

- oncological diseases;
- cardiovascular diseases (including cerebrovascular diseases);
- mental diseases and behavioural disorders;
- communicable diseases;
- respiratory diseases;
- internal diseases;
- neurological diseases;
- urological diseases;
- spa treatment;
- anaesthesiology and intensive care;
- paediatrics and broadly defined treatment of children;
- gynaecology and obstetrics;
- geriatrics;
- long-term care, palliative care, hospice care;
- medical rehabilitation;
- outpatient specialist care;
- ophthalmology.

It should be borne in mind that investments should be made in facilities and laboratories cooperating with health care providers, particularly in the above-mentioned areas. Another important aspect is the development of the infrastructure of hospital pharmacies resulting in automation, increased level of computerisation and reduced losses.
At the same time, it is necessary to provide tools for the safe preparation of enteral and parenteral nutrition and individual treatment with cytostatic drugs. The development of clinical pharmacy services aimed at supporting hospital teams and increasing the effectiveness of pharmacotherapy and reducing its costs should also be taken into account.

The projects planned for implementation should focus, among other things, on carrying out renovation and construction works necessary from the point of view of providing health services (construction of new facilities - only in justified cases) and providing modern medical equipment and apparatus to units treating adults and children. Providing support in the implementation of qualitative changes in the functioning of entities, for example, through the implementation of recovery plans, the optimisation of investment and management processes, the improvement of management and operating systems of entities or the introduction of quality-oriented measures in entities are equally important for the improvement of the effectiveness of health care providers.

In addition, in the context of emergencies (e.g. comparable to the pandemic caused by the SARS-CoV-2 virus in 2020), it is necessary to prepare health infrastructure to take and carry out quick, effective and efficient actions in such situations. In this context, it is important to adapt health care providers to operate under a tight sanitary regime, for example, by implementing solutions to safely organise the movement of patients, improving the isolation and surveillance of potentially infected patients and improving hygiene and sanitary conditions.

Tool 3.2 Strengthening efforts to adapt health care providers to the implementation of accessibility standards

Given the architectural condition of most buildings, the accessibility of health facilities poses a significant problem. Therefore, support for people with special needs should be continued with the aim of reinforcing efforts to implement changes in selected health facilities by providing them with equipment facilitating communication (with the deaf and hearing- and speech-impaired people) or movement (signs, ramps, lifts etc.)[261].

People with disabilities are not only wheelchair users but also people with intellectual disabilities, people who move on crutches, blind, visually-impaired or deaf people, for whom appropriate signs are necessary to ensure safe movement or offer the possibility to use alternative forms of communication (e.g. a multisensory number system in the waiting room). In the process of removing barriers, actions should be taken to improve the accessibility of offices of medical practitioners by changing the way they are furnished and purchasing diagnostic equipment that can be used by people with diabilities. The availability of information about the adaptation of a facility to the needs of these people is also important.

Therefore, it is still necessary to take actions of an infrastructural nature related to the adaptation of medical facilities to the needs of people with disabilities and the elderly in the context of the implementation of accessibility standards.

The accessibility standards are legal provisions that guarantee accessibility, for example, in the implementation of construction projects, the purchase of properly prepared means of transport, the marking of routes and public spaces, the provision of services or the performance of tasks using public funds. In this context, an infrastructural measure is an intervention aimed at ensuring the operation of public transport enabling access to health care providers in addition to transport provided as part of guaranteed services.

The main objective of this support should be to increase the quality of health services for patients with disabilities, to remove architectural barriers, to operate disability-friendly facilities or to increase digital maturity in terms of the needs of people with disabilities.

This tool also includes the implementation of investment projects the aim of which is to adapt health care providers (especially OSC) to implement the accessibility standard in the selected components:

- architectural component - ramps, lifts, widening of building entrances and internal doors, elimination of

[261] Government Programme - Accessibility Plus 2018-2025, p. 40.

high thresholds, installation of non-slip flooring, adaptation of sanitary rooms, patient registration, switches and information boards, purchase of induction loops, etc.);

- digital component - purchase of computer equipment, software and other devices, provision of broadband Internet access to improve the accessibility of health services for patients with disabilities, development of telemedicine to facilitate long-distance communication, implementation of other solutions to ensure the operation of disability-friendly facilities, registration systems (including online registration systems) meeting the needs of people with disabilities, creation and adaptation of websites to the WCAG 2.0 standard).

Further efforts should be made to develop the accessibility standards worked ou in the 2014-2020 POWER programme (for health care providers providing hospital treatment and PHC).

Tool 3.3 Providing infrastructure support for the emergency medical and emergency response system

An epidemiological transformation in the incidence of accidents was observed in the last decade. The proportion of deaths due to falls, which are the most important cause of hospital treatment out of all accidents in every age group, is increasing.

Thanks to the immediate provision of first aid at the scene of the accident and the safe transport of the trauma patient under the care of qualified staff, it is possible to maintain and stabilise basic vital functions. Health services are ultimately provided in the ED, which should be adequately staffed and equipped to save human life and health.

A comprehensive, sustainable emergency medical system means a coherent operation of various units of the system equipped with modern and compatible equipment. Individual units of the system must work closely together so that a person who is in a medical emergency can receive aid quickly and effectively. The emergency medical system is a network of sorts; the absence of one element results in the inability of the system to operate in a fully effective manner.

As far as the infrastructure of the emergency medical services is concerned, it is particularly important to follow the so-called 'golden hour' principle (not to exceed 60 minutes between being informed of an incident and the start of specialist hospital treatment). It is also necessary to eliminate disparities in access to the State Emergency Medical Services system infrastructure in a way that is appropriate to the risks characterising different areas of the country and that provides necessary medical care at a comparable level, regardless of location.

The aim of actions taken in this tool should be to strengthen the capacity of the State Emergency Medical Services, including emergency medical teams along with administrative facilities (ambulance station facilities requiring major expenditure on their modernisation, refurbishment and upgrading), Medical Air Rescue, landing pads for rescue helicopters (construction works and provision of new equipment) and Hospital Emergency Departments (construction works, provision of new equipment).

Despite significant improvements in the equipment and functioning of the infrastructure of the emergency medical services, it is still necessary to provide hospital emergency departments with medical equipment. The remaining hospital infrastructure, which is necessary for the smooth operation of the system, and specialist means of sanitary transport (ambulances) also need to be upgraded.

Activities should focus on providing support for the system, among other things, through:

- the provision of equipment to existing hospital emergency departments and the construction of new departments in areas where there are deficits;
- the purchase of new fully equipped ambulances for emergency medical teams;
- the strengthening of the capacity of voivodes to operate medical dispatch centres;
- improvements in and the provision of modern communication modules for the emergency medical system;
- support for the Medical Air Rescue through the construction or modernisation of HEMS operational bases and the provision of appropriate equipment and apparatus for helicopters;
- support for emergency medical teams through the provision of appropriate medical equipment and apparatus for ambulances;

- support for emergency medical teams through the construction of new emergency medical team stations/sub-stations/waiting areas or the adaptation of the existing emergency medical team stations/sub-stations/waiting areas;
- support for emergency medical teams through the development of professional skills/the organisation of training courses;
- support for emergency medical teams through the renovation of the existing emergency medical team stations/sub-stations/waiting areas (including thermal efficiency improvement, use of renewable energy sources, replacement of computer and communications equipment, replacement of equipment, etc.);
- support for the State Emergency Medical Services system units through the financing of the replacement of IT equipment and office facilities and the purchase of new software for comprehensive unit management (ERP, CRM, pharmacy systems, risk management and analytical management);
- support for innovative projects related to the effective provision of first aid by witnesses of an incident before the arrival of emergency medical teams.

In the context of the COVID-19 pandemic, an extremely important element is infrastructural, construction and technical support as well as purchasing the necessary equipment for institutions that are particularly involved in the fight against the coronavirus, i.e. Chief Sanitary Inspector (GIS), Voivodeship Sanitary and Epidemiological Station (WSSE), Poviat Sanitary and Epidemiological Station (PSSE), National Institute of Public Health – National Institute of Hygiene – National Research Institute (NIZP-PZH-PIB), Regional Centre for Blood Donation (RCKiK), National Blood Centre (NCK). It is crucial to establish a modern and well-functioning infrastructure (including high-capacity laboratory infrastructure), taking into account current and future epidemiological and research-diagnostic needs, based on procedures that enhance safety and counter the spread of the virus.

In addition, an extremely important action is to purchase and distribute an adequate number of COVID-19 vaccines and monitor the course and effectiveness of vaccination in order to achieve vaccination coverage that allows the virus to be brought under control as quickly as possible while maintaining the highest safety standards.

Direction of intervention 4: Supporting the development of human resources in the health system in the context of adapting resources to the changing needs of the population

The appropriate number and quality of medical staff are a prerequisite for the effective implementation of state activities in the area of health at all levels - from preventive care and early detection to diagnosis and treatment of diseases. The profile and intensity of the education of medical staff should be closely related to the demand for staff with a specific speciality, resulting from epidemiological and demographic trends occurring in Poland.

Meanwhile, one of the main challenges currently facing the Polish health system is the overall low number of medical staff, their ageing, as well as their inadequate distribution in relation to the actual demand.

The inadequate number of health care professionals is compounded by their uneven territorial distribution. The number of medical practitioners per 100,000 population varies between the voivodeships[262].

The qualifications of medical staff are an important factor affecting the quality of health care. It is assumed that the measure used to assess the level of qualifications of doctors and dentists is the percentage of specialists.

In addition, regulations requiring health care providers to gradually increase the basic salaries of medical professionals were introduced. To ensure a gradual increase in the salaries of medical professionals, including medical practitioners, regulations setting the lowest basic salary for certain employees were enacted in 2017 and then amended in 2019. The above-mentioned amendment led, for example, to the unfreezing of the base amount.

The basic salaries of medical practitioners undergoing speciality training as residents and specialist medical practitioners were also significantly increased. In 2018, solutions were implemented to increase the basic

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[262] Czauderna P., Gałązka-Sobotka M., Wątek M., Golubiewski K., Janas J., Maciejczyk A., Woch M., Bartoszewicz A. (2020), *ZDROWIE DLA GOSPODARKI – GOSPODARKA DLA ZDROWIA: Nowoczesna droga do równowagi systemu i obywatela w zdrowiu*, pp. 48–49.

salaries of specialist medical practitioners who are employed on the basis of an employment relationship with health care providers that have concluded contracts with the National Health Fund covering the provision of health care services on a 24-hour or 365-day basis, who participate in the provision of these services and who undertake towards the employer not to provide health care services against payment at another health care provider that has concluded a contract with the National Health Fund.

Regulations were introduced under which a medical practitioner undergoing speciality training as a resident may receive an allowance in exchange for his or her commitment to practise medicine in Poland in an entity providing health services financed from public funds, for a total period of two years out of five consecutive years from the date of obtaining confirmation of completion of speciality training, with a total working time corresponding to at least one full-time equivalent.

They also stipulate that units training resident medical practitioners are reimbursed for the salaries incurred for programme medical duties. Additional research leaves were also introduced.

Moreover, as a result of the COVID-19 pandemic, medical practitioners directly treating virus-infected patients in the so-called 'covid hospitals', as well as all medical practitioners working in EDs and admission rooms in all hospitals, received additional cash benefits equal to their monthly salaries during the peak period of the pandemic (which resulted in the doubling of their salaries).

Actions are also taken to increase the admission limit, in particular for full-time Master's degree programmes in the field of medicine, conducted in Polish. In the field of medicine as well as medicine and dentistry, a limit of 7,550 places (including 5,703 places for full-time and part-time programmes in Polish) was set for the 2015/2016 academic year, and a limit of 9,717 places (including 7,436 places for full-time and part-time programmes in Polish) was set for the 2020/2021 academic year. As can be seen from the above, compared to the 2015/2016 academic year, the limit of places for the 2020/2021 academic year was higher by 2,167 places.

It should be noted that since 2015 the number of medical faculties at universities has also increased. In 2015, medical education was provided by 15 universities (including 11 supervised by the Minister of Health and 3 supervised by the Minister of Science and Higher Education), whereas in 2020, there were already 22 universities (including 9 supervised by the Minister of Health, 9 supervised by the Minister of Education and Science, and 4 private universities). This represents an increase of 7 universities.

Currently, as many as 42,938 students are studying in medical as well as medical and dental faculties in Poland (including more than 37,000 in medical faculties and almost 6,000 in medical and dental faculties).

An important element in the promotion of medical studies is the introduction of a system of loans and scholarships for medical students and specialist registrars, which will be forgiven after a specified period of working in the public health system. Loans will also be provided to medical practitioners who have passed speciality examinations or returned from abroad.

The number of residency places awarded is also being increased, especially in deficit fields, i.e. those where there is the greatest demand for specialist medical practitioners.

Measures are also being taken to increase the number of nurses and midwives in the health system and to make these professions more attractive and prestigious. One of such measure is the document adopted in 2019 by the Council of Ministers - "Long-term State Policy for Nursing and Midwifery in Poland" (taking into account the stages of works initiated in 2018), the aim of which is to develop solutions to ensure high quality, safety and accessibility of nursing and midwifery care for patients and society by increasing the number of nurses and midwives in the Polish health care system and stopping economic emigration of this professional group, motivating graduates to enter the nursing and midwifery profession and retaining nurses and midwives who acquire pension rights on the labour market.

The issues related to the working conditions of nurses and midwives are very extensive and cover many aspects. Currently, the most important issues in this area are, among other things, remuneration for work and employee privileges. For example, an additional training leave of up to six working days per year was introduced for nurses and midwives in 2019, and higher education institutions were allowed to offer first-degree programmes in nursing/obstetrics in a part-time form. This solution allows working people who want to take up new professional skills and work as a nurse or midwife to undergo training.

To improve the accessibility of healthcare services, including PHC and OSC, measures were taken to develop

the skills of nurses and midwives - on 1 January 2016 nurses and midwives with the appropriate professional qualifications were given the right to prescribe certain medicines and medical devices, as part of both their professional autonomy and the continuation of treatment according to the medical practitioner's recommendations.

In addition, the possibility was introduced for nurses and midwives to provide consultations as part of PHC (the scope of consultations includes, e.g., choosing a wound treatment method as part of the treatment provided by a nurse/midwife independently without a medical practitioner's order and issuing a referral for diagnostic tests, with the exception of tests requiring diagnostic and treatment methods that pose an increased risk for patients). The above solutions were implemented to improve the functioning of the health care system and facilitate access to health services for patients, including the elderly and people with disabilities, who require intervention without the direct and personal involvement of medical staff, and to enhance the professional independence of nurses and midwives.

One of the objectives of the coordinated care model is to establish cooperation among health care staff. Cooperation and interpenetration of skills of medical staff help to achieve an appropriate level of accessibility of health care.
According to the WHO report[263], the proper design and implementation of the skill mix is of great importance for the organisation, management and effectiveness of actions taken in health systems.

The health system also employs people in professions that are not directly associated with the performance of medical activities, but are important for ensuring health security.

The development of the above-mentioned professions, including the relevant public administration staff involved in health care tasks, needs to be enhanced. An efficient workforce supporting medical professionals in carrying out their tasks is of paramount importance for the effectiveness of the actions taken. This includes providing support to the medical staff at the level of individual health care providers and at various levels of public administration taking specific actions and decisions in the health sector.

When planning to increase the number of graduates, one should keep in mind that measures implemented now will be reflected in an increase in the number of specialists in about 12 years (six years of studies and an average of six years of speciality training).

In addition to this, in view of the threat posed by the SARS-CoV-2 coronavirus pandemic, it is extremely important that staff are adequately trained to provide diagnostic, treatment and prevention activities in the area of infectious diseases. In carrying out these activities, it is important to ensure that medical staff receive adequate psychological support.

It should be pointed out that it is necessary to enhance the existing actions encouraging people to specialise in the above-mentioned fields and to take new ones.

[263] World Health Organization (2000). Buchan J., Ball J., O'May F., *Skill mix in the health workforce: determining skill mix in the health workforce: guidelines for managers and health professionals*. World Health Organization.

CHALLENGES - AREAS TO BE SUPPORTED

- Increasing the number of people studying in medical faculties, systematically increasing the limits of admission to and places in medical programmes and the number of training places, especially in fields relevant from the point of view of the epidemiological and demographic needs in Poland.
- Introducing loans for medical students.
- Promoting education in other health care professions and in the field of organisation and administration in health care, especially education of medical caregivers.
- Increasing the flexibility of the education process in medical professions, e.g. by reducing the number of specialities and developing non-medical skills in medical professions.
- Carrying out the standardisation of postgraduate training of medical practitioners in surgical specialities and developing the use of modern technologies in the area of improving surgical and diagnostic techniques.
- Providing training support for narrower medical skills as a response to increasing access to insufficient medical services relevant from the demographic and epidemiological point of view.
- Increasing the number of speciality places according to the epidemiological and demographic demand and taking into account, e.g., the insufficient number of specialist medical practitioners due to the departure of specialist medical practitioners from the labour market.
- Providing infrastructure support for medical universities and teaching medical institutions.
- Developing modern teaching methods for medical students and a teaching base for pre-clinical education, in particular by developing practical training using medical simulation techniques.
- Improving working conditions, introducing remuneration policies and facilitating further development after graduation to encourage graduates to take up employment in Poland.
- Providing training courses in the field of family medicine for medical practitioners working in PHC facilities.
- Supporting the professional development of current, health professionals and other health care professions and administrative and organisational staff.
- Establishing an effective mechanism for planning the distribution of medical staff and eliminating disparities between voivodeships and mechanisms encouraging medical staff to take up jobs in locations with staffing shortages.

Direction of intervention 4 will be implemented using the following tools:

1) Tool 4.1 Developing and supporting the education of medical practitioners;
2) Tool 4.2 Developing and supporting the education of nurses and midwives;
3) Tool 4.3 Developing and supporting education in other health care professions;
4) Tool 4.4 Developing and supporting the education of organisational/administrative/management staff in the health system.

Tool 4.1 Developing and supporting the education of medical practitioners

Despite the implementation of a number of interventions aimed at the development of medical staff, it is still necessary to strengthen actions dedicated to medical practitioners, who are fundamental to the functioning of the health care system.
It is also essential to support actions the aim of which is to ensure an adequate number of medical students and an adequate number of specialist medical practitioners in the Polish health system. The implementation of the actions covered by the tool will also contribute to the development of practical postgraduate training of medical practitioners, which can also be ensured through the further development of modern surgical simulation centres. Moreover, the COVID-19 outbreak has shown how critical it is to have the right tools in place to deliver remote education for medical practitioners. It is, therefore, necessary to create a new comprehensive teaching offer based on a digital platform, which enables the overall organisation of the teaching process on the basis of digital technologies, while ensuring the legally required number of hours of classes conducted in the traditional manner.

In this context, the actions taken under this tool should focus on:

- increasing the number of medical students -
  e.g. increasing the number of students in medical faculties, promoting the profession, providing incentives for medical students in the form of scholarships, financing of study trips for students, work placements or compulsory work placements, making the rules for applying for a permit to provide programmes in the field of medicine or medicine and dentistry more flexible (solutions in this direction were introduced in the Act of 17 November 2021 amending the Law on Higher Education and Science and certain other acts /Dz. U. [Journal of Laws] item 2232 and 2459/);
- improving working conditions, introducing remuneration policies and facilitating further development after graduation to encourage graduates to take up employment in Poland;
- establishing an effective mechanism for planning the distribution of medical staff based on reliable data and eliminating disparities between voivodeships and mechanisms encouraging medical staff to take up jobs outside large centres (in locations that are considered less attractive), e.g. financial mechanisms;
- introducing modern teaching methods, increasing the effectiveness and sustainability of learning outcomes by supporting teaching infrastructure and tools, including through the development of the existing medical simulation centres by adapting them to the number of students and the creation of new ones; supporting scientific and learning exchanges between domestic and foreign universities, including with the use of IT equipment;
- providing speciality training for medical practitioners in fields relevant from the point of view of Poland's epidemiological and demographic needs. Supported areas include family medicine, internal medicine, paediatrics, general surgery, surgical oncology, clinical oncology, radiation oncology, haematology, pathomorphology, psychiatry, geriatrics, and infectious diseases. In addition, it is planned to provide training courses in the field of family medicine for medical practitioners working in PHC facilities. Examples of actions taken include those planned under the National Oncology Strategy to adjust the structure of the medical staff to better meet the needs of patients in the field of oncology by increasing human resources and improving the quality of education;
- providing training support for specialist medical skills as a response to improved access to insufficient medical services that are relevant from the demographic and epidemiological point of view. Actions should focus on the organisation of training courses allowing medical practitioners to obtain certificates in skills related to, for example, cancer prevention and diagnosis, care for the elderly or patients with infectious diseases;
- standardising postgraduate training of medical practitioners specialising in surgeries, with a view to teaching them highly specialist skills by creating a network of surgery simulation centres training future specialists in surgical skills. Standardisation should address the method of training instructors, the education process and the method of verifying skills;
- providing infrastructure support for medical universities and increasing the use of modern technologies in the area of the improvement of surgical and diagnostic techniques and their uniform dissemination throughout the country;

- carrying out activities related to the computerisation of the university management and the comprehensive reorganisation of administrative processes, including adapting universities to remote work;
- developing soft skills of university staff and implementing a motivation system tailored to the needs of this group, increasing the use of non-clinical units in practical education, and implementing programmes to improve the teaching skills of the staff of these units.

Tool 4.2 Developing and supporting the education of nurses and midwives

As in the case of medical practitioners, support measures for nurses and midwives also need to be strengthened. Focusing works on preparing nurses and midwives for the demographic and epidemiological changes that are taking place requires the development of solutions that would support and develop activities allowing this professional group to participate in various forms of postgraduate education.

The main objective of the projects under this tool should be to strengthen activities aimed at ensuring an adequate number of nurses and midwives in the Polish health care system, which is of particular importance in the context of an ageing population. To meet the existing needs, the provision of development programmes for medical universities involved in nursing and midwifery education should be continued and strengthened (information campaigns, promotion of professions, funding of study trips for university staff and students, work placements, and funding of incentive scholarships for outstanding students). It should also be extremely important to put in place mechanisms for nursing graduates to encourage them to work in Poland.

Given the demographic and epidemiological trends, it is necessary to continue support for postgraduate education of nurses and midwives in areas related to the needs resulting from the above-mentioned trends, including education in the area of primary health care and long-term care, as well as epidemiological nursing in view of the experience from the fight against the COVID-19 pandemic. The main activities should include qualification and specialisation courses, among other things, in oncology nursing, cardiology nursing, neurology nursing, diabetology nursing, psychiatric nursing, family nursing for nurses, family nursing for midwives, internal medicine nursing, long-term care nursing, anaesthesiology and intensive care nursing, palliative care nursing, epidemiology nursing, and specialisation courses in oncology nursing, psychiatry nursing, family nursing for nurses, family nursing for midwives, internal medicine nursing, long-term care nursing, anesthesiology and intensive care nursing, palliative care nursing, epidemiological nursing, and specialisation courses, e.g., in oncology nursing, psychiatric nursing, family nursing for nurses, family nursing for midwives, internal medicine nursing, long-term care nursing, anaesthesiology and intensive care nursing, palliative care nursing, epidemiological nursing and specialisation courses for nurses in long-term care nursing. The National Oncology Strategy envisages reviewing and modifying selected speciality training curricula for nurses and midwives in the area related to preventive care and care for cancer patients during and after treatment.

In addition, in order to ensure qualified nursing staff providing long-term care services, the provision of specialist courses (e.g. in nursing care for adult patients in systemic cancer treatment, enteral and parenteral nutrition or wound management) should also be considered.

Bearing in mind the problems faced by the medical community and current trends, the provision of professional development and specialist courses in the so-called "soft" skills, e.g. maintaining Electronic Medical Records, interpersonal communication in nursing or aggression in health care, should be considered, as well. To develop practical postgraduate education, it is necessary to intensify support for the professional competencies of nurses and midwives using modern technologies, aiming in particular at the establishment of a Multi-Profile Nursing Practice Simulation Centre, as well as using e-learning techniques. The education and professional development of nurses and midwives should also be supported through a mentoring programme.

Tool 4.3 Developing and supporting education in other health care professions

Focusing activities on preparing health care professionals for the demographic and epidemiological trends that are taking place requires designing support for those in other health care professions. Their skills and qualifications are important in terms of increasing the quality of services; they also help to relieve the burden on medical practitioners and nurses.

At the same time, the experience from the fight against the COVID-19 pandemic unquestionably confirms that it is not only medical practitioners and nurses but also people practising other health professions, such as

paramedics and laboratory diagnosticians, who play a huge role in the health system.

Bearing in mind that the results of laboratory tests are the basis for making the right medical diagnosis, choosing the right therapy and assessing treatment outcomes, it is very important to ensure the appropriate quality of education preparing for work in medical diagnostic laboratories and for the profession of laboratory diagnostician.

The draft act on laboratory medicine currently under way at the Ministry of Health, which is intended to replace the current Act of 27 July 2021 on Laboratory Diagnostics, introduces a number of new regulations that will increase interest in taking up work in the field of laboratory medicine and improve working conditions for laboratory diagnosticians and other employees working in the field of laboratory medicine, including regulations that will recognise professional or scientific achievements in a given field of laboratory medicine as equivalent to the completion of a training programme - laboratory diagnosticians whose achievements will be recognised by the Minister of Health will be able to immediately take the speciality examination and, upon obtaining a positive result, will hold the title of specialist in a given field of laboratory diagnostics. In addition, the draft act on laboratory medicine also contains provisions on the co-financing of speciality training for laboratory diagnosticians. Laboratory diagnosticians will also be entitled to a training leave of up to six working days per year to pursue continuing professional development.

The actions implemented should aim to support education in other health professions, including pre-graduate education and post-graduate education - professional development training or speciality training. Encouraging people to take up training in health professions and to work in Poland remains an important issue. Support should be given to, among others, health system specialists, including specialists in child and adolescent mental health, paramedics, Medical Air Rescue staff, laboratory diagnosticians, pharmacists, physiotherapists, medical caregivers, dental assistants, dental hygienists, orthoptists, optometrists, electroradiologists, pharmaceutical technicians, massage technicians, orthopaedic technicians, occupational therapists, hearing therapists, dental technicians, dieticians, medical sterilisation technicians, speech therapists.

Tool 4.4 Developing and supporting the education of organisational/ administrative/management staff in the health system

Apart from supporting medical staff and those practising other health professions, it is extremely important for the proper functioning of the health systemto increase the competence of public administration and the management staff of health care providers. To guarantee the proper functioning of the health system, it is important to continuously improve the knowledge and skills of organisational, administrative and management staff working in the health care sector.

Actions taken during the fight against the COVID-19 pandemic identified other professions and institutions that have to be supported, such as the State Sanitary Inspectorate and voivodeship sanitary and epidemiological stations.

In this context, measures should be implemented to improve the professional skills of the employees of local government units, voivodeship offices, the State Sanitary Inspection, voivodeship sanitary and epidemiological stations, the National Health Fund, the Agency for Health Technology Assessment and Tariff System, etc. and to better prepare them for the performance of their duties.

To improve the efficiency of the health care system, it is crucial to implement projects developing the knowledge and improving the skills of the management and administrative staff of healthcare providers related to modern management and the use of quality-focused tools to improve economic efficiency. From the point of view of the development of hospital management and administrative staff, it will be particularly important to equip them with skills related to new tasks and the use of IT tools.

Based on the experience from the fight against the COVID-19 pandemic, it should be borne in mind that the epidemiological situation may require the urgent introduction of new elements of education, which, in turn, requires flexible actions and the possibility of educating new professional groups.

Direction of intervention 5: Developing digital services in the public health systems

eHealth, understood as the use of ICT systems for the provision of health care services, is an important area of

current activities of the Ministry of Health and a prerequisite for the transformation of the health care sector towards predictive, anticipatory, personalised, and participatory solutions.

Regardless of the source of the adopted definition of eHealth, the ICT-based development of the health system is the dominant trend, indicated by 58% of WHO members participating in the 3rd Global Survey on eHealth[264].

One of the most anticipated e-services in the Polish health system is e-registration, which facilitates the process of making appointments, increases the friendliness and transparency of the system, and creates conditions for more efficient system management. Another important aspect of eHealth development is the implementation of the EMD exchange system. Currently, the majority of medical records are kept in paper form, as a result of which, if they need to be accessed by medical staff from a facility other than the one holding the records, the patient must individually request access or a copy can be sent to the healthcare provider upon request. However, both of these solutions do not provide rapid access to medical data and medical records, which is essential in the event of an urgent need for the provision of services, including to save a patient's life or health. This also often results in unnecessary duplication of diagnostic tests, which generates unnecessary costs, or the determination of diagnosis and therapy based on incomplete data, which increases the risk of poor treatment decisions.

Digital technologies make it possible to provide rapid access to health care information, facilitate diagnosis and treatment, and improve access to health care at home and in health care facilities. Although there are more and more IT tools and technologies in the area of eHealth, the main challenge currently remains the varying and generally insufficient level of computerisation of health care, as well as the interoperability of individual IT systems and solutions.

The continuation of the process of building the eHealth system in Poland will significantly improve the resilience of the health care system to future crises by increasing patient participation in the treatment process and expanding the offer of public digital services and remote ways of providing medical services.

The implementation of ICD-11 (International Statistical Classification of Diseases and Related Health Problems) is also an important aspect. This classification provides the basis for health statistics. It creates a system of categories to which disease entities are assigned in accordance with established criteria, and the uniform classification ensures international comparability of data. Based on an ontological structure, the ICD-11 classification is fully electronic and much easier to implement compared to revision 10, which was not developed for an electronic environment. Updating the classification will make it easier to integrate it with other electronic health applications and IT systems, which will result in fewer errors and allow more details to be recorded and processed. As part of the POWER programme, a project is implemented to adapt the entire ICD-11 classification to Polish conditions and to develop the final Polish version of ICD-10 (taking into account all updates made after 2008), as well as to create Polish versions of IT tools, developed by WHO, which support ICD-11 users.

In addition, it is worth noting that the development of eHealth, especially during the COVID-19 pandemic, which is a difficult period for the health system, could become a source of increased attacks from cybercriminals. It is therefore important to strengthen efforts to protect and defend ICT systems and combat the sources of threats.

[264] World Health Organisation Report, *Global Diffusion of eHealth. Making universal health coverage achievable*. Geneva 2016, p. 12.

CHALLENGES - AREAS TO BE SUPPORTED

- Carrying out standardisation in IT health systems to ensure the interoperability of systems, including standards for data structures, processes, terminology and syntax.
- Developing public digital services in health care (e.g. introducing central registration for medical appointments - e-registration, patient cards, promoting and developing the EDM exchange and reporting of medical events to the eHealth Platform, as well as developing solutions such as the Patient Online Account (IKP) or e-referral) and digitisation of *back office* processes.
- Implementing communication and information-sharing tools between the different participants in the system (patients, doctors, nurses, pharmacists, payer), including communication/consultation tools to enable the coordination of services, consultations regarding the diagnostic process, as well as the elimination of irregularities.
- Developing ICT tools to support the process of navigating the patient through the system, including providing information on available services, notifying of appointments scheduled.
- Establishing a system for informing medical staff, pharmacists and patients about the availability and possible shortages of medicines, monitoring the distribution of medicines.
- Implementing information technology that optimises the doctor's time and workload, thus increasing the efficiency of the entire system.
- Support for building the digital competence of patients and medical staff, calculated to achieve optimal use of the solutions produced.
- Development of IT infrastructure in health care.
- Improving cyber security in the health care system.
- Cooperation with representatives of medical professions in the development of e-health solutions.

Direction of intervention 5 will be implemented using the following tools:

1) Tool 5.1 Developing public digital e-health services;
2) Tool 5.2 Developing digital skills of patients and medical staff and taking actions to increase the digital maturity of health care providers

Tool 5.1 Developing public digital eHealth services

Support under that tool should focus on the implementation of activities that are a continuation of the initiated processes of building the e-health system.

1) Creation of a Patient Service Centre - patient.gov.pl

The center will offer comprehensive service and improve communication with a patient, which will also translate into improved quality and access to services.

The possibility to register for a medical appointment online is the most frequently indicated service that the patients in Poland would use. According to a study entitled "eHealth. What do patients expect?"[265] conducted by the My Pacjenci Foundation together with the Centre for Health Care Information Systems in August 2017, 90% of respondents would be willing to use such a form of registering an appointment with a doctor, nurse or other medical professional.
An important element of improving patient service in the public health care system is also the development of other ICT tools, such as: telephone triage, telephone registration, advice on vacancies in hospitals, management of the medical rescue staff. It will also enable sending appointment reminders via text messages, which will make the life of millions of patients easier.

The aim of the above should be to enable patients to electronically search for available appointments for a doctor's appointment or hospitalisation and register electronically, as well as to manage planned services, including rescheduling or cancelling a service. The central electronic registration system will also streamline the process of maintaining benefit schedules and waiting lists by health care providers, which will contribute to its optimisation and indirectly reduce waiting times.

Building a central e-registration on the basis of the P1 Platform will, among other things, enable the electronic identification of the patient, thanks to the IKP. To achieve this goal, the development of IT infrastructure and appropriate programming solutions is an extremely important activity.

In addition, the Medical Information System (SIM) will enable the transfer of information about patient-related medical events, as well as the patient's EDM, to the doctor with the patient's consent. It is worth noting that it is planned that the e-registration system will initially enable registration for selected healthcare services, the scope of which will be systematically expanded.

2) Exchange of Electronic Medical Records

In its Communication on the digital transformation of health and social care in the digital single market, empowering of citizens and development of a healthier society (COM(2018)233)[266], the EC indicated that citizens should be able to access their full electronic health records securely anywhere in the EU. Citizens should retain control of their health data and should be able to exchange this data securely with authorised parties (for treatment, preventive services, research or any other purpose they deem appropriate).

In line with the EC recommendation on the EDM exchange format of 6 February 2019 (C(2019) 800), Member States should ensure that citizens and medical staff have remote and secure access to the above-mentioned documentation. An essential element of European policy is the promotion of interoperability of systems, both at national and European level, which is carried out in particular through the definition of the European Interoperability Framework (EIF), which forms part of the regulations announced in the Communication (C(2017) 134).

[265] https://mypacjenci.org/wp-content/uploads/2018/08/E_Zdrowie_Raport.pdf; accessed on 12 May 2020
[266] https://eur-lex.europa.eu/legal-content/PL/TXT/PDF/?uri=CELEX:52018DC0233&from=EN accessed on 27 October 2021.

An important aspect of system-wide EMD development activities is to base the solutions introduced on recognised and accepted international standards, which will condition the interoperability, including cross-border interoperability, of the national EMD exchange service. Realising the potential of the P1 Platform requires raising the digital competence of health care providers, as without this it is not possible to fully exploit the potential of the EMD exchange service as well as access to patient medical data extracted from medical events provided via the Health e-Platform. Activities undertaken as part of the tool should focus on further development in the area of EMD, in particular the inclusion of the Republic of Poland in its exchange between EU Member States.

A key direction is also further development of eHealth services based on solutions launched so far, such as e- prescription, IKP or e-referral, as well as solutions planned to be launched, aimed at making the use of the health system more intuitive and user-friendly. As part of the tool, solutions should be developed to help navigate the patient through the system, providing information on available services, reminding patients of appointments, as well as monitoring and reporting on the availability of medicines and possible shortages.

Moreover, an important element is also the creation of solutions to support communication (including consultation) between the various participants in the health care system (patients, medical professionals, providers, payer).

For the proper functioning of eServices in the healthcare system, it is necessary to develop IT infrastructure, including that of healthcare providers. In this context, the digitalisation of *back office* processes is also very important, especially in central administration. At the same time, the development of digital services in the health system is associated with an increasing risk of cyber attacks, so it is essential to take measures to improve cyber security in the system.

The document should highlight the importance of electronic medical records within clinical trials. There is a need to ensure that clinical trial sponsors are entitled to inspect patients' medical records to the extent that this is necessary for the conduct of the clinical trial, including the clinical trial monitoring process. This problem was particularly highlighted during the pandemic period, when access of clinical research associates to research facilities was very difficult and the current state of the law and the IT infrastructure of health care entities did not enable remote access to the medical data of patients assigned to specific clinical trials.

In view of the development of clinical trials, it is important to ensure that such solutions are in place in the legislative and technical areas (through adequate access in entities conducting clinical trials).

Tool 5.2 Developing digital skills of patients and medical staff and taking actions to increase the digital maturity of health care institutions

Even the best developed digital health solutions will not be effective without adequate awareness and knowledge of how to use them. Given that the computerisation of the health sector is a process that will progress, the acquisition or expansion of digital competences among both patients and medical staff (including students and representatives of other health professions and units administering medical entities) is necessary to ensure that benefits are achieved in terms of increased convenience as well as time and expense savings.

Within the framework of this tool, activities should be carried out in order to increase the level of awareness of already existing and produced eHealth solutions and services among the identified stakeholders through:

- organising information campaigns, training courses, practical sessions;
- communicating the benefits to individual stakeholders through measures designed to target specific user groups;
- popularising digital health solutions at universities in the area;
- applying the principle of "simplicity by design" – using accessible user experience and user interface solutions for the digital solutions being introduced;
- using well-known communication channels (the Internet, smartphones, mobile applications);
- offering assistance and consultation to the administration of healthcare entities on the computerisation of facilities and increasing staff competence.

Direction of intervention 6: Developing and disseminating modern and innovative technologies in the health sector

Of great importance in the context of access to medical services and the legitimacy of providing remote solutions are activities related to the development of telemedicine, which are an effective response to challenges related primarily to demographic trends but also to the epidemic crisis.

There is significant potential for benefit from the perspective of patients, medical staff and the system as a whole in the development and increased use of artificial intelligence and tools based on algorithms to analyse large datasets.

Of particular importance for the development of medicine are clinical trials, which determine the delivery of new drugs and medical devices. Clinical trials are a great opportunity for patients, especially those suffering from serious diseases, for whom all standard therapies have failed [267].

In view of the importance of clinical trials, we propose to concentrate, to a greater extent, on the activities that contribute to the improvement of the conditions for conducting clinical trials in Poland. Clinical trials are one of the key elements of the development works on new drugs and are often a very important therapeutic option for patients. The benefits of clinical trials of various phases apply not only to patients but also to the research centres where they are carried out as they generate revenue for the state budget.

However, it should be remembered that the recent problems caused by the collapse of patient recruitment for clinical trials due to the pandemic and the difficulties in monitoring clinical trials have revealed the need for further work to improve the systemic solutions, e.g., the introduction of IT solutions (remote monitoring of trials) or the compassionate use programme (enabling patients fast access to therapeutic options).

In general, innovative solutions in the health sector contribute to improving the efficiency of the health care system, and thus to extending and improving the quality of life of patients [268]. Therefore, it is necessary to support the cooperation of institutions in the use of qualified staff, in particular, in the field of imaging, pathomorphological and endoscopic diagnostics. This can be achieved by using digital on-line and off-line solutions, thanks to which medical professionals can perform their tasks remotely.

New medical technologies increase investment in healthcare but also help to reduce some costs and improve the quality of treatment[269].

[267] *Badania kliniczne w Polsce*, PWC, December 2015, p. 4.
[268] Czauderna P., Gałązka-Sobotka M., Wątek M., Golubiewski K., Janas J., Maciejczyk A., Woch M., Bartoszewicz A. (2020), *ZDROWIE DLA GOSPODARKI – GOSPODARKA DLA ZDROWIA: Nowoczesna droga do równowagi systemu i obywatela w zdrowiu*, p. 45

[269] BFF Banking Group (2019), *Finansowanie ochrony zdrowia a jakość systemu dla pacjentów. Polska na tle wybranych krajów europejskich*, https://pl.bffgroup.com/documents/138192/154306/PL+Raport+-+Finansowanie+ochrony+zdrowia+a+jakosc+systemu+dla+pacjentow+%283%29.pdf/9566cc9e-0b0a-34d5- abe1-3931c069543b; dostęp 20.01.2020.

CHALLENGES - AREAS TO BE SUPPORTED

- Increasing the scientific potential of the health care sector, including strengthening the role and financing of research (in the field of medical sciences and health sciences), non-commercial clinical trials and research and development works.
- Improving access to innovation in health care, including modern therapies.
- Developing and promoting modern forms of providing medical services and health care, combining elements of telecommunications, IT and medicine (telemedicine).
- Placing particular emphasis on the implementation of innovations related to the development of medicine (new therapies, biotechnology), technology (digital technology and telemedicine) as well as organisational and process innovations.
- Ensuring consistent implementation of innovations and striving for constant optimisation - coordination and action in this regard on the part of central institutions and involvement of leading scientific and research centres are necessary.
- Elimination of inadequacies or imperfections in legal regulations related to the introduction of new types of technology, as well as their uncoordinated implementation only in certain areas.
- Development of digital tools to assist medical staff, such as speech and image recognition or clinical decision support systems.
- Intensification of efforts in the area of the development and application of artificial intelligence, in particular, in the field of the use of artificial intelligence in predictive, diagnostic and therapeutic processes (including the use of neural networks) and patient service processes.
- Establishing a system for monitoring and supporting the effectiveness of pharmacotherapy (monitoring the achievement of therapeutic goals and continuity of treatment, adverse effects, counteracting polypharmacy and antibiotic resistance).
- Establishment of a biomedical hub and the development of production of active substances and plasma-derived products.
- Development of the potential of the medicine and medical devices sector.
- Development of analytical activities, e.g. in the field of collecting and analysing data to enable, in the long term, the improvement of the quality of health care in the field of infectious and non-infectious diseases.

Direction of intervention 6 will be implemented using the following tools:

1) Tool 6.1 Developing and disseminating telemedicine solutions;
2) Tool 6.2 Developing the concept of using artificial intelligence tools in health care;
3) Tool 6.3 Increasing the scientific and R&D potential of the health sector.

Tool 6.1 Developing and disseminating telemedicine solutions

Telemedicine understood as remote delivery of health care services and medical information with the use of telecommunication technologies is an important element of the development of e-health in Poland in the coming years. The use of telemedicine will be one of the actions helping to improve the efficiency and accessibility of the health care system, at the same time, remote methods of providing services are a measurable response to the needs related to the pandemic crisis and an important element of the exit strategy.

The purpose of the measures implemented based on that tool is to improve the quality of treatment and

accessibility to services for patients by providing faster and easier access to medical services through the use of telemedicine solutions.

The main actions proposed under that tool include:

- analysis of the package of services and identification of the services that would be most optimal for implementation in the form of telemedicine;
- preparation of recommendations related to the implementation pathway of a given solution taking into account the technical (hardware, communication standards) and substantive issues;
- analysis of the readiness to handle new solutions in terms of content and hardware - on the part of the service provider and the patient;
- determining the conditions for the purchase of medical and IT equipment based on the conducted analysis, including the m-health devices to enable the provision of telemedicine services (e.g., telemonitoring devices for home care of the elderly and dependent persons; monitoring of vital health parameters in persons with chronic diseases; devices for home telerehabilitation, etc.);
- defining transparent and clear standards for providing telemedicine services;
- implementation of the recommended procedures, in the form of a pilot project;
- introduction of the recommended procedures into the package of services;
- educational and promotional activities - training courses for medical staff and patients, information and promotional campaigns.

Tool 6.2 Developing the concept of using artificial intelligence tools and advanced analytics of large data sets in health care

Artificial intelligence and advanced methods of analysing large data sets are key elements of the ongoing 4th industrial revolution. They enable the transformation of the health care sector towards predictive, anticipatory, personalised and participatory solutions. In view of the rising health care costs, unfavourable demographic trends and the progressive development of technology, they are important support of the implemented e-health solutions.

Artificial intelligence solutions can contribute to the benefits of all parties in the health care sector:

- patient perspective: increasing the quality of medical services, optimising the time and effectiveness of medical procedures, developing individual models of prevention based on the analysis of medical data, personalised medicine;
- medical staff perspective: access to clinical decision support tools, improving the effectiveness of diagnostics (earlier detection of diseases), identifying epidemiological threats, detecting drug interactions, optimising working time by analysing data from monitoring devices;
- system perspective: optimisation of costs and use of resources, reorientation of the health care system from a response to a disease to preventive measures, building tools to monitor and eliminate abuses;
- scientific and research perspective: new drugs and more effective clinical trials developed based on complete data and not on a group, better identification of patients, better positioning of new drugs, reduction or elimination of side effects.

The implementation of the activities with the use of the discussed tool should contribute to increasing the level of use of artificial intelligence in the health care system and the development of tools of that type. In that context, it is desirable to initiate activities that would lead to the practical application of artificial intelligence tools in the work process of medical staff for the purposes of improving prevention, diagnosis and treatment, through, for example, speech recognition in the processes of creating medical documentation, image recognition and automation of identifying deviations (e.g. radiology, pathomorphology), "real world data" (RWD) analysis, optimisation of processes in the system or the implementation of artificial intelligence in patient monitoring and service.

An important direction for the development of analytical tools is to exploit the potential of the data found in the medical information system and medical registers. An example of such activities may be the creation of a system to monitor and support the effectiveness of pharmacotherapy to enable monitoring of side effects,

achievement of therapeutic goals and continuity of treatment, as well as counteracting polypharmacy and antibiotic resistance. An important aspect of using the potential of artificial intelligence and advanced analytical methods is also increasing the availability of data found in public and medical registers by developing transparent rules and methods for sharing the data while maintaining anonymity and respecting patient rights.

Tool 6.3 Increasing the scientific and R&D potential of the health sector

The area that requires significant support and promotion in the context of health care is the research and development sector.

It is necessary to make the organisation of clinical trials professional by introducing a career path related to the organisation and management of that process to limit the organisational work for the researchers, simplify administrative procedures for clinical trials while maintaining high quality and safety.

At the same time, for the development of the science sector and the growth of innovation in health care, it is also necessary to invest in increasing the knowledge of the staff who perform clinical trials. A difficulty related to the above is the "brain-drain" phenomenon in the area of biotechnology, resulting from international (external) and cross-sectoral (internal) emigration, as well as the lack of support for scientists when it comes to the commercialisation of research results - patents, searching for investors, negotiating terms and conditions. The development of medical research is also restricted due to too short perspective of grant funding, which limits the conduct of research that last more than 5 years - this leads to research being split into smaller tasks that are sometimes ignored. The researchers spend a lot of time applying for follow-up funding, which increases the sense of uncertainty as to the meaning of the performed research.

In view of the above, there is a need to develop a system of incentives to continue the R&D in health care in Poland, and to build a support system for the quick and effective transfer of research results to the commercial stage. In that context, support should be offered to establish and develop clinical research centres in Poland and to develop entrepreneurship and education in the field of clinical research, as well as to use new technologies in medicine, and finance young talented people through grants for scientists under the age of 35.

An important element of expanding the research and development potential of the health care sector is also the creation of a biomedical hub, which is a platform that creates opportunities to use innovative solutions and scientific research results to improve the health of patients.

Also, an important measure that needs to be introduced to improve the medical safety of the country is supporting the production of active substances and blood-borne products through plasma fractionation. Therefore, it is necessary to support not only research and development works performed to invent new active substances but also the growth of research in the field of pharmacodynamics, pharmacokinetics or improving compliance with medical recommendations. It is important, especially in times of crisis and anxiety related to the coronavirus pandemic, to offer to patients access to effective and safe medicines as well as a transparent and rational drug reimbursement system that supports investment activities in Poland and the development of the Polish economy. It is planned to support financially leading Polish universities and hospitals so that they can develop drugs and vaccines to stop further mutations of the virus.

In view of the above, undertaking tasks in the regulatory area is extremely important, including, above all, the creation of a regulatory framework and the implementation of a system of incentives for manufacturers in terms of subsidies for API (Active Pharmaceutical Ingredient) production. In the investment area, in turn, the financing of the expansion or construction of production facilities, the reconstruction of API syntheses and the modernisation of production lines by pharmaceutical companies is of great importance.

With this in mind, it is also extremely important to establish an adequate scientific base, including infrastructure, through investment measures such as the construction of a new analytical centre or the development of appropriate IT systems for obtaining and monitoring epidemiological data. The priority area of activities should be analytical support in the field of: vaccine technology, antiviral drug development, drug resistance studies and research in the field of post-covid complications and, in the longer term, the treatment and/or prevention of those complications. Analyses will be prepared in the context of developing and testing innovative therapeutic solutions and diagnostic methods. With such data, it will be possible to identify the most promising therapies, and then, conduct analyses by dedicated institutions in terms of implementing the evaluated solutions into the health care system. The conducted analyses will be used, e.g., to identify strategic areas of intervention that can

be implemented in the form of non-commercial ABM-funded clinical trials and the possibility of developing and gaining independence by Poland in the area of the supply of medicines or raw materials for the production of medicines in the event of further epidemic threats.

In the future, the described activities will support institutions that deal with the assessment and optimisation of therapy, which, in the long term, will translate into generating additional savings within the health care system and their allocation to other goals related to health.

To increase the scientific, research and development potential as part of creating conditions for the growth of the pharmaceutical manufacturing sector, the role and importance of competent national and EU authorities responsible for scientific and regulatory support of the development of innovation should be taken into account (EMA, URPLiB, drug agencies in other countries of the EU). Safety and quality, GLP standards, GCP standards, EDQM guidelines are, apart from clinical effectiveness, the foundations of national and EU law. In connection with the above, the proposal is, as part of the activities in the field of creating conditions for the development of the medical sector, to extend the activities to include the objective of improving regulatory knowledge and access to the Polish research and development community for European and national institutions responsible for supporting innovation, practical support for entities in their contacts with the EMA (fees for legal advice, reimbursement of scientific advice costs, travel costs for meetings with the EMA experts, etc.).

Due to the focus of the Polish pharmaceutical industry on generic drugs, there are no entities on the Polish market with experience in research and development in the field of innovative medicinal products. The currently functioning R&D departments within enterprises develop on the "learning from own mistakes" bases rather than using the knowledge of experienced R&D staff with appropriate knowledge in the regulatory area. Therefore, it seems reasonable to establish an institution in the country that would offer advice in the regulatory area ("scientific advice") and to intensify training in that area for innovators, inventors and R&D staff of universities and enterprises. Due to the specificity of the "scientific advice" process of the European Medicines Agency, which requires the originators to produce quality documents and development plans for innovative medicinal products, it would only seem reasonable to support the participation in the very expensive and complex "scientific advice" procedures of the EMA once the competence of national R&D staff is improved and supported through national support instruments. Given the other regulatory pathways for generic drugs that bypass the EMA, it does not seem that the proposed solutions will contribute to the attractiveness of Polish manufacturers of generic drugs on external markets.

COORDINATION, MONITORING AND EVALUATION SYSTEM

All activities listed in *Healthy Future* and the appendices, regardless of the method of financing, will be coordinated and monitored by the minister responsible for health with the help of appropriate bodies, units and institutions.

The smooth and effective implementation of all objectives and tools listed in the document requires their coordination at multiple levels:

1) central and regional;
2) national and EU funds;
3) between different programmes financed from community funds;
4) documents at the programme and operational level in relation to Healthy Future.

The need to coordinate regional activities with national ones is related to many areas of key importance for the proper functioning and development of the health care sector in Poland,
both in the area of the legislative environment and the creation of legal grounds for the implementation of reforms, as well as specific actions of a project nature concerning, for example, preventive health care, strengthening the potential of medical staff or infrastructural investments.

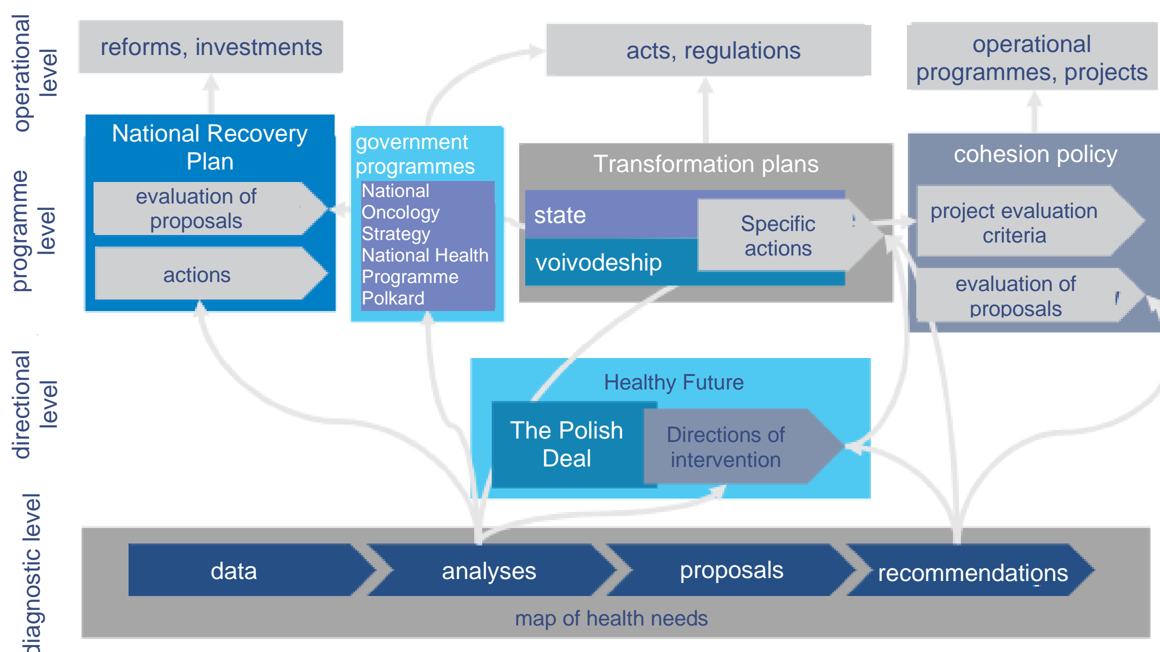
Effective coordination is crucial to maximising the effects of planned activities. Appropriate coordination mechanisms contribute to the achievement of operational objectives and related indicators, stimulate complementarity and, above all, ensure consistency and effectiveness
of planned interventions.

The coordination tools that can be used to implement the actions listed in Healthy Future are:

1) regulations of the minister responsible for health and regulations of the National Health Fund shaping the health policy in a given area;
2) Steering Committee for the coordination of support in the health sector;
3) system of coordination, implementation and reporting of national and voivodeship transformation plans;
4) coordination mechanisms indicated in other documents of the health care system (e.g. National Health Programme, National Oncology Strategy, Medical Fund, etc.);
5) guidelines of the minister responsible for health or the minister responsible for the development policy (e.g. on minimum conditions for health care providers applying for participation in the health policy programme);
6) investment assessment mechanism (OCI);
7) recommendations, opinions and positions of the minister responsible for health in the areas covered by support; maintaining a public database of those positions;
8) appointment of teams/working groups to deal with specific problems;
9) ensuring the possibility for experts in the area of health to participate in the evaluation of projects in that field;
10) a website for communication, coordination, monitoring, exchange of experience and good practices with regard to the use of the EU funds.

The development policy of the health sector in Poland is carried out at four levels through the strategic and implementation documents assigned to them. They are complementary and interdependent, with the same basis, i.e. data, analyses, conclusions and recommendations indicated in the Maps of Health Needs.

Figure 76. Coordination levels and documents in the policy of the development of the health sector in Poland



Source: Ministry of Health, own elaboration

The basis for the public policy is the analyses and recommendations contained in the Maps of Health Needs – a document of a diagnostic nature that includes detailed and systematised knowledge on the availability of care services in the country, planned changes in that area and a recommended courses of action. The directions of intervention defined in *Healthy Future* are based on analytical data resulting from the map of needs. Those, in turn, translate into the information in the transformation plans (national and voivodeship), which are implementation documents that contain specific actions to be taken to ensure access to health services of high quality. At the same time, they influence the identification of priority reforms and investments planned to be implemented within the framework of the National Recovery and Resilience Plan and Cohesion Policy for the years 2021-2027, and are used in determining the criteria for assessing projects and applications for funding.

National and voivodeship transformation plans are one of the elements of the system of creating and coordinating health care policy at the central and regional levels. They define the health needs and challenges related to the organisation of the health care system that require actions coordinated at supra-regional and voivodeship levels. They determine the year/years for the performance of the activities, the entities responsible for their implementation, estimated costs, expected results and implementation indicators.

The National Transformation Plan is prepared by the Minister of Health after obtaining the opinion of a large group of experts: the Council for Social Dialogue, the President of the National Health Fund, the President of AOTMiT and the Director of the National Institute of Public Health – National Institute of Hygiene – National Research Institute (NIZP-PZH-PIB), national consultants in health care, the Director of the National Institute of Cardiology and the Director of the National Cancer Institute. With regard to the area of voivodeships, the transformation plan is determined by voivodes, who take into account the national plan and recommended directions of actions indicated in the Map of Health Needs and resulting from other strategy documents on health care. Such a system of coordination makes it possible to ensure the uniformity, comprehensiveness and coherence of activities in the field of health care undertaken on a provincial and supra-regional scale.

The transformation plans are drawn up for a period of five years but are subject to annual monitoring in terms of the achievement of the performance indicators of the individual measures in a given year. Additionally, mid-term reports are to be prepared in the third year, and final reports - after a five-year implementation period.

Both interim and final reports shall include:

1) a description of the actions initiated or implemented during a given period,
2) a description of how the recommended action directions outlined in the map will be implemented;
3) an indication of the sources and amounts of funding for the actions performed or initiated during a given period;
4) degree of achievement of indicators for the implementation of individual actions;
5) identification of new priority health needs and challenges for the health care system;
6) conclusions after the implementation of the National Plan;
7) proposals for updating actions.

Conclusions from the mid-term reporting will be used to update the activities in the event of the achievement of indicator targets or as a result of the identification of new priority health needs and challenges for the organisation of the health system. The voivodeship plans will also be updated if required, to coordinate them with the national plan after its amendment.

Since *Healthy Future* is a guidance document, its monitoring and coordination system is linked to the implementation of, inter alia:

- current national development strategy;
- documents adopted by the Council of Ministers, e.g. National Health Programme, National Oncology Strategy, proposed strategy in the field of circulatory system diseases;
- mechanisms established by law, e.g. the Medical Fund.

An additional element of the coordination and implementation system, the purpose of which is to rationalise and increase the efficiency of the public spending system, is the investment assessment mechanism (OCI) resulting from Art. 95d, sec. 1 of the Act of 27 August 2004 on healthcare services financed from public funds.
As a result of its application, public funds will be used to support only those investment projects that are purposeful, and therefore meet existing and forecasted health needs. The effect of using the mechanism will be the adjustment of investments in the health sector to the actual needs of society and enabling the service provider to develop prospectively in line with local health needs.

It is also important to emphasise the role of the National Health Programme, which is a strategic document for public health and therefore the basis for action in the health care policy-making and coordination system. The National Health Programme is based on the cooperation of government administration bodies, local government units and third-sector entities. The National Health Programme is drawn up for a period of not less than five years and is subject to an annual monitoring process. The minister competent for health, as the coordinator of the implementation of the Programme, monitors the activities of the entities that perform the tasks in the field of public health (permanently or periodically) in the context of the strategic objective and operational objectives of public health. The minister may also ask individual entities to undertake specific tasks and, if required, support their activities financially or substantively.

With regard to the implementation of individual long-term programs supervised by the Minister of Health, such as the National Oncology Strategy or Polkard, inter alia, systematic monitoring activities are also carried out by the units indicated in the relevant regulations.

The subject of monitoring is the progress in the implementation of the objectives in the national and regional terms. Taking into account the scale of the planned activities, the amount of public funds (national and EU funds) allocated to health care, as well as the number of entities that make up the institutional system of health policy in Poland, the coordination of the sector's activities is a significant challenge for public authorities and will take place at three levels:

- strategic – conducted by the central authorities, which are responsible for creating and updating the strategic

framework for the health care sector. The main bodies are: the minister competent for health with the assistance of organisational units competent for investments, programming and strategy. The main tasks are to set directions in the field of policy and strategic programming in health care;

- operational - conducted by the Steering Committee appointed for that purpose, for the coordination of support in the health sector. At that level, the supporting body is the organisational unit of the Ministry of Health competent for the coordination of the implementation of projects co-financed from European funds in cooperation with other substantive departments of the Ministry, in partnership with the entities that influence the shape of health policy in Poland, and social partners;
- executive - carried out through the implementation of specific actions (tools) in line with the objectives of the *Healthy Future* document. The implementation will take place both at the central level (through the activities of e.g. the National Health Fund, the Ministry of Health) and at the regional level (through the activities of e.g. voivodeship branches of the National Health Fund, managing authorities of the Regional Operational Programme, voivodes).

The main tool for coordinating interventions in the health sector, supported by the cohesion policy funds, is the Steering Committee for coordination of support in the health sector. The Committee is managed by the minister responsible for health. Apart from the representatives of the minister responsible for health and units subordinated to the Ministry of Health, the members of the Committee are, inter alia, the representatives of: the minister responsible for regional development, the minister responsible for labour, the minister responsible for social security, the minister responsible for digitisation and regional governments, as well as partners representing the so-called third sector in the field of health care (i.e., e.g. associations, foundations, self-government organisations). The meetings of the Committee may also be attended by other entities invited by the chairperson of the Committee, e.g., medical consultants or representatives of social partners and entities representing civil society.

The coordination activities are carried out through, e.g., issuing by the Steering Committee recommendations for project selection criteria, for a specific type of investment. The Managing Authorities are required to follow the recommendations for the project selection criteria, for the relevant interventions.

A prerequisite for undertaking interventions in the health sector is their compliance with the action plan agreed upon by the Steering Committee. The action plan contains, among other things, recommendations for the monitoring committees on the modes and criteria for selecting projects under calls for proposals announced under national and regional programmes and proposed interventions implemented in the form of projects that are not included in the competitions. The action plan also indicates the appropriate justification for taking the intervention, whether it is in the form of competition or not.

The Steering Committee is based on a mechanism that guarantees the commitment of the institutions responsible for the allocation of the EU funds for the health system to cooperate closely and formally with the minister responsible for health to enable proper coordination of investments in the area of health, in particular, with so many support instruments.

The Committee analyses and evaluates issues related to health care on an ongoing basis, in particular, in terms of developing solutions to ensure the effectiveness and efficiency of cohesion policy interventions. The Committee may request evaluation and analyses for particular scopes of support.

As a rule, meetings of the Committee are held if required, however not less often than twice a year. If a more detailed discussion on specific issues is necessary, the chairman may decide to convene a meeting of the Committee at a working level, with a composition appropriate to discuss the given matter. The detailed mode of work of the Committee, the tasks of the chairman and members of the Committee are set out in the regulations.

The monitoring and evaluation will be based on changes in the value of contextual indicators for the area of health, over time, indicated in strategic documents.

Table 14 Context indicators for the area of health in strategic documents

Indicator	Measurement unit	Base value (year)	Target value (2007)	Data source	Indicator definition
Increasing healthy life expectancy and improving the health of Poles					
Health adjusted life expectancy (HALE) at the time of birth	years	68.7 (2019)	growth	WHO	Healthy Life Expectancy (*HALE*) - the number of years a person of a given age can expect to be in good health, taking mortality and disability into account. The HALE/DALE measures of health-adjusted life expectancy were estimated by WHO using mortality, incidence and prevalence data. It is based on epidemiological data
1. Patient 1.1. **Accessibility**. Ensuring equal **access** to health services in a quantity and at a time adequate to the legitimate health needs of the population					
1.1.1. Median wait time for knee replacement surgery	days	107 – urgent cases 460 - stable cases (Q4 2019)	drop	NHF	Median wait time - based on data on average waiting time, reported by health care providers, for the provision of health care services
1.1.2. Median wait time for lens surgery (cataract)	days	36 – urgent cases 142 - stable cases (Q4 2019)	drop	NHF	Median wait time - based on data on average waiting time, reported by health care providers, for the provision of health care services
1.1.3. Number of active substances produced in Poland	number of	658 (February 2021)	growth	GIF	Number of active substances produced by chemical/biological synthesis (chemical/biological APIs) or plant extraction (plant API) at at least one stage of production in Poland
1.2. Improving the safety and clinical effectiveness of health services					
1.2.1. Number of hospitals accredited by the Ministry of Health	number	214 (2020)	growth	CMJ	Number of hospitals with accreditation. Hospital accreditation was developed by the Centre for Quality Monitoring (CMJ) in Health Care – the center for cooperation with WHO for quality and safety development in health care systems

1.3. **Friendliness.** Increasing patient **satisfaction** with the health care system					
1.3.1. Percentage of persons satisfied with the way of functioning of health care in Poland	%	36 (2020)	growth	CBOS	Percentage of persons strongly satisfied or rather satisfied with the way of functioning of health care in Poland
1.3.2. Number of complaints to the NHF	number	6,825 (2020)	drop	NHF	Number of complaints to the NHF (concerning headquarters and voivodeship branches)
1.3.3. Number of complaints to the Patient Ombudsman	number	135,625 (2020)	drop	RPP	
1.3.4. Number of proceedings related to the violation of the collective rights of patients that ended with the confirmation of the Patient Ombudsman that the collective rights of patients were violated	number	136 (2020)	growth	RPP	
1.4. **Public health**. Developing preventive care, promoting health and health-oriented attitudes					
1.4.1. Mammography screening attendance as part of the prevention programme (% of eligible persons)	%	63.62 (2019)	growth	Ministry of Health	Share of eligible persons in the annual in the annual female population
1.4.2. Cytological screening attendance as part of the prevention programme (% of eligible persons)	%	17.3 (2019)	growth	Ministry of Health	Share of eligible persons in the annual in the annual female population
1.4.3. Percentage of vaccinated children at the age of 3 in relation to the requirements of the "Vaccination programme" (% reported)	%	85.2 (2019, born in 2017)	growth	NIZP- PZH-PIB	Share of children at the age of 3 fully vaccinated under the compulsory vaccination programme among those covered by the reports
1.4.4. Percentage of persons vaccinated against flu	%	4.12 (2019/2020)	growth	NIZP- PZH-PIB	Share of persons vaccinated against flu in the total population
1.4.5. Share of expenditure on prevention in current expenditure on health	%	2.3 (2017)	growth	Statistics Poland	Share of expenditure on prevention and public health in total expenditure on health

2. Processes					
2.1. Ensuring the **transparency** of procedures					
2.1.1. Number of implemented organisational standards of patient health care	number	3 (February 2021)	growth	Ministry of Health	Number of healthcare organisational standards implemented by Regulation of the Minister of Health (concerning anaesthesiology and intensive care, perinatal care, patients suspected of being infected or infected with SARS-CoV-2) (2021)
2.1.2 Number of therapeutic and diagnostic pathways developed in the public health care system	number of	11 (February 2021)	growth	NHF	Number of therapeutic and diagnostic pathways implemented by the National Health Fund in a form of a pilot project
2.2. Improving **patient service** processes					
2.2.1. Quality assessment of the health care system	coefficient .	5.4 (2016)	growth	European Quality of Life Survey (EQLS) – Eurofound	Assessment of the quality of health care in Poland, a coefficient presented in the range [0-10]. Low value of the coefficient means a low score related to the quality of health care
2.2.2. Number of individual case investigations, unde which violation of a patient's rights was confirmed	number	1,312 (2019)	drop	RPP	Number of individual case investigations conducted by the Patient Ombudsman, under which violation of a patient's rights was confirmed
2.3. Developing **coordinated care**					
2.3.1. Number of developed mode of coordinated and comprehensive care	number	17 (February 2021)	growth	NHF	Number of comprehensive and coordinated care services developed by the National Health Fund for the public health system. Including pilot programmes
2.3.2.1. Number of models of coordinated and comprehensive care implementec in the public health care system	number	9 (2019)	growth	NHF	Number of comprehensive and coordinated care services implemented by the National Health Fund in the public health care system. Pilot programmes are not included
2.3.2.2. Number of persons qualified for coordinated and comprehensive care programmes i the public health care system	number	50 thousand (2019)	growth	NHF	Number of people who received at least one coordinated or comprehensive care service in the public health care system

2.4. Optimising the **"pyramid of services"**					
2.4.1. Outpatient services ratio	%	6.62 (2018)	drop	NHF	Numerator: number of inpatient services (hospitalisations), characterised by the procedure only, which can be provided as an outpatient procedure Denominator: numerator + number of outpatient services characterised by such procedures, the reporting of which enables the settlement of hospitalisations
3. Development 3.1. **Personnel**. Supporting the development of the health system in the context of changing health needs					
3.1.1. Number of graduates from medical studies/courses	number	162 thousand (2020)	growth	Ministry of Health	Number of people who received a certificate confirming qualifications in selected medical professions (nurses, midwives, physiotherapists, doctors, dentists, medical analytics, pharmacy, medical rescue, dental assistant, dental hygienist, massage technician, medical assistant, orthoptist, hearing care professional, dental technician, electroradiology technician, pharmaceutical technician, orthopaedic technician, medical sterilisation technician, occupational therapist, medical electronics and IT technician)
3.2. **Infrastructure**. Developing and upgrading health infrastructure in line with the health needs of the population					
3.2.1. Value of completed investments	number of	PLN 2.4 billion (2020)	growth	Ministry of Health	Total amount of co-financing of investments completed in a given year (from the state budget, EU funds and COVID-19 Response Fund at BGK)
3.2.2. Number of supported entities	number	360 (2020)	growth	Ministry of Health	Total number of entities conducting medical activity that received support under investments completed in a given year
3.2.3. Share of medical equipment with high priority for replacement	%	44.90 (2019)	drop	Ministry of Health	The share of old medical devices characterised by high utility (determined based on the average number of tests performed with the use of the device by a given health care provider)

					in the total number of medical devices (accelerators, angiography devices, brachytherapy equipment, ECMO, gamma cameras, mammograms, PET scanners, MRIs, X-rays, CT scanners, ultrasound scanners)
3.3. **Innovation**. Developing and disseminating modern and innovative solutions in health care					
3.3.1. Share of patients using telemedicine solutions	%	~0 (2019)	growth	Ministry of Health	Share of patients who received at least one telemedicine service in the total number of patients in a given year
3.3.2. Share of services provided via telemedicine	%	~0 (2019)	growth	Ministry of Health	Share of services provided with the use of telemedicine solutions in the total number of services provided to patients in a given year
3.3.3. Number of plasma-derived drugs manufactured in Poland from plasma obtained in blood donation centres	number	3 (February 2021)	growth	GIF	Number of plasma-derived medicines manufactured in Poland based on plasma obtained in blood donation centres
3.4. **e-Health**. Developing and disseminating digital e-health services					
3.4.1. Number of implemented e-services in the public health care system	number	352 (February 2021)	growth	CeZ	Number of e-services implemented under CeZ systems
3.4.2. Number of patients using e-services in the public health care system (e-prescriptions)	number	28.7 million (February 2021)	growth	CeZ	Number of patients (unique records) who used the e-prescription service
3.4.3. Number of Online Patient Accounts	number of	5.8 million (February 2021)	growth	CeZ	Number of Online Patient Accounts - adults and children
4. Finance 4.1. **Increase in and diversification of financing**. Increasing public expenditure on health care					
4.1.1. Share of public expenditure on health (% GDP)	%	4.9 (2019)	growth	Statistics Poland	Share of *general goverment expenditure* in GDP
4.1.2. Share of expenditure of government institutions in public expenditure on health care	%	8.22 (2018)	drop	Statistics Poland	Share of expenditure of public government institutions in public expenditure on health care
4.2. Effectiveness of expenditure**. Rationalising the mechanisms of expenditure**					
4.2.1. Hospitals' debt	number	PLN 18.430 billion	drop	Ministry of Health	Total liabilities of public hospitals based on the Rb-Z report

		(Q3 2020)			

Minister of Health
Republic of Poland

Appendix No. 1

DEINSTITUTIONALISATION STRATEGY: HEALTH CARE FOR THE ELDERLY

"Zdrowa Przyszłość (Healthy Future). Strategy framework for the development of the health system for 2021-2027, with an outlook to 2030"

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INTRODUCTION

This document constitutes Appendix No. 1 to the document "Healthy Future. Strategy framework for the development of the health system for 2021-2027, with an outlook to 2030", hereinafter referred to as the "Strategy". In accordance with the assumptions set out in the document, support for the elderly planned. The document includes tasks such as providing the elderly with comprehensive and universally accessible health care and other forms of care and assistance.

The document consists of a diagnostic section that contains demographic and epidemiological data, a description of the health situation of the elderly in Poland, health and care needs and a description of the currently available support, that is, a description of the available health care within the health care system i.e. guaranteed long-term care services and palliative and hospice care, as well as other health care services broken down into inpatient, outpatient, home care and day care.

One of the sections of the document is also dedicated to informal care for the elderly.

The main goal is defined, which is to improve the health-related quality of life of the elderly and their caregivers in the local community.

The following strategic areas for achieving the main objective are identified:

1) Development of human resources;
2) Development of forms of day care;
3) Development of forms of home care;
4) Development of innovative forms of care;
5) Support for informal caregivers;
6) Coordination of community care.

Each strategic area was assigned a specific objective and concrete actions to be implemented as well as results to be achieved.

Separate sections are dedicated to the system of coordination and implementation and monitoring and evaluation systems of the planned activities, as well as indicators for achieving the objectives of the activities.

The most important section includes actions to be financed from both national and the EU funds. The method of managing the budget and European funds is specified in separate regulations, as is the way of applying to have the projects financed from those funds. The implementation of the document does not affect changes in regulations with respect to the management of financial flows and their volume.

The actions presented in this document, especially in the field of financing from European funds, will be undertaken simultaneously with analogous actions for deinstitutionalisation of social services indicated in the Strategy for the Development of Social Services prepared by the Ministry of Family and Social Policy.

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DIRECTIONS OF DEVELOPMENT OF HEALTH SUPPORT UNDER THE DEINSTITUTIONALISATION

Older people are one of the four population groups included in the pan-European guidelines for the transition from institutional to community-based care (apart from people with disabilities, people with mental health problems and children).

According to the aforementioned document, the process of deinstitutionalisation of health services addressed to those people is to contribute to the development of personalised health services offered in the local community and designed to reduce the need for institutional care and to change the current proportions of dedicated resources (in particular human and financial resources) - from the dominant position of institutions providing 24-hour long-term care towards the predominance of services provided in the local environment.

It is important to note that the target groups for the deinstitutionalisation measures listed above are not disjoint groups, e.g. an older person may have a disability and mental health problems at the same time. In that case, the range of forms of support depends on the particular type of health problem and need.

In the current health care system, older people in the community are offered, in particular, long-term care and palliative and hospice care, as the elderly, due to the increased number of diseases and ailments, constitute the largest group of recipients of those benefits.

Providing appropriate health care is of particular importance for the elderly who need support in everyday functioning not only because of limited mobility and sensory dysfunction but also because of cognitive and emotional problems due to progressive dementia as well as chronic incurable cancer and non-oncological diseases.

However, being an older person does not mean the need to use that type of service as the criteria for obtaining them are strictly medical and based on identifying specific health problems.

It is also worth noting that some older people in need of non-medical support find it in the social assistance system, including, e.g., care services provided in day or 24-hour facilities or in the form of home-based care and support services.

The main purpose of the process of deinstitutionalisation of health services dedicated to the elderly is to improve health and quality of life of the elderly and their caregivers, as well as to support and maintain the independence of the elderly to enable them to function in the local environment as long as possible.

Taking into account the specificity and issues of the health care system in Poland, the following **strategic areas** have been adopted to achieve the above-mentioned objective:

I. **Development of human resources;**

II. **Development of forms of day care;**

III. **Development of forms of home care;**

IV. **Development of innovative forms of care;**

V. **Support for informal caregivers;**

VI. **Coordination of community health care.**

STRATEGIC AREAS

DEVELOPMENT OF HUMAN RESOURCES

SPECIFIC OBJECTIVE: Increasing the competence of the personnel providing health care services for the elderly who need support in everyday functioning in the local environment

Diagnosis

Medical staff are the basis of any health care system and are the main resources determining the level of availability and quality of medical services. Ensuring an appropriate number of medical personnel directly affects the health of the population. This is of great importance in the case of medical care provided to the elderly who need support in everyday functioning, in particular, those suffering from chronic, incurable diseases who, due to their health condition, require long-term medical support to maintain an adequate quality of life related to health. Therefore, adequately prepared medical workforce is a key prerequisite for meeting the health needs of the elderly, the opportunity to provide high-quality health care services and focusing on the patients and their needs, especially in view of the progressive ageing of the population and the increasing prevalence of incurable diseases.

Nurses, medical staff and physiotherapists are primarily involved in long-term care in Care and Treatment Centres or Nursing and Care Centres, while nursing and care services at home are provided mainly by nursing staff.
Palliative and hospice care is provided mainly by nurses, physicians, physiotherapists and psychologists.

Nursing and care services under long-term care provided to elderly patients may be offered by nursing staff with a completed specialisation/qualification course or during the specialisation/qualification course in the relevant fields of nursing applicable to the provision of such care [80].

With regard to care of mechanically ventilated patients, services are additionally provided by a nurse who has completed a specialist course/specialisation in the nursing of mechanically ventilated adult patients or qualification course in the field of anesthesiology and intensive care nursing or who is on the process of completing the specialisation/course.

When it comes to the provision of nursing services to patients who require long-term home care, all nursing staff are obliged to have additional qualifications obtained as part of postgraduate education, which is essential due to the specific nature of the nursing profession, i.e. self-dependence.

In 2019, the number of medical staff employed by the National Health Fund in long-term care amounted to 33,696, including, e.g., 24,300 nursing staff, 5,031 physiotherapists and 4,197 doctors (including 1,382 internal medicine doctors and only 98 geriatricians). In turn, 10,612 people were employed in palliative and hospice care, including 6,288 nursing staff, 2,543 physicians (including 774 internal medicine specialists and 55 geriatricians)[81].

Since 2004, the number of nursing staff employed in long-term care institutions has almost doubled. As of 2 August 2021[82], the number of nurses with a nursing specialisation applicable to long-term care was 23,871. In

[80] Those areas are listed in Annex 4 of the Regulation of the Minister of Health of 22 November 2013 on guaranteed services within nursing and care services in long-term care (Dz. U. [Journal of Laws] of 2015 item 1658 as amended).
[81] https://basiw.mz.gov.pl/index.html#/visualization?id=3403, Kadry NFZ (NFZ personnel).
[82] Based on data from the Centre of Postgraduate Education of Nurses and Midwives

turn, as of 31 December 2020, the number of nurses who had completed qualification courses in nursing disciplines/specialised courses applicable to long-term care was 68,666 and 66,511, respectively - a total of 135,177 persons.

Based on the analysis of the results of the survey conducted among the group of 296 nurses employed in long-term care in 2016, long-term home care was provided by experienced staff:

- with many years of experience;
- with secondary and higher education and the necessary qualifications;
- usually looking after several people at the same time;
- performing this work as an extra job.

The period of their work in the patient's home environment was 4 years, on average (1–27 years). The great majority of nursing staff (78.7%) has been involved in that form of care for no more than six years. For many respondents, it was an additional job and the caregivers looked after 3 patients at the same time, on average (in the study group, 15.5% of the respondents looked after 1 patient, 21.3% looked after 2 patients and 40.9% - after 3 patients) [83].

Palliative and hospice care services are also provided by nursing staff to a large extent:

- as of 2 August 2021, the number of nursing staff with a specialisation in palliative care nursing was 2,399;
- as of 31 December 2020, the number of nurses who completed a qualification course in palliative care nursing or a specialist course in the field of basic palliative care was 5,221 and 7,234, respectively - a total of 12,455.

Moreover, an upward trend in the number of staff qualified to provide long-term care and palliative and hospice care has been recorded in recent years also among doctors, physiotherapists, psychologists, speech therapists, occupational therapists and addiction therapists and medical caregivers.

The number of medical caregivers employed in health care facilities has doubled in recent years- from almost 4.2 thousand persons in 2015 to almost 8.3 thousand persons in 2019, including an increase in Care and Treatment Centres or Nursing and Care Centres from almost 1.7 thousand persons in 2010 by over 4,000 people in 2015 to almost 6,000 persons in 2019 [84].

The above trends indicate the progressive adaptation of the long-term care system in Poland to the growing number of elderly people who need support in everyday life and to the increasing needs in the field of health care and social assistance among that group of people.
Despite the steady increase in the number of personnel providing long-term care, palliative and hospice care services observed in recent years, the ageing process of the Polish society has resulted in an unsatisfactory number of medical personnel providing the afore-mentioned services - still, the average ratio of the number of employees to the number of patients covered by the care in question remains one of the lowest among the EU countries.

For this reason, actions are necessary to maintain the appropriate number of medical staff and level of their competence to meet the needs of elderly patients, and measures need to be taken to develop care staff who support medical staff providing services to such patients.

Within the scope of services provided under long-term care as well as palliative and hospice care, simple nursing, caring and preventive care activities can be distinguished, which largely coincide with the range of tasks of medical caregivers. Nevertheless, the specificity of working with terminally ill patients in the last stage of the disease or with elderly patients who need support in everyday functioning due to their health condition (including people with dementia, who are a specific and constantly growing group of elderly patients) requires specific knowledge and skills of medical caregivers, which the current educational programme does not sufficiently guarantee.

[83] Nowak-Kapusta Z., Irzyniec T., Franek G., Drzazga B., *Pielęgniarki i pielęgniarze opieki długoterminowej domowej.* Pielęgniarstwo Polskie 2017, no. 3(65), pp. 409–415.
[84] Based on: *Biuletyny Statystyczne Ministerstwa Zdrowia*, ed. Centrum e-Zdrowia; Biuletyn Statystyczny 2020, Warszawa 30 October 2020.

It is worth emphasising that in the case of medical caregivers, it is also important to improve their competence in the provision of social services for older people.

Despite the nationwide system of training for health care providers and a growing number of people who gain qualifications in that field, the lack of training in the field of caring for the above-mentioned groups of patients is a significant limitation in the use of the potential of the staff of that professional group.

Persons performing the profession of a medical caregiver work based on the knowledge and skills acquired in the course of education. However, the currently applicable legislation do not contain regulations on professional development and competence development of medical caregivers. If they wish to gain more skills, medical caregivers are forced to finance their further education by themselves.

Result 1

Increasing the competence of at least 1,500 medical caregivers in the care of the elderly in need of support in everyday functioning - by the end of 2030

Actions

1. Development of a qualification course programme for medical caregivers in the field of care for the elderly in need of support in everyday functioning - by the end of 2022

The development, by a group of experts, of a qualification course in the field of care for the elderly in need of support in everyday functioning, for the needs of long-term care, palliative and hospice care and care for people with dementia will be the basis for training medical caregivers in that field.

The areas to be covered in the development of the qualification course for that professional group should be, inter alia, care for patients with Alzheimer's disease and other dementia diseases and diabetic patients, palliative and hospice care, geriatric care and first aid.

2. Implementation of a qualification course for medical caregivers involved in long-term care, palliative and hospice care and care for people with dementia - by the end of 2030

To increase the number of staff competent to provide specialised care for patients in long-term care, palliative and hospice care and patients with dementia, it is planned to improve the qualifications of medical caregivers by conducting training courses in the field of providing health care services to those groups of patients.

The aim of the aforementioned educational activities is to prepare the professional group in question to deliver services at home and in a local community.

RESULT 1											
Deadline for completion	Action number	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	1.										
	2.										
Indicative sources of financing	1. National Health Programme funds for the years 2021-2025 2. Resources under the European Funds for Social Development (FERS) programme.										
Coordination	1. Centre of Postgraduate Medical Education (CMPK) in cooperation with the Ministry of Health and Ministry of Science and Higher Education 2. CMPK in cooperation with the Ministry of Health										

DEVELOPMENT OF FORMS OF HOME CARE

SPECIFIC OBJECTIVE: Developing forms of daily medical care for the elderly in need of support in everyday functioning, with particular emphasis on regions and rural areas where access to long-term care, palliative and hospice care is often limited

Diagnosis

The Polish health care system still lacks long-term day services tailored to the individual needs of patients and their relatives, combining specific features of institutional and home-based care.

For several years, day medical care has been provided in DDOMs (Day-Care Centre for Medical Care) established under projects financed from the EU funds. The main purpose of DDOMs is to ensure the best possible way of functioning of patients in the environment after hospitalisation, to improve the health of older people in need of support in their daily functioning and to reduce the number and duration of medically unjustified hospitalisations among those people.

Taking into account the positive reception by society of the services provided by DDOMs, it was decided to continue their activities under the RPO for 2014-2020 and it is planned to undertake similar activities also in the future financial perspective 2021-2027.

However, the services provided in DDOMs do not meet the demand for day care among patients who require daily health support. A special group of people who - due to the specificity of their symptoms and disease progression - require a separate form of care are those with dementia.

The health care system offers long-term care services to older people who need support in everyday functioning but there are no services specific to people with dementia. Care for patients with dementia as part of health care is provided in Care and Treatment Centres and Nursing and Care Centres as part of long-term residential care, as well as in day and 24-hour psychogeriatric units. However, those are not forms of care focused *strictly* on people with dementia but rather on the elderly, the chronically ill and those in need of general support in everyday functioning [85].

So far, as part of the universal health care system functioning in Poland, no dedicated tools for effective care have been introduced or comprehensive problem solving solutions for people with dementia (including Alzheimer's disease) and other chronic brain diseases resulting in memory disorders (including Parkinson's disease, Huntington's disease) or the problems of the relatives of those people. Given the need for a comprehensive system of care for people with dementia, the decision was taken to develop and implement a national action plan on dementia.

The specificity of dementia and other chronic brain diseases resulting in memory disorders means that the available forms of institutional health care in Poland are not adapted to the needs of that group of patients. Due to the progressive nature of dementia, providing the patient with 24-hour institutional care outside their familiar environment can often intensify the symptoms of the disease and cause new ones, accelerate the progression of the disease and related disability and the need for support in everyday functioning.

In 2010, in Poland, almost 92% of persons with dementia stayed at home from the onset of the disease until death [86]. This is due to the fact that care of those with dementia is provided mainly by informal caregivers who come from the patient's family or are engaged by the family.

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[85] As part of the social assistance system, care for people with dementia is offered in: family homes through care services and specialist care services, support centers for people with mental disorders (community self-help centres and self-help clubs), social assistance institutions (local government units or run on behalf of local government units). Within the private sector, such care is provided in private nursing homes or by private caregivers who look after the patient at his/her home.

[86] Durda M., *Organizacja opieki nad osobami z demencją w Polsce na tle krajów rozwiniętych i rozwijających się*. *Gerontologia Polska,* vol. 18, no. 2, p. 77, Poznań 2010.

Non-institutional care offered at home, currently performed mainly by informal caregivers, means a heavy psychological and physical burden on the caregivers, who often do not have sufficient knowledge and skills to perform the tasks properly. In the long term, this also has a negative impact on the health of the caregivers and other aspects of their lives (family, professional or social lives, etc.).

The health care system in its current shape does not include care services dedicated separately to that group of patients, taking into account their health needs, functional limitations and therapeutic perspectives. For this reason, those people, depending on the stage of the disease, are covered by different types and range of health care - from basic health care services and outpatient specialist care, through long-term care services to psychiatric services provided in an inpatient setting. However, there is no comprehensive approach and coordination of health care to cover the patient and his/her family by appropriate support in their local environment.

Result 1

Establishment of a network of DDOMs financed from public funds - by the end of 2030

Actions

1. Including health care services provided in DDOMs into the basket of guaranteed benefits – by the end of 2022

To include health care services provided in DDOMs into those financed from public funds, it is planned to introduce appropriate changes into the legal provisions and to make the care provided in DDOMs one of the elements of guaranteed benefits under long-term care.

2. Enabling existing DDOMs to apply for financing from public funds - by the end of 2030

It is planned to finance the care provided in DDOMs from public funds as part of nursing and long-term care services financed from the National Health Fund or other types of funds.

3. Further development of the network of DDOMs - by the end of 2030

In the following years, further development of the network of DDOMs is planned, through financing from public funds and by expanding the DDOM network infrastructure - co-financed from the EU funds for the launch of additional services, new investment activities, adaptation or provision of new equipment in the facilities.

RESULT 1											
Deadline	Action number	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
for completion	1.										
	2.										
	3.										
Indicative sources of financing	1. Cost-free measures 2. Public funds 3. Funds under Regional Programmes for the years 2021-2027 (investments, adaptation of premises, equipment, additional services not included in the DDOM network) Public funds										
Coordination	1. Ministry of Health, National Health Fund 2. Ministry of Health, National Health Fund 3. Managing Authority of the Regional Operational Programme, National Health Fund										

Result 2

Creation of a daily support system for people with dementia and other chronic brain diseases resulting in memory disorders, and support for their caregivers - by the end of 2030

Actions

1. Development of a standard for Day-Care Centres for Memory Support - by the end of 2022

It is planned to develop a standard for the provision of medical services in Day-Care Centres for Memory Support (DCWP), which will then be tested as part of a pilot project.

2. Implementation of a 3-year pilot programme in Day-Care Centres for Memory Support - by the end of 2025

Based on the developed standard for supporting patients and their caregivers, launching DCWPs as a pilot project is planned. The pilot project is to cover the area of all 16 voivodeships of the country. It is forecasted that the DCWP pilot project will be implemented for a period of 3 years, during which at least one DCWP will be established in each voivodship.

Each of the DCWPs will be run by a medical entity holding a contract for the provision of health care services concluded with a voivodeship branch of the National Health Fund.

The health care services provided by the DCWP will be offered to persons who are entitled to publicly funded health care benefits.

The following forms of support will be offered as part of the pilot project:

- day care for people with Alzheimer's disease or other types of dementia or chronic brain diseases resulting in memory impairment;
- training for informal caregivers of people with dementia or other types of chronic brain diseases resulting in memory impairment;
- psychological support for informal caregivers of people with dementia or other forms of chronic brain diseases resulting in memory impairment;
- screening for people with symptoms of dementia;
- information centre on the available social assistance.

The purpose of DCWPs is to provide professional daytime care and support for patients and their informal caregivers, and to improve access to early diagnosis and detection of dementia.

3. Evaluation of the results of the conducted pilot project and determination of the possibility of incorporating the tested solutions into the system of guaranteed services — by the end of 2025

The pilot project of support in DCWPs will be subject to evaluation and the way in which given procedures may systemically qualify for co-financing from public funds will be assessed, i.e. whether they are sufficiently effective and clinically efficient.

4. Creation and financing activities of additional of Day-Care Centres for Memory Support operating based on the standard developed as part of the pilot project - by the end of 2030

Based on the pilot study and the developed standard for the operation of Day-Care Centres for Memory Support, it is planned to create and finance new facilities providing support in that area at the level of individual regions.

5. Integration of the positively validated forms of support implemented in Day-Care Centres for Memory Support into the system of benefits guaranteed in the field of long-term care - by the end of 2030

If positive results are obtained based on the evaluation of the implemented pilot project, it is planned to include the services offered by DCWPs into the set of guaranteed benefits provided in long-term care by amending the regulations for the provision of nursing and care services in long-term care.

RESULT 2											
	Action number	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Deadline for completion	1.										
	2.										
	3.										
	4.										
	5.										
Indicative sources of financing	1. Resources under the European Funds for Social Development (FERS) programme, technical assistance measures under the Operational Programme Knowledge Education Development (POWER) 2. Resources under the European Funds for Social Development (FERS) programme 3. Resources under the European Funds for Social Development (FERS) programme 4. Regional Programme funds for the years 2021-2027 5. National Health Fund budget										
Coordination	1. Ministry of Health 2. Ministry of Health 3. Ministry of Health 4. Managing Authority of the Regional Operational Programme, Ministry of Health 5. Ministry of Health, National Health Fund										

DEVELOPMENT OF FORMS OF HOME CARE

SPECIFIC OBJECTIVE: Increasing the availability of long-term care and palliative and hospice care provided in the home setting

Diagnosis

Although the number of persons providing long-term home care has been steadily decreasing in recent years, the number of nursing and care services provided at home, in particular as part of nursing care, shows an upward trend. Attention should be paid to the data that shows that the number of recipients of long-term home care is higher than the number of recipients of long-term institutional care.

The development of care and support provided in non-institutional conditions, in the local environment, preferably at home of the patient or his/her family, is one of the main directions of development of health care for the elderly. Nevertheless, a significant limitation in that process is the shrinking resources of professional medical personnel, in particular nursing staff, which is the basis of care provided at home. Staff limitations and the increasing demand for care services in the above-mentioned group of patients pose a huge challenge for the health care system. Designing appropriate solutions in that area requires taking into account both the needs and health expectations of patients, the current resources and organisational capacity of the system.

Considering the scope of support provided to patients due to their health condition, in particular at home, it is worth noting that some of them require a great deal of day-to-day assistance and support from health care staff in meeting basic biological needs, maintaining or restoring independence and daily activities, ongoing safety and hygiene or adoption of health-promoting behaviour.

Also, for some patients with incurable and progressive diseases, the day-to-day health care provided as part of a home-based hospice - in addition to the prevention and relief of pain and other somatic symptoms - is largerly based on daily assistance with basic activities such as hygiene and care, bedsore prevention and support in the use of orthopaedic and rehabilitation equipment.

In both of the above cases, the afore-mentioned duties largely correspond to the scope of care activities performed by medical caregivers. It should be noted, however, that medical caregivers are currently only involved in the provision of long-term care and palliative and hospice care services provided in inpatient settings (Care and Treatment Centres/Nursing and Care Centres, inpatient hospices/palliative medicine wards) and they do not provide those services at the home setting.

At the same time, caregivers need a variety of equipment to support them in looking after chronically ill and dependent people, as well as to protect themselves against physical overload. Access to such equipment is very often limited, especially in small towns, and there is a requirement to have a formal disability certificate.

Result 1

Increasing the availability of guaranteed services in long-term care and palliative and hospice care provided in the home setting by medical caregivers - from the beginning of 2023

Actions

1. **Including medical caregivers among the personnel that provides guaranteed services in long-term care and palliative and hospice care in the home setting - by 2023**

To improve access to long-term care and hospice palliative care services in the home setting, as well as to optimise the organisation of the provision of those services, it is planned to involve medical caregivers more intensively in the provision of those services by amending the staffing requirements in the existing regulations for the provision of those services.

According to the assumptions for the aforementioned changes, the caregiver is to take over the performance of simple nursing and care activities done by long-term care nurses so far. This is supposed to help manage the current resources of medical caregivers and to relieve the burden on the existing nursing staff that provide large share of those services. This is particularly important due to the growing shortage of nursing staff in Poland and the declining potential of generational replacement among that personnel.

RESULT 1										
Deadline for completion	Action number	2021	2022	2023	2024	2025	2026	2027	2028	2029
	1.									
Indicative sources of financing	1. National Health Fund budget									
Coordination	1. Ministry of Health in cooperation with National Health Fund									

DEVELOPMENT OF INNOVATIVE FORMS OF CARE

SPECIFIC OBJECTIVE: Increasing the availability of telemedicine services, especially for the elderly and other people in need of support in everyday functioning

Diagnosis

The increase in demand for health care due to demographic changes and the aging of the society is associated with the need to increase the efficiency of provided medical services on the system level. Innovative forms of care, including remote monitoring and support systems, can be the solution to those challenges. The key element of such changes is the development and promotion of solutions in the field of telemedicine (or, more broadly, digital health), which have a significant potential to increase the effectiveness of current health care resources and optimise related expenses.

Based on the report *E-zdrowie oczami Polaków* (E-health through the eyes of Poles) from February 2018, the potential of telemedicine solutions is noticed by both patients and medical practitioners. Both groups indicated that telemedicine is not sufficiently developed in Poland (65.2% of patients; 80% of medical practitioners) and that activities related to bureaucracy in health care consume too much time and attention of doctors (72% of patients and 66% of medical practitioners). Developing digital services can bring tangible benefits in terms of increasing the efficiency of patient care, inter alia. Within the group of surveyed people, a positive opinion about telemedicine was particularly evident among those over 60 years of age (69.6% at the age of 60 or over believe that the development of telemedicine will have a positive impact on society), who indicated important role and potential of telemedicine solutions for older people.

E-health tools, including telemedicine, can be used in the field of chronic diseases, such as diseases of the cardiovascular system (e.g. online consultations, the use of health monitoring devices, mobile devices, wearable technology), as well as in case of many popular civilisation diseases (promoting a healthy lifestyle with the use of modern communication tools, proper diet and physical activity, and providing support in individual selection of preventive medical examination).

Moreover, in Poland there are social groups that, due to the socio-economic situation, require urgent support to have equal access to medical services. Those people generally live in non-urbanised areas, located at

a considerable distance (tens of kilometres) from health centres [87]. This group often includes the elderly and other people with special needs. For those people, travelling to specialists is often difficult or even impossible due to, among other things, limited financial resources, travel time and limited mobility. Therefore, those people often interrupt the process of diagnosis or treatment and do not follow the recommendations of the doctors. Supporting those groups is essential to increase access to and quality of health care services but also to improve the efficiency of the health care system. Achieving such results is to be made possible by, inter alia, wider use of new technologies to support the delivery process of health care services.

Result 1

Implementation of developed telemedicine procedures in selected fields of medicine as part of guaranteed services - from 2027

Actions

1. Development of standards for telemedicine procedures - by the end of 2021

It is planned to appoint a team of experts to develop standards for telemedicine procedures. To improve the availability and quality of medical services, including those dedicated to the elderly and other people with special needs, 7 models are to be developed in selected fields of medicine.

2. Development of telemedicine procedure models in selected fields of medicine - by the end of 2021

Based on performed analyses, groups of experts are to develop proposals of models of telemedicine services, which will then be tested in a form of pilot projects.

3. Conducting pilot projects of telemedicine procedures in terms of the possibility of extending the package of guaranteed benefits - by the end of 2024

Telemedicine procedures, in line with the developed telemedicine benefit models, are to be implemented in a form of a pilot project in selected units. Such approach will allow an assessment of the effectiveness of the proposed solutions and the possibility of implementing them on a wider scale.

4. Evaluation of the results of the conducted pilot projects and determination of the possibility of incorporating the tested solutions into the system of guaranteed services — by the end of 2025

The solutions tested in the form of pilot projects are to be evaluated and assessed whether they may qualify for co-financing from public funds, i.e. whether they are sufficiently effective and clinically efficient.

5. Integration of positively assessed telemedicine procedures into the system of guaranteed benefits - by the end of 2027

The tested and assessed solutions in the field of telemedicine are planned to be introduced into the guaranteed benefit system.

[87] Long-term care: https://basiw.mz.gov.pl/index.html#/visualization?id=3361, Palliative and hospice care: https://basiw.mz.gov.pl/index.html#/visualization?id=3368.

RESULT 1											
Deadline for completion	Action number	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	1.										
	2.										
	3.										
	4.										
	5.										
Indicative sources of financing	1. Funds from the Norwegian Financial Mechanism 2014-2021 (telemedicine project) 2. Funds from the Norwegian Financial Mechanism 2014-2021 (telemedicine project) 3. Funds from the Norwegian Financial Mechanism 2014-2021 (competition part) 4. Funds from the Norwegian Financial Mechanism 2014-2021 (telemedicine project) 5. National Health Fund budget										
Coordination	1. Ministry of Health 2. Ministry of Health 3. Ministry of Health 4. Ministry of Health 5. Ministry of Health in cooperation with National Health Fund										

SUPPORT FOR INFORMAL CAREGIVERS

SPECIFIC OBJECTIVE: Development of community support for informal caregivers of the elderly who need support in everyday functioning

Diagnosis

Formal home care in Poland still constitutes small share in all nursing and care services. The increase in the number of patients receiving long-term care is mainly observed in residential care facilities, while the proportion of care services provided at home is increasing at a much slower rate.

Despite the fast development of both public and private care services, care provided by the family and relatives of sick people is of key importance. Informal caregivers of a dependent person are family members or other close persons (mostly middle-aged women) who provide care free of charge.

In 2010, in Poland, caring for people outside of own household accounted for 53% of all unpaid work performed in the country, which translated into 0.77 million full-time jobs. Care for the sick and the elderly accounted for almost ⅓ of the total care work [88].

Informal caregivers are not registered, except for a few people who receive, for example, a special caregiver allowance. An attempt to estimate the number of informal caregivers in Poland was made for the first time within the framework of the international EUROFAMCARE project, implemented in the years 2003–2004.
Based on the study, the number of older people with disabilities or those who required assistance in performing daily activities was estimated to be approximately 2 million [89].

The reasons for the high level of involvement in informal caregivers in Poland are, above all, traditional family relations and a high rate of cohabitation (many elderly people living with their children).
It is worth emphasising that care provided by the family has positive social and health effects for a sick person who needs support in everyday functioning - the presence of loved ones and positive relations with the family are of particular importance for the sense of security and comfort of life.

Effective care requires a great deal of competence and dedication on the part of informal caregivers but in many cases caregivers do not have sufficient knowledge, skills and support to be able to adequately provide day-to-day care.

Meanwhile, it turns out that informal caregivers often do not even have basic knowledge about the available solutions that may make their work easier, such as long-term nursing care services, home rehabilitation treatment, access to orthopaedic and auxiliary equipment, co-financing system to purchase equipment and the conditions for obtaining the funds [90]. This knowledge is important, especially in the early stages of care.

Training should cover a wide range of topics, from basic care for a person in need of support in everyday functioning to detailed issues in the field of specific illnesses about which even experienced caregivers are not aware. Key areas of educational support for caregivers include:

- basic first aid rules;
- practical ways of handling bedridden patients (rules of movement, changing diapers, changing bedding, washing, feeding, personal hygiene, bedsore prevention);
- performance of simple medical procedures, administering medication, bedsores prevention, physiotherapy elements and giving simple massages, measuring blood pressure and dressing wounds;
- appropriate care for people with dementia at different stages of the progression of the disease;
- fall and injury prevention.

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[88] *Family caregivers of the elderly - problems, needs, challenges for social policy - research report*, ROPS Kraków, Kraków 2015, p. 7.
[89] As above, p. 8.
[90] Racław M., *Opiekunowie nieformalni. Krótkookresowa funkcjonalność nieopłacanej pracy*, [in:] *O sytuacji ludzi starszych*, Hrynkiewicz J. (ed.), Rządowa Rada Ludnościowa, Warszawa 2012, p. 76.

Support from family, friends and immediate environment (neighbours, local authorities and institutions) is also of great importance for maintaining a good quality of life of caregivers while caring for the patient. No less important is also the positive intergenerational communication and previous experience of family care for a person in need of assistance at home. In contrast, factors that reduce the quality of life of a caregiver are most often: changes in the quality of the relationship between the patient and the caregiver, a sense of lack of control over the situation and lack of influence, family conflicts, problems in other personal relationships, no acceptance of help in the family, changes in the way of spending free time, lack of experience and skills to properly look after the patient [91]. It is often difficult to combine informal care with professional work and social activities, which can lead to household impoverishment and deterioration of the physical and mental health condition of the caregiver, and consequently, a negative impact on the quality of provided care. Due to the lack of wide-scale system support, the provision of care most often affects the quality of life of the caregiver in a negative way.

Caring at home for chronically ill patients with functional deficits is a difficult challenge for many caregivers. Improving the quality of life may be an important goal of therapeutic management, conducive to ensuring optimal care for the patient at home [92].

With the length of care, the somatic state of caregivers deteriorates, making them more susceptible to the negative effects of stress. Longer time of care is associated with an increased burden, the occurrence of depression and anxiety symptoms, and thus with the deterioration of the self-assessment of health and the decrease in the quality of life of the caregiver. Deterioration of the quality of life of a caregiver may be the reason for insufficient assistance provided to people with low functional efficiency at home.

The tension associated with performing caring tasks, combined with the sense of being trapped in the role of a caregiver, is one of the main reasons why caregivers decide to institutionalise care for their loved ones [93].

Therefore, it is necessary to offer informal caregivers psychological support, giving them a chance to prevent and treat disorders that may occur in the situation of performance of long-term care duties for their elderly relatives.

Psychological support for caregivers gives the opportunity to maintain or improve the ability to ensure appropriate relationships with the patient, preventing depression and burnout in caregivers [94].

In view of the great importance of informal care and the unsatisfied needs on the part of informal caregivers for the provision of multi-directional systemic support, with regard to the provision of day-to-day care, the introduction of comprehensive measures is planned to improve the competence of that group of people (taking into account the various problems associated with particular diseases and areas of care) and their ability to cope with the burden related to the provision of care in the context of the need to remain active in their private and working lives.

Efforts should be made to ensure adequate support in the local environment for informal caregivers - apart fromensuring access to care services at home or in the community it is also extremely important to provide comprehensive information as well as educational and psychological support.

People with dementia and their caregivers often lack reliable and comprehensive information on the forms of available assistance and care, the specifics of the disease and opportunities to get advice and emotional support in coping with the burden of illness and care duties on a daily basis. Awareness of the symptoms (including emotional, cognitive and behavioural changes) and the prospects for the further course of the disease, as well as the forms of support available to patients and caregivers, may significantly affect the quality of life of both the caregiver and the patient.
It may, among other things, reduce the feeling of helplessness accompanying the disease and support active coping with everyday problems related to it.

[91] Kachaniuk H., Bartoszek A., Ślusarska B., Nowicki G., Kocka K., Deluga A., Piasecka K., Jakość życia starszych opiekunów nieformalnych osób przewlekle chorych w opiece domowej. Geriatria 2018, no.12, p. 75.
[92] As above
[93] A above, p. 81.
[94] Research on informal caregivers in Poland was also conducted as part of the international project *Nurse Managed Care for Elderly* - NMCE, whose Polish partner was the WSINF team from Łódź. The purpose of the project was to determine the educational needs of formal and informal caregivers, to develop ways to support informal caregivers as adults and to increase the level of competence and quality of health care provided by caregivers - based on: Janowicz A., *Rola opiekunów nieformalnych w opiece u kresu życia. Przyczynek do badań w ramach projektu, European Palliative Care Academy (EUPCA)*,
Pielęgniarstwo i Zdrowie Publiczne 2014, vol. 4, no. 2, p. 163

The above-mentioned areas of support are of particular importance due to the fact that informal caregivers often already belong, or will soon belong, to the group of elderly people, and thus preventive measures and supporting their daily functioning in the context of caring appears to be of key importance taking into account prolonging their years of health, fitness and independence and thus also delaying the need to place the persona they look after in an institutional care facility.

Result 1

Improving the caring competence of informal caregivers of the elderly who need support in their daily functioning in the field of caring for those people - by the end of 2030.

Actions

1. Developing a framework training programme for informal caregivers of elderly people who need support in daily functioning - by the end of 2022

It is planned that selected experts will develop a training framework based on which the training providers will conduct relevant activities for the participants in the subject matter. Experience from projects already implemented in that area should serve as a basis.

2. Organising and conducting local training for informal caregivers of elderly people who need support in everyday functioning - by the end of 2030

It is planned that the training will take place throughout Poland, in local communities - close to the place of residence of participants, as well as remotely in the form of online training. The purpose of the training is to improve the knowledge and skills of informal caregivers of elderly people who need support in their daily functioning in terms of caring for those people, which will improve the quality and safety of care provided at home. Additionally, during the training, the participants will be able to increase their knowledge of disease symptoms in selected diseases characteristic of old age, including dementia and other memory disorders.

RESULT 1												
Deadline for completi	Action number	2021	2022	2023	2024	2025	2026	2027	2028	2029		2030
	1.											
	2.											
Indicative sources of financing	1. National Health Programme funds for the years 2021-2025 2. Regional Programme funds for the years 2021-2027											
Coordination	1. Ministry of Health 2. Managing Authority of the Regional Operational Programme, Ministry of Health											

Result 2

Improvement of physical and mental health, health-related quality of life and ability to cope with the role of an informal caregiver of the elderly and those in need of support in everyday functioning, including people with dementia - by the end of 2030

Actions

1. Development of a programme for the implementation of a pilot project of psychological support and maintaining good physical and mental health condition for caregivers of the elderly and those in need of support in everyday functioning - by the end of 2022

To conduct a pilot project of psychological support for informal caregivers, it is planned to develop assumptions for the implementation of the programme, including a programme of individual forms of psychological support, by appropriate experts in consultation with other relevant entities.

2. Conducting a pilot project of psychological support and mental and physical health prevention programme for at least 1,000 caregivers of the elderly and others requiring support in daily functioning — by the end of 2025

Psychological support and preventive mental and physical health support, including in the form of group therapy sessions, for informal caregivers of the elderly and those in need of assistance in daily functioning, including people with dementia, will be implemented by selected entities in the form of a pilot project based on a developed programme, including a psychological support programme. The implementation of the pilot project will make it possible to assess the effectiveness of the proposed solutions of support and the possibility of implementing them on a wider scale.

3. Evaluation of the results of the conducted pilot project and determination of the possibility of incorporating the tested solutions into the system of guaranteed services — by the end of 2026

Once the pilot project is completed, the implementation of individual forms of psychological support and their results are to be subject to a comprehensive assessment in terms of the accuracy and effectiveness of the applied solutions and the possibility of their inclusion in the public health care system as part of preventive health care.

4. Integrating the positively validated forms of support for informal caregivers of the elderly and others who require assistance in daily functioning into the public health care system — by the end of 2030

If positive results of the evaluation of the pilot project are obtained, it is planned to implement the tested forms of psychological support for informal caregivers into the public health care system as part of the implementation of health prevention by preventing psychosomatic diseases and improving the health-related quality of life of informal caregivers.

RESULT 2											
Deadline for completion	Action number	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	1.										
	2.										
	3.										
	4.										
Indicative sources of financing	1. National Health Programme funds for the years 2021-2025 2. Resources under the European Funds for Social Development (FERS) programme 3. Resources under the European Funds for Social Development (FERS) programme 4. National Health Fund budget										
Coordination	1. Ministry of Health 2. Ministry of Health 3. Ministry of Health 4. Ministry of Health, National Health Fund										

Result 3

Establishment of a professional hotline with information on dementia and with psychological support for informal caregivers of people with dementia and others - by the end of 2030

Actions

1. Development of assumptions of the pilot project of the professional hotline with support for people with dementia and their caregivers - by the end of 2022

For the purpose of implementation of the pilot project of the hotline with psychological support for people with dementia and their caregivers, it is planned that selected experts will develop implementation guidelines for specific activities in that area.

2. Conducting a pilot project of the hotline with information and psychological support among at least 30,000 people with dementia and their caregivers - by the end of 2025

Launching of a pilot project of a telephone-based information and support service for people with dementia and their caregivers will enable the callers to obtain information about, among other things, the course of the disease, available social services supporting patients and their caregivers, legal issues, providing emotional support and help in coping with the disease.

3. Evaluation of the results of the implemented pilot project and analysis of the possibility of further financing of the hotline from national budget - by the end of 2026

Once the pilot project is completed, the results are to be subjected to a comprehensive assessment in terms of the accuracy and effectiveness of the applied solutions and the possibility of their inclusion in the public health care system as part of preventive health care.

4. Maintaining the operation of the hotline from national funds - until the end of 2030

The possible continuation of the operation of the hotline is planned as part of the ongoing implementation of the National Health Programme or the national plan in the field of dementia.

RESULT 3											
Deadline for completi	Action number	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	1.										
	2.										
	3.										
	4.										
Indicative sources of financing	1. Resources under the European Funds for Social Development (FERS) programme 2. Resources under the European Funds for Social Development (FERS) programme 3. Resources under the European Funds for Social Development (FERS) programme 4. National Health Programme funds for the years 2021-2025 Resources allocated for the implementation of the national dementia plan										
Coordination	1. Ministry of Health 2. Ministry of Health 3. Ministry of Health 4. Ministry of Health										

COORDINATION OF COMMUNITY CARE

SPECIFIC OBJECTIVE: Increasing access to comprehensive information about the existing health support for the elderly and the caregivers

Diagnosis

A significant systemic problem affecting the proper use of the health care benefits and other available health services is low social awareness and knowledge about the available forms of public care and support.

Elderly people who need support in everyday functioning and who require a specific form of care or another type of support due to their health condition, as well as the informal caregivers, often have a problem with understanding the way of operation of the health care system and the way of using assistance to which they are entitled.

Currently, there is no comprehensive information base on the available range of health care services and other forms of health support, as well as other issues useful to older people and caregivers, with the use of which such individuals could quickly and easily obtain the necessary information and assistance (e.g. available health care and other health-related services, health-promoting activities carried out regionally and locally, as well as contact details to institutions and entities providing such support, other information useful while dealing with a given disease on a daily basis, or information about the role of a caregiver, e.g. related to the course of a given disease, accompanying symptoms, etc.).

Moreover, the staff in the institutions and facilities involved in providing care and health support to elderly patients and caregivers are most often not sufficiently knowledgeable to adequately inform the patients and their relatives about health support beyond the area of health care services or other health-related services provided by the entities in which they work.
As a result, to obtain further or additional support in another area of health care, patients and caregivers are forced to look for information in many places, which can cause problems while trying to get appropriate assistance.

As a consequence of insufficient awareness and knowledge of the available public support, sometimes the process of receiving the expected assistance may be prolonged or even become impossible, and thus may result in the deterioration of the patient's health condition and increase the burden of daily care for the informal caregiver. Additionally, the lack of knowledge about clear rules and conditions for receiving support may increase the feeling of helplessness, marginalisation and social isolation, which may also have a negative impact on the overall quality of life, also health-related, but also reduce trust in public institutions.

It would be easier for patients and caregivers to navigate the health care system if all the necessary information, updated on an ongoing basis and presented in an accessible way, on available services and benefits dedicated to the elderly and those in need of support in everyday functioning and the caregivers was available online in one place. Such a database should include information on, for example, the eligibility rules for specific support, the institutions and facilities that decide on eligible support, the documents required to receive a specific form of support, as well as other important information and advice for informal caregivers on, e.g., disease symptoms, daily care and related problems. It could significantly improve and facilitate the individual diagnostic, treatment and rehabilitation process, and thus influence the length of time a patient remains out of institutional care.

The Ministry of Health cooperates with the Ministry of Family and Social Policy in developing a strategy for the deinstitutionalisation of social services in Poland, taking into account the needs of people with disabilities, people with mental disorders, the elderly, families, children and adolescents, including foster care, as well as homeless people.

Result 1

Creation of a comprehensive online information database on the health support system for the elderly and caregivers - by the end of 2030

Actions

1. Development of a comprehensive information database on the health support system for the elderly and caregivers and its update – by the end of 2022

It is planned to select an entity that will collect information on the health support system (taking into account activities carried out regionally) and other issues (e.g. on the course of given diseases, accompanying symptoms, etc.) useful for the elderly and caregivers, and then, based on that, to develop a comprehensive database of information and a system of their verification and updating.

2. Posting information on the health support system for the elderly and caregivers on the website patient.gov.pl and updating it on an ongoing basis - by the end of 2030

It is planned to make available the collected and developed information on the health support system for the elderly and caregivers on the website patient.gov.pl. The information is also to be posted and updated on a regular basis, in a clear and communicative form, in an easy-to-navigate way, so that the targeted users can easily find it on the website and use it.

RESULT 2											
Deadline for completion	Action number	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	1.										
	2.										
Indicative sources of financing	1. State budget 2. State budget										
Coordination	1. Ministry of Health 2. Ministry of Health										

IMPLEMENTATION AND MONITORING SYSTEM

The strategy is to constitute public policy within the meaning of the Act of 6 December 2006 on the Principles of Development Policy (Dz. U. [Journal of Laws] of 2021, item 1057).
The detailed manner of the development of *the Strategy* is determined in the provisions of that Act.

The strategy is a framework for the process of deinstitutionalisation of health services. It indicates, among other things,

- target groups and the main objectives of the strategy assigned to them;
- the areas of deinstitutionalisation for each target group and the specific objectives assigned to each area;
- the results for each specific objective and the actions to achieve the expected results;
- the expected period of implementation of each action;
- the type and amount of available resources for the implementation of each action;
- the entities coordinating and involved in the implementation of different actions;
- indicators for monitoring the achieved results.

Implementation of *the Strategy* requires actions in the legal, organisational, financial and informational dimensions, coordinated primarily by public administration institutions.

The Strategy is a document that includes actions to be financed from both national and EU funds. The method of managing the budget and European funds is specified in separate regulations, as is the way of applying to have the projects financed from those funds. The implementation of *the Strategy* does not affect changes in regulations with respect to the management of financial flows and their volume.

The correct use of funds is governed by the relevant legislation, both in the case of national and EU funds. There are no plans to establish additional institutions to control the implementation of the actions under *the Strategy*.

The Strategy is a set of directional measures related to the health area, so the institution coordinating their implementation is the Ministry of Health in cooperation with other institutions, including the ROP Managing Authorities. An important element in this respect will be the correlation of actions of a national nature with those implemented in different regions of the country.

Financing

The actions under *the Strategy*, the purpose of which is to improve the health situation of the elderly, those in need of support in everyday life and their caregivers, are planned to be financed from both national and European funds. With regard to the national funds, the planned activities are to be financed primarily by the National Health Fund but also under the National Health Programme, inter alia. In the case of activities under the National Health Programme, they are to be implemented in a competition mode by selected entities who will be responsible for the process of implementing given solutions at the regional or national level (including the preparation of an activities schedule, selection of implementation tools, ensuring personnel resources, performance of subsequent activities, evaluation of project implementation, etc.).

Coordination

The Ministry of Health is responsible for the coordination of the implementation of activities and monitoring of results; however, in the case of measures related to the financing of the inclusion of solutions in the system of guaranteed benefits, the National Health Fund is to be the coordinator, while in relation to activities implemented

at the regional level and financed from European funds - the Managing Authorities and Intermediate Bodies of Regional Operational Programmes.

Evaluation

As part of the implementation of *the Strategy*, no evaluation of actions resulting from the document is planned.

Monitoring indicators

The implementation of the actions determined in this document will involve periodic monitoring of the indicators included in the expected results.

The main assumption in the construction of indicators for monitoring the implementation of measures and the assumed results is to achieve a faster increase in the number of people at the age of 65 and over covered by community (home and day) long-term care than the increase in the number of people covered by 24-hour stationary (institutional) long-term care.

Other monitoring indicators in that area also relate to:

- the number of caregivers employed by health care providers offering nursing and care services in the framework of long-term care provided at home per 10 thousand persons at the age of 65 and over;
- the number of people at the age of 65 and over covered by nursing and long-term care provided at home;
- the number of people at the age of 65 and over in long-term day care provided in a DDOM (Day-Care Centre for Medical Care);
- the number of people at the age of 65 and over in long-term day care provided in a DCWP (Day-Care Centre for Memory Support);
- percentage of people at the age of 65 and over in long-term care, including in community-based forms.

An increase in the value of each of the above-mentioned indicators is assumed in the period of the implementation of *the Strategy* (comparison of the initial value of an indicator to its final value).

The sources of data for the objectives selected for monitoring are, inter alia: public statistics, data from the National Health Fund, Maps of Health Needs.

Minister of Health
Republic of Poland

Appendix No. 2

DEINSTITUTIONALISATION STRATEGY: HEALTH CARE FOR PEOPLE WITH MENTAL DISORDERS

"Zdrowa Przyszłość (Healthy Future). Strategy framework for the development of the health system for 2021-2027, with an outlook to 2030"

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INTRODUCTION

This document constitutes Appendix No. 2 to the document "Healthy Future. Strategy framework for the development of the health system for 2021-2027, with an outlook to 2030", hereinafter referred to as the "Strategy". In accordance with the assumptions set out in the document, support for psychiatric care is planned. The document contains tasks that consist primarily of providing persons with mental disorders comprehensive and widely available health care and other forms of care and assistance necessary for the functioning in a family and social environment, as well as shaping appropriate social attitudes towards persons with mental disorders, in particular understanding, tolerance , kindness and counteracting the discrimination of those persons.

The main objective is to improve the quality of life of the population related to mental health and to ensure appropriate conditions of care in the mental health system. The document proposes the implementation of activities in the field of deinstitutionalisation of psychiatric care in the following areas:

1) Investment in human resources - improvement of staff situation and the quality of education in psychiatry, as well as the staff of other specialities involved in mental health care;
2) Investment in the system - change in the organisation of the provision of health services in psychiatric care;
3) Investment in the system - increasing access to health services in psychiatric care;
4) Investment in infrastructure - adaptation of health care providers to a community-based model of mental health care;
5) Investment in population health - mental health promotion, prevention of suicide and self-destructive behaviour.

Each of the above-mentioned strategic areas has specific objectives and associated specific actions for their implementation. Separate sections are devoted to the system of coordination and implementation, as well as monitoring and evaluation, and indicators for achieving the objectives of the draft document.

The document includes actions to be financed from both national and EU funds. The method of managing the budget and European funds is specified in separate regulations, as is the way of applying to have the projects financed from those funds.
The implementation of the document does not affect changes in regulations with respect to the management of financial flows and their volume.

DIRECTIONS OF DEVELOPMENT OF HEALTH SUPPORT UNDER THE DEINSTITUTIONALISATION PROCESS

The document that defines the strategy for action in the area of mental health protection is the National Mental Health Protection Programme for 2017-2022, hereinafter referred to as the "Programme". The programme includes tasks such as, in particular, providing people with mental disorders multilateral and universally available health care and other forms of care and assistance necessary to live in a family and social environment and shaping appropriate social attitudes towards people with mental disorders, especially understanding, tolerance, kindness, and counteracting their discrimination. Among the tasks listed in the programme, the promotion of the community model of psychiatric health care in the spirit of the deinstitutionalisation process is considered to be of key importance, e.g. by creating the conditions for the development of Mental Health Centres. The gradual transition from the "asylum" model, based on isolating people with mental health disorders and placing them in large psychiatric hospitals, to the community model, is in line with the directions of psychiatry reforms in developed countries.

It should also be noted that the deinstitutionalisation of psychiatric health care is a recommended direction of change postulated by WHO, EU and OECD but also by many non-governmental organisations, including patient organisations. The transfer of psychiatric care to the local environment makes it possible, among other things, to counteract the stigmatisation of people suffering from mental disorders and, with proper coordination, gives a chance to achieve better therapeutic results.

One of the elements enabling the implementation of the community model was also the support implemented in measure 4.1 POWER Social Innovation. It allowed solutions not previously used to be tested in practice.

Considering the above, it is proposed to implement actions in the field of deinstitutionalisation in the following areas:

Main objective: To improve of the quality of life of the population related to mental health and to ensure appropriate conditions of care in the mental health system

1) Investment in human resources - improvement of staff situation and the quality of education in psychiatry, as well as the staff of other specialities involved in mental health care;
2) Investment in the system - change in the organisation of the provision of health services in psychiatric care;
3) Investment in the system - increasing access to health services in psychiatric care;
4) Investment in infrastructure - adaptation of health care providers to a community-based model of mental health care;
5) Investment in population health - mental health promotion, prevention of suicide and self-destructive behaviour.

ADULT PSYCHIATRY

Investment in human resources - improvement of the staff situation in adult psychiatry

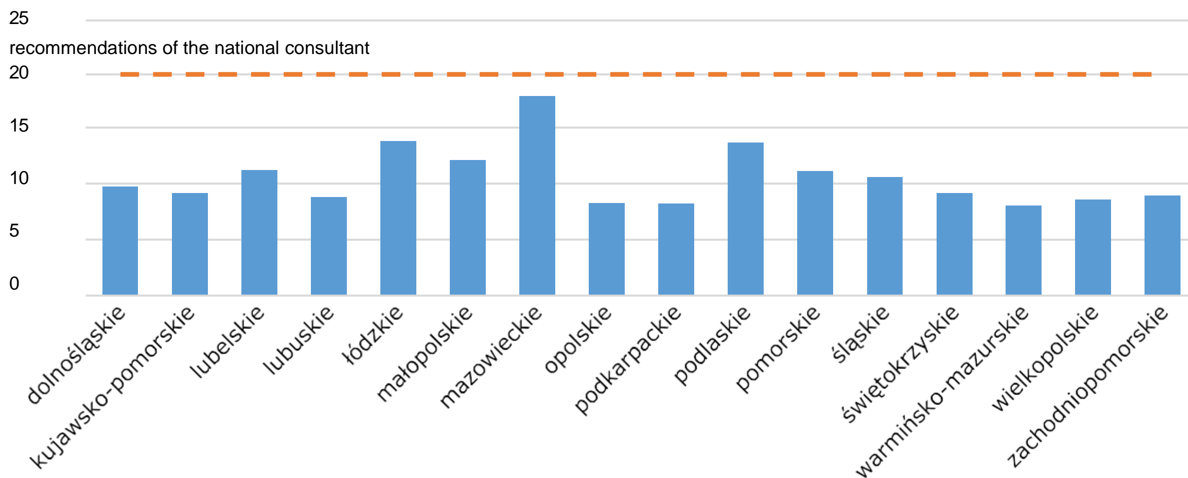
Specific objective

Improving the staff situation in adult psychiatric care

Diagnosis

Due to the specific nature of the services in the field of psychiatric care and addiction treatment, the professionals involved in providing that type of services are the most important resource that guarantees the availability and quality of the provided services. For that reason, it is important to assess the number of psychiatrists and other mental health professionals. The figure below shows the number of psychiatrists per 100,000 persons by voivodeships; the tables below contain information on the number of representatives of selected professional groups involved in the provision of the services.

Figure 4. Number of medical practitioners specialising in adult psychiatry per 100,000 persons in 2019



source: own elaboration based on *the Map of health needs for 2022-2026*

Table 12. Total number of staff providing services such as psychiatric care and addiction treatment - medical practitioners, psychologists, psychiatric nurses (unique PESEL/Personal identification numbers) in 2017-2020

Voivodeship branch of the National Health Fund	Year	Number of psychiatrists			Number of psychologists		Number of psychiatric nurses
		In speciality training	With I-degree specialisation	Professionals	With no specialisation	Clinical	
Dolnośląskie	2017	61	29	218	324	83	71
	2018	79	28	220	321	87	107
	2019	87	31	215	332	97	127
	2020	2020	103	29	212	363	95
Kujawsko-pomorskie	2017	40	11	144	188	39	64
	2018	61	11	154	214	39	64
	2019	60	7	160	148	71	142
	2020	71	7	155	169	66	168
Lubelskie	2017	67	30	160	302	76	67
	2018	71	31	173	374	105	79
	2019	59	23	159	281	73	50
	2020	54	21	157	308	73	89
Lubuskie	2017	9	17	81	110	15	26
	2018	6	13	74	102	13	39
	2019	9	10	67	93	31	38
	2020	15	9	64	99	29	47
Łódzkie	2017	118	23	253	296	140	62
	2018	122	23	269	376	168	86
	2019	89	16	205	267	118	155
	2020	98	16	196	287	117	185
Małopolskie	2017	93	28	312	401	168	77
	2018	112	31	347	528	208	111
	2019	102	23	291	412	159	114
	2020	128	21	290	480	168	115
Mazowieckie	2017	236	55	596	884	159	106
	2018	250	50	589	904	154	130
	2019	219	43	573	846	220	186
	2020	252	42	550	930	222	212
Opolskie	2017	29	17	77	105	44	30
	2018	32	17	82	116	48	53
	2019	24	14	81	124	47	54
	2020	21	14	75	149	53	58
Podkarpackie	2017	32	21	123	190	48	38
	2018	40	16	127	189	47	53
	2019	38	15	117	223	51	89
	2020	45	14	115	243	50	126

Number of psychiatrists					Number of psychologists		
Voivodeship branch of the National Health Fund	Year	In speciality training	With I-degree specialisation	Professionals .	With no specialisation	Clinical	Number of psychiatric nurses
Podlaskie	2017	28	14	139	151	33	73
	2018	31	12	128	136	25	59
	2019	28	12	123	139	33	66
	2020	36	12	124	137	31	66
Pomorskie	2017	79	24	201	293	57	40
	2018	79	22	215	279	64	78
	2019	75	18	203	233	107	125
	2020	82	18	199	246	110	138
Śląskie	2017	107	31	397	606	120	88
	2018	131	31	396	633	127	79
	2019	75	26	391	529	150	224
	2020	92	29	376	572	159	227
Świętokrzyskie	2017	29	8	95	114	8	45
	2018	29	8	95	139	9	45
	2019	19	6	105	106	30	47
	2020	19	5	104	117	34	55
Warmińsko-mazurskie	2017	23	22	90	131	38	57
	2018	23	21	93	142	39	70
	2019	20	15	90	103	34	38
	2020	23	14	90	110	32	41
Wielkopolskie	2017	74	22	261	370	115	56
	2018	79	25	277	421	133	157
	2019	79	14	307	353	145	159
	2020	89	15	302	384	151	171
Zachodnio-pomorskie	2017	47	17	120	157	56	33
	2018	52	17	131	188	76	39
	2019	39	11	135	165	70	37
	2020	44	10	129	182	60	41
Total	2017	1,072	369	3,267	4,622	1,199	933
Total	2018	1,197	356	3,370	5,062	1,342	1,249
Total	2019	1,022	284	3,222	4,354	1,436	1,651
Total	2020	1,172	276	3,138	4,776	1,450	1,879

Source: data based on information from the National Health Fund

Table 13 Total number of staff providing services such as psychiatric care and addiction treatment - psychotherapy specialists and addiction treatment instructors (unique PESEL/Personal identification numbers) in 2017-2020

Voivodeship branch of the National Health Fund	Year	Number of psychotherapists	Number of applicants for psychotherapist certification	Number of addiction psychotherapy specialists	Number of applicants for addiction psychotherapy specialist certification	Number of addiction treatment instructors
Dolnośląskie	2017	80	92	152	48	63
Dolnośląskie	2018	87	97	162	49	59
Dolnośląskie	2019	76	104	158	47	58
Dolnośląskie	2020	82	139	159	50	54
Kujawsko-pomorskie	2017	40	31	109	8	41
Kujawsko-pomorskie	2018	40	35	112	15	44
Kujawsko-pomorskie	2019	26	29	81	38	34
Kujawsko-pomorskie	2020	26	31	83	47	30
Lubelskie	2017	21	56	77	60	19
Lubelskie	2018	33	85	98	57	26
Lubelskie	2019	30	40	95	32	23
Lubelskie	2020	35	49	93	35	25
Lubuskie	2017	9	21	76	20	34
Lubuskie	2018	9	21	73	19	31
Lubuskie	2019	21	23	82	22	35
Lubuskie	2020	18	24	85	23	29
Łódzkie	2017	41	80	71	63	53
Łódzkie	2018	62	98	97	88	54
Łódzkie	2019	54	37	94	49	33
Łódzkie	2020	56	54	91	54	32
Małopolskie	2017	60	109	109	33	29
Małopolskie	2018	100	136	123	78	35
Małopolskie	2019	103	85	172	52	36
Małopolskie	2020	102	117	166	53	32
Mazowieckie	2017	248	372	270	174	52
Mazowieckie	2018	238	394	266	186	47
Mazowieckie	2019	123	148	321	138	59
Mazowieckie	2020	135	218	314	146	54
Opolskie	2017	19	29	62	27	18
Opolskie	2018	20	42	68	30	19

Voivodeship branch of the National Health Fund	Year	Number of psychotherapists	Number of applicants for psychotherapist certification	Number of addiction psychotherapy specialists	Number of applicants for addiction psychotherapy specialist certification	Number of addiction treatment instructors
Opolskie	2019	18	37	70	20	19
Opolskie	2020	19	49	66	24	19
Podkarpackie	2017	39	37	78	23	27
Podkarpackie	2018	42	31	82	27	27
Podkarpackie	2019	26	40	58	34	22
Podkarpackie	2020	31	46	56	31	21
Podlaskie	2017	42	88	78	42	14
Podlaskie	2018	41	80	81	41	13
Podlaskie	2019	39	55	92	40	13
Podlaskie	2020	41	70	84	44	13
Pomorskie	2017	54	55	38	32	7
Pomorskie	2018	75	77	57	29	7
Pomorskie	2019	91	67	159	54	31
Pomorskie	2020	90	82	160	66	33
Śląskie	2017	186	392	272	129	61
Śląskie	2018	213	392	278	124	63
Śląskie	2019	146	193	260	81	54
Śląskie	2020	159	242	260	85	59
Świętokrzyskie	2017	25	33	90	25	19
Świętokrzyskie	2018	25	47	90	28	17
Świętokrzyskie	2019	30	28	87	21	12
Świętokrzyskie	2020	29	34	88	22	12
Warmińsko-mazurskie	2017	28	30	96	35	36
Warmińsko-mazurskie	2018	31	44	102	26	37
Warmińsko-mazurskie	2019	25	28	93	18	22
Warmińsko-mazurskie	2020	24	29	94	16	24
Wielkopolskie	2017	79	118	81	35	46
Wielkopolskie	2018	104	165	101	55	49
Wielkopolskie	2019	91	151	262	73	34
Wielkopolskie	2020	93	174	251	81	33
Zachodnio-pomorskie	2017	69	64	71	39	165
Zachodnio-pomorskie	2018	87	89	88	49	175

Voivodeship branch of the National Health Fund	Year	Number of psychotherapists	Number of applicants for psychotherapist certification	Number of addiction psychotherapy specialists	Number of applicants for addiction psychotherapy specialist certification	Number of addiction treatment instructors
Zachodnio-pomorskie	2019	27	29	112	24	28
Zachodnio-pomorskie	2020	27	33	109	26	25
Total	2017	1,040	1,607	1,730	793	684
Total	2018	1,207	1,833	1,878	901	703
Total	2019	926	1,094	2,196	743	513
Total	2020	967	1,391	2,159	803	495

Source: data based on information from the National Health Fund

Based on the data in the table above, in 2020, services in the field of psychiatric care were provided by 967 psychotherapists and 1391 applicants for psychotherapist certification. Analysing the data in the table, after the decrease in 2018-2019, there is a noticeable increase in the number of applicants for psychotherapist certification. This is quite important, bearing in mind that psychotherapy is an important element in the treatment process.
For example, in depressive disorders, it is advisable to consider recommending the implementation of psychotherapeutic interventions at each stage of treatment (in mild depression - as the only form of treatment; with the intensification of symptoms - as supportive treatment in addition to pharmacotherapy)[28].

It seems crucial to ensure equal access to dedicated medical staff in individual voivodeships.

It is worth noting that in the implemented model of community psychiatry, recovery assistants will become more important. The requirement to employ recovery assistants in Mental Health Centres results from the provisions of the Regulation of the Minister of Health on the pilot programme in Mental Health Centres.

Expected results

1. **By the end of 2025, increasing the number of adult psychiatrists.**
2. **By the end of 2021, increasing the number of recovery assistants in Mental Health Centres.**
3. **From 2022, the possibility of supporting professional development of recovery assistants to be able to perform their functions.**
4. **By the end of 2025, increasing the total number of community therapists (proposed launch of undergraduate studies from 2022, with retention of the rights by those who have acquired them based on the current arrangements), psychotherapists, occupational therapists and psychiatric nurses employed in units financed by the National Health Fund.**

[28] https://wyleczdepresje.pl/wp-content/uploads/2019/04/Depresja_rekomendacje_calosc.pdf.

Actions

The Ministry of Health is taking steps to increase the number of adult psychiatry specialists by, inter alia, considering psychiatry as a priority area (meaning that for taking up education in that field it is possible to get financial support and additional residency positions are offered). Additionally, the Ministry of Health increases the limit on the number of medical students each year, and introduces changes to the specialisation training system for medical practitioners. The development of new professions/qualifications in psychiatric care, such as recovery assistants, inter alia, is also of great importance. It will be essential to support the professional preparation of recovery assistants. Work is underway to include a market qualification in the Integrated Qualifications System to support people experiencing mental crises in their recovery process, people experiencing psychosis. At the moment, the employment of recovery assistants stems from the provisions of the Regulation of the Minister of Health on the pilot programme. It is also important to take steps to enable the launch of a bachelor's degree course to train community therapists, who are a very important element of the community model.

Pursuant to Art. 70 of the Act of 15 July 2011 on the nursing and midwifery professions (Dz. U. [Journal of Laws] of 2021, item 479 and 1559), the minister competent for health, within the available funds and the established minimum number of training places for nurses and midwives, subsidises specialisation training for nurses and midwives in priority areas, including, inter alia, specialisation training in psychiatric nursing. Each year, the Minister of Health allocates funds for that purpose.

Financing

The financing of medical staff under that strategy (result 1, 2, 4) is primarily based on the provisions of the Act of 20 July 2018 – the Law on Higher Education and Science (Dz. U. [Journal of Laws] of 2021, item 478, as amended), the Act of 5 December 1996 on the professions of doctor and dentist - Dz. U. [Journal of Laws] of 2021, item 790, as amended) and the Act of 15 July 2011 on the nursing and midwifery professions, as well as other legislation on the subject. An important legal act related to financing the education of medical staff is also the Regulation of the Minister of Health of 21 June 2019 on the method of allocating funds for medical universities supervised by the minister competent for health (Dz. U. [Journal of Laws], item 1201). At the same time, as part of the deinstitutionalisation strategy, it is planned to support financially the professional development of recovery assistants to be able to perform their functions.

Objective - improvement of staff situation and the quality of education in psychiatry								
Deadline for completion	Result number	2021	2022	2023	2024	2025	2026	2027
	3							
Indicative sources of financing	Financing from the EU funds							
coordinating institutions	Minister of Health in cooperation with the Ministry of Funds and Regional Policy							

Investment in the system - change in the organisation of the provision of health services in psychiatric care

Specific objective

Change in the profile of services provided by large psychiatric hospitals - reduction of "acute" admissions to monoprofile psychiatric hospitals in favour of admissions to psychiatric wards in general hospitals.

Diagnosis

Guaranteed psychiatric care services in the form of stationary (24/7) services are provided in psychiatric wards, addiction treatment wards and emergency rooms to persons over 18 years of age in the field of diagnosis and treatment of all types of mental and behavioural disorders (F00-F99). 24-hour services are provided primarily in general psychiatric wards, which are the most important element of the inpatient treatment base. There are currently 46 psychiatric hospitals and 109 facilities with psychiatric wards at multispeciality hospitals.

An important direction of change is also the reorganisation of care for patients experiencing mental disorders, so that in future, those requiring hospitalisation will receive support exclusively in psychiatric wards within multispecialist hospitals. Providing services in this way not only reduces the stigmatisation associated with psychiatric hospitalisation but also allows for a more complete diagnosis and treatment of co-existing health problems.

In the case of some mental disorders and diseases, it is necessary to create the possibility of using the assistance of specialised centres with properly prepared staff, premises and a therapeutic programme.

Expected results

1. **By the end of 2027, the reduction of "acute" admissions to monoprofile psychiatric hospitals in favour of admissions to psychiatric wards in general hospitals, with the exception of the reserve for places where an extension of the transitional period is justified.**
2. **By the end of 2027, the reduction of the bed base in psychiatric wards.**
3. **By the end of 2027, the creation of out-of-hospital crisis accommodation at each Mental Health Centre (short-term stays)**

Actions

The measures outlined in the area of changing the organisation of the provision of psychiatric health services primarily concern changing the structure of the provision of 24-hour services through the reorganisation of 24-hour psychiatric facilities and psychiatric wards operating at multispeciality hospitals.

The key element of that measure is the limitation of "acute" admissions to monoprofile psychiatric hospitals, with the exception of the reserve for places with specific conditions related to the accessibility of care, as well as local conditions related to travel time, inter alia.

The reduction of "acute" admissions in psychiatric hospitals, as well as the gradual reduction in the number of beds in the above-mentioned units is associated with the increase in the capacity of psychiatric wards at multispeciality hospitals. 24-hour treatment of patients who suffer from mental disorders and require hospitalisation in psychiatric wards at multispeciality hospitals guarantees access to specialists in connection with coexisting somatic diseases and reduces the stigmatisation of patients with mental disorders.

The purpose of the change in the structure of provided services by monoprofile psychiatric hospitals is the implementation of programmes related to the provision of specialised psychiatric services by such units. Those units should have an adequately trained staff - medical professionals, nurses and other specialists, as well as appropriate treatment conditions and programmes.

Therefore, the basis for shaping the structure of inpatient care (size and activity profiles of psychiatric hospitals)

should be a psychiatric hospital network plan established on a statutory basis. A similar plan should apply to Mental Health Centres and wards at multispeciality hospitals, within which the areas of responsibility should be defined.
It is proposed to establish special rules for academic centres - as places with the highest level of reference, which must have the most specialised medical staff.

It is important that, in the process of reducing "acute" admissions to monoprofile psychiatric hospitals in favour of admissions to psychiatric wards in general hospitals, out-of-hospital crisis accommodation is provided at each Mental Health Centre. This will enable patient safety during the implementation of the objectives of the strategy.

Financing

The implementation of tasks under the aforementioned objective means primarily the organisational change in the way mental health care services are provided. Financing the activity of providing health care services is primarily associated with signing or terminating a contract with the National Health Fund. The entity responsible for the organisational change of a given health care facility is the establishing body. The implementation of the above activities will be based on the systematic implementation of changes prepared by the government administration based on strategic documents, e.g. National Mental Health Protection Programme in cooperation with local government units and the National Health Fund.

Investment in the system - increasing access to health services in psychiatric care

Specific objective

Development of a community-based model of psychiatric care for adults through the establishment of Mental Health Centres.

Diagnosis

The community-based model is currently recognised as the best systemic solution to improve mental health care. It helps to achieve better results in the recovery process and restores the social participation of people with mental health problems, it also increases the availability of health services.

Community-based care means the availability of appropriate services near the place of residence. World and European experience shows the need for solutions in which hospital care is limited, while the most important part of the assistance is offered at the level of community.

Expected results

1. **By the end of 2022, development and implementation of organisational standards at Mental Health Centres.**
2. **By the end of 2022, preparation and approval of the target map of areas of responsibility of Mental Health Centres.**
3. **Extension of the pilot programme until the end of 2022.**
4. **By the end of 2027, increasing the number of Mental Health Centres to 300 units and extending the activities of Mental Health Centres to the adult population of Poland.**

Actions

The implementation of that objective will take place analogously to the process of selecting the entities responsible for the implementation of the pilot programme in Mental Health Centres, i.e. after the qualification process is completed based on the applications submitted by the entities willing to implement the pilot programme.
For Mental Health Centres to be able to start providing services, it is necessary to sign a contract with the

relevant branch of the National Health Fund in a given voivodeship. Mental Health Centres are established and financed based on national funds (based on contracts with the National Health Fund). The development of organisational standards seems to be crucial in the context of unifying the organisation of health care services provided in the community model of mental health care.

Financing

Health services provided by Mental Health Centres are financed by the National Health Fund.

Objective - Investment in the system - increasing access to health services in psychiatric care								
	Result number	2021	2022	2023	2024	2025	2026	2027
Deadline for completion	4							
	1							
Indicative sources of financing	4. National Health Fund							
	1. Budget of the Minister of Health							
Coordinating institutions	1. Minister of Health and National Health Fund							

Investment in infrastructure - adaptation of health care providers to a community-based model of mental health care

Specific objective

Adaptation of the infrastructure of health care providers implementing the community model of psychiatric care.

Diagnosis

The long-term underfunding of psychiatric care results in the fact that inpatient facilities, in particular, are not adapted to the requirements of modern psychiatry. In many cases, inpatient entities require thorough infrastructural support to be able to deliver the services properly. Currently, there are 46 psychiatric hospitals and 109 psychiatric wards operating at multispeciality hospitals.

Expected results

1. **By the end of 2027, infrastructural co-financing of psychiatric wards in multispeciality hospitals (or the creation and adaptation of new ones) and the reduction of the number of beds in psychiatric hospitals (reorganisation).**
2. **By the end of 2027, infrastructural support for Mental Health Centres and for entities meeting the conditions for establishing a Mental Health Centre.**

Actions

As part of the implementation of the objective, the provision of support is planned for existing Mental Health Centres and new entities declaring the willingness to join the programme. The implementation of the pilot programme in Mental Health Centres requires appropriate adaptation of the entities establishing the centers to

the requirements of modern psychiatry. As part of the action, it will be necessary to equip outpatient teams, which are an important element of the community model, and to support the adaptation of entities in terms of equipment for them to be able to provide comprehensive psychiatric care, as well as to perform the necessary infrastructural investments (renovation and construction of facilities). The improvement of the infrastructure seems to be crucial especially in the newly established reporting and coordination points, whose tasks are, inter alia: the provision of information on the scope of the activities of the centre and the possibility of obtaining health care services, the assessment of the health needs of those contacting the PZK, the establishment of a preliminary plan of action and provision of support in terms of defined needs or giving advice on where to obtain the necessary social assistance - if required.

Infrastructural support is also important in the process of reorganising the functioning of inpatient wards in psychiatric hospitals and psychiatric wards at multispeciality hospitals, which guarantee comprehensive somatic care for patients with mental disorders. It is also important to co-finance the infrastructure of large psychiatric hospitals by adapting some wards to the new offer of specialist programmes as part of the change in the organisation of the provision of services and when the number of beds in general psychiatric units are reduced in favour of the development of multispeciality hospitals.

Financing

The reorganisation of the entities providing inpatient health services will be financed with the support of European funds. It is expected that as part of achieving the expected results indicated in point 1, it will be possible to obtain financial support from European funds.

The purpose of the action is to enable multispeciality hospitals to adapt or create psychiatric wards. The action should make it possible to ensure adequate infrastructure to run the branches (adaptation of the building, furnishing of rooms, purchase of equipment).

The main purpose of European funding as part of the action is to ensure infrastructural support to those involved in the reform. The provision of health services and the functioning of the entire system are based solely on the resources of the National Health Fund.

Thanks to the co-financing of the already existing Mental Health Centres, the conditions for the provision of services will be improved and the newly incorporated entities will be able to adapt to the current recommendations related to the provision of psychiatric services. Thanks to the support, new entities will be included in the pilot programme under which they will provide services financed by the National Health Fund, which will ensure the sustainability of activities.

Objective - adaptation of health care providers to the community-based model of mental health care								
Deadline for completion	Result number	2021	2022	2023	2024	2025	2026	2027
	1							
	2							
Indicative sources of financing	1 - Financing from the EU funds							
	2 - Financing from the EU funds							
Coordinating institutions	1 - Minister of Health in cooperation with the Ministry of Funds and Regional Policy							
	2 - Minister of Health in cooperation with the Ministry of Funds and Regional Policy							

CHILD AND ADOLESCENT PSYCHIATRY

Investment in human resources - improvement of the staff situation and quality of education in the mental health system

Specific objective

Improving the staff situation in child and adolescent psychiatric care

Diagnosis

One of the key barriers to accessing the child and adolescent psychiatric care is the insufficient number of professionals. Child and adolescent psychiatry is included in the list of priority areas, therefore for taking up education in that field it is possible to get financial support; moreover, additional residency positions are planned. Nevertheless, each year, a significant proportion of the available residency positions are not filled due to a lack of applicants. The entire mental health care system is based on the assistance of psychiatrists, of whom there are approximately 480 in Poland, and only some of them work in the public system.

An essential element of the functioning of the new model is the development of professional staff - apart from psychiatrists - who would work in the field of protection of the mental health of the youngest ones. Thanks to making the offer of assistance provided by those specialists more available - psychologists, psychotherapists and community therapists - it will be possible to organise care in such a way that only people who would need a psychiatric diagnosis or pharmacological therapy would be referred to psychiatrists.

Taking into account the above, it has been decided to introduce regulations concerning new professions:

- the specialisation of child and adolescent psychotherapy was introduced based on the Regulation of the Minister of Health of 31 January 2019 amending the Regulation on specialisations in fields applicable to health care (Dz. U. [Journal of Laws] of 226). The speciality training programme in the field of child and adolescent psychiatry was approved in September 2019;
- the market qualification "the provision of community-based therapy for children and adolescents" was included in the Integrated Qualifications System by the Notice of the Minister of Health of 19 December 2018 (Monitor Polski item 1279);
- a new specialisation programme in clinical psychology was developed (April 2018).

Expected results

1. **By 2027, education of new specialists qualified in the field of clinical psychology or child and adolescent psychotherapy or community-based therapy for children and adolescents.**

Actions

To increase interest in obtaining qualifications in the above-mentioned professions, it is important to promote them. It is important to subsidise courses the purpose of which is training professionals who could be employed in the public system - not only in the health care system but also in education or social assistance. Improving the skills of professionals already working in the system is also important.

In addition to the conducted courses, it will be extremely important to spread the information about the new professions in society and build trust towards those professionals. The above is of key importance for changing the current model of using the services, as part of which the first specialist to whom a child is often referred in relation to mental disorder is a child and adolescent psychiatrist. Measures to make the other professions in the field of mental health care of the youngest independent have already been initiated, e.g., by abolishing the obligation to have a doctor's referral for a child or adolescent to be able to receive psychological, psychotherapeutic and community services.

Financing

As part of the activities to increase the number and competence of professionals in the child and adolescent mental health system, training will be provided for staff of the public health care, education and social welfare systems to obtain qualifications and improve competence:

a) in child and adolescent clinical psychology;
b) in child and adolescent psychotherapy;
c) in child and adolescent community-based therapy;
d) within the framework of other courses or training in the field of child and adolescent psychiatry.

Objective - improvement of staff situation and the quality of education in psychiatry								
Deadline for completion	Result number	2021	2022	2023	2024	2025	2026	2027
	1						-	-
Indicative sources of financing	1 - Financing from the EU funds							
Coordinating institutions	1 - Minister of Health in cooperation with the Ministry of Funds and Regional Policy							

Investment in the system - change in the organisation of the provision of health services in child and adolescent psychiatric care

Investment in the system - increasing access to health services in child and adolescent psychiatric care

Specific objective

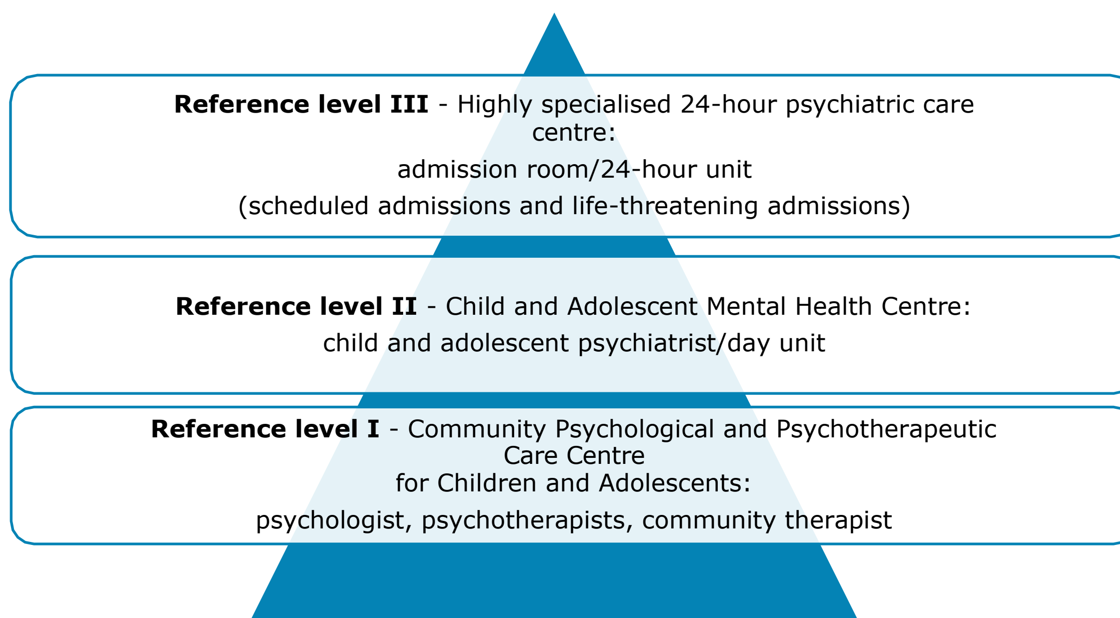
Implementing a new model of psychiatric care for children and adolescents based on three referral levels.

Diagnosis

Currently, the system of child and adolescent psychiatric care in Poland does not meet population needs for that type of care.

The new mental health care model was introduced by the Regulation of the Minister of Health on 14 August 2019, amending the Regulation on guaranteed services in the field of psychiatric care and addiction treatment (Dz. U. [Journal of Laws] of 1640), which defines the specific conditions to be met by health care providers offering guaranteed services in the field of child and adolescent psychiatric care within the reference levels. The new model of mental health care for underage patients is the result of the work of the Child and Adolescent Mental Health Team in operation since February 2018. The Team consists of outstanding experts in the field of psychiatry, psychology and psychotherapy. In the course of the work, the inspiration for the creation of the assumptions of the new model were the conclusions from the implementation of the project: "Deinstitutionalisation as a chance for good change - an integrated project. Bielany district of the capital city of Warsaw" (project number: POWR.04.01.00-00-D207/17), implemented under the Operational Programme "Knowledge Education Development" of the Ministry of Funds and Regional Development.

Below, there is a pyramid presenting the three reference levels of the facilities of the system providing support to minor patients who experience mental disorders, under the new mental health care model:



The basis of the planned model are community psychological and psychotherapeutic care centres for children and adolescents (reference level I), employing psychologists, psychotherapists and community therapists. The professionals working at that level will help the child and the family, will cooperate with the school environment and refer patients to psychiatrists, if required.

The solution will be the opposite of the current situation, where admission to a psychiatric ward (e.g. after a suicide attempt) is often the first form of contact of the minor with any form of care. Obviously, people in the state of exacerbation of the disease and especially in life and health-threatening situations will still be able to receive services in 24-hour units.

In addition to the level I units, there will also be level II facilities, where a psychiatrist will be available and patients requiring more intensive care will be able to receive services in a day unit. One such unit would cover several neighbouring counties with its support.

Finally, centers offering highly specialised 24-hour psychiatric care will operate at the third, highest reference level. In such centres, patients requiring the most specialised assistance will find support, including, in particular, people in a life and health-threatening state, admitted in emergency mode. We hope that over time the number of such cases will decrease; however, for the sake of patient safety, it is necessary that there is at least one such centre in each voivodeship. Also, future psychiatrists and other system specialists will be educated in those centres.

According to the assumptions of the reform, by increasing the availability of services in outpatient and community care, people who do not require hospitalisation will be able to receive assistance in smaller facilities (thus reducing the burden on Hospital Emergency Departments and Admission Rooms). Additionally, thanks to the creation of a network of centres providing assistance to the mentally ill, it will be possible to shorten the time of stay in hospital and prevent re-hospitalisation.

An important change is the possibility to receive child and adolescent psychological, psychotherapeutic and community assistance without a medical referral.

Currently, the biggest challenge for the child and adolescent mental health care system is the implementation and promotion of the model across the country.

Expected results

1. **By 2027, expanding the network of community psychological and psychotherapeutic care centres for children and adolescents of the first reference level.**
2. **By 2025, development and implementation of organisational and diagnostic and therapeutic standards in facilities operating within the new model of child and adolescent mental health care.**

Actions

Thanks to the introduced legislative changes, it is possible to conduct competition procedures by voivodeship branches of the National Health Fund and to conclude contracts for the provision of services under the new model of mental health protection for children and adolescents. The first reference level I units started their operation on 1 April 2020. Voivodeship branches conduct further competition procedures. The next stage will involve the conclusion of contracts for the reference levels II and III. It should be noted that the creation of a network of the centres will be gradual (e.g. due to the time necessary to educate the staff).

It is also necessary to carry out activities to improve the quality of the provided services (e.g. by developing organisational as well as diagnostic and therapeutic standards) and strengthen the cooperation between the reference levels and other institutions offering support for children, adolescents and their families (operating within the educational, social welfare and justice systems).

To achieve the expected result indicated in point 2, the development and publication of organisational, diagnostic and therapeutic standards in the field of assistance provided to children and adolescents experiencing mental disorders within three reference levels should be taken into account. Once developed, the standards will be handed over to health care entities with a recommendation to be used by all health care providers in the public system, at least in a form of a document signed by the National Consultant in the field of child and adolescent psychiatry or the person in charge of the reform in child and adolescent psychiatry (if appointed).

Financing

Achieving the expected result indicated in point 1, related to the expansion of the network of reference level I units, i.e., the community psychological and psychotherapeutic care centres for children and adolescents, is primarily related to signing an agreement with the National Health Fund.

Objective - Change in the organisation of the provision of health services in child and adolescent psychiatric care and increasing access to psychiatric care for children and adolescents								
Deadline for completion	Result number	2021	2022	2023	2024	2025	2026	2027
	2							
Indicative sources of financing	2 - Financing from the EU funds							
Coordinating Institutions	2 - Minister of Health in cooperation with the Ministry of Funds and Regional Policy							

Investment in infrastructure - adaptation of health care providers to a community-based model of child and adolescent mental health care

Specific objective

Ensuring adequate infrastructure for the provision of psychiatric services for children and adolescents under the new model of the mental health care system.

Diagnosis

The currently functioning system of child and adolescent mental health care is characterised by a large regional diversity: in some regions, there are no service providers who would offer certain types of services (e.g. on a 24/7 basis). To ensure patient safety, it is particularly important that there is at least one centre of the reference level III in each voivodeship (that is, a centre of highly specialised 24-hour psychiatric care).

A change in the provision of services requires infrastructural investments (e.g. adapting facilities to provide services in an outpatient or day unit setting, organising a hostel, purchase of necessary equipment).

Expected results

1. **By 2027, infrastructural support for health care providers participating in the implementation of the new model of child and adolescent health care and entities willing to be involved in the new model of child and adolescent psychiatric care.**

Actions

As part of the implemented activities, infrastructural support is required for the entities in the reference levels (especially I and II). It is necessary to adapt the infrastructure of facilities to the requirements of the current recommendations related to the provision of services for children and adolescents with mental disorders.

As part of the development of a network of 24-hour facilities, it is necessary to cooperate with health care providers and the local government of Podlaskie Voivodeship (where there is currently no 24-hour psychiatric care available for children and adolescents). At the moment, thanks to financial support from the Ministry of Health and the EU, a project is being implemented in Podlaskie Voivodeship to establish a psychiatry centre at the University Clinical Hospital and the L. Zamenhof University Children's Clinical Hospital in Białystok.

Financing

The achievement of the expected result will be based on infrastructural support of centres of the reference levels I, II and III and entities willing to be included in the new model of child and adolescent psychiatric care. As part of the support for facilities providing the services, it will be possible to co-finance the adaptation of the infrastructure to the requirements of the current recommendations related to the provision of services for children and adolescents with mental disorders. Under the measure, support will also be possible for centres operating at reference level III. Thanks to the co-financing, the conditions of providing services to children, adolescents and their families will be improved within reference levels in the facilities that will also provide services after the end of the co-financing period.

Health care services provided under the new model of child and adolescent psychiatric care are financed by the National Health Fund.

It is estimated that PLN 300 million should be involved in the achievement of the expected result described in point 1.

Objective - adaptation of health care providers to community-based model of child and adolescent mental health care.								
Deadline for completion	Result number	2021	2022	2023	2024	2025	2026	2027
	1							
Indicative sources of financing	1 - Financing from the EU funds							
Coordinating institutions	1 - Minister of Health in cooperation with the Ministry of Funds and Regional Policy							

ADULT PSYCHIATRY, CHILD AND ADOLESCENT PSYCHIATRY

Investment in population health - mental health promotion, prevention of suicide and self-destructive behaviour

Specific objective

Establishment of the Office for the Prevention of Suicidal Behaviour to support activities undertaken to prevent suicidal behaviour.

Ongoing supervision over the implementation of tasks under Operational Objective 3 "Promotion of mental health - prevention of suicidal behaviour under the National Health Programme".

Diagnosis

Based on the statistical data collected by the Police, there were 12,013 suicide attempts in 2020, of which 5,165 resulted in death, including 4,386 men and 778 women.

The lowest number of suicides was recorded in 2008 - 3,964, and the number of suicide attempts resulting in death has been steadily declining since 2013.

The most common reason for attempting suicide was a mental disorder (2,939) and the second most common reason was love disappointment (1,208). It needs to be noted that in the case of 4,969 events the reason has not been established. In 2020, there was more suicides committed by men than women (4,386 men and 778 women). The highest suicide rate, of 524, was recorded among adults at the age of 60 to 64. The second highest rate (490) was recorded for persons at the age of 40 to 44 or younger - 35 to 39 years old (481). The suicide rate in the group of younger persons was lower than in the group of middle-aged and older people.

It should be noted that according to the NIZP-PZH report, *Health status of Polish population and its determinants* (published in 2018), “among the external causes of death, the most common cause is suicide, as a result of which 4,671 people lost their lives in 2016 (4,075 men and 596 women). They are a significantly more common (by 63%) among men living in rural areas than in urban areas, while there is not much difference in the case of women. In all voivodeships, the mortality rate due to suicide was significantly higher in rural areas than among the residents of urban areas. The largest relative difference between mortality levels in rural and urban areas was recorded in Lubelskie Voivodeship, followed by Mazowieckie, Warmińsko-Mazurskie and Łódzkie voivodeships. The lowest number of death due to suicide was recorded in Śląskie Voivodeship, which is the only voivodeship where the death rate among rural residents is lower than the national average. Such large differences in the rates between urban and rural residents may indicate large gaps in meeting mental health needs."

At the same time, it should be noted that extensive activities for the promotion of mental health and the prevention of mental disorders have been implemented as part of the 2016-2020 National Health Programme. These activities will continue under the 2021-2025 National Health Programme.

Expected results

1. **By 2021, the establishment of the Office for the Prevention of Suicidal Behaviour to support suicide prevention activities.**

Actions

Taking into account the activities undertaken in the country to prevent suicidal behaviour, it is necessary to establish the Office for the Prevention of Suicidal Behaviour, which will coordinate the activities to prevent suicidal behaviour listed in the 2021-2025 National Health Programme (objective 3. Mental health promotion, part: "prevention of suicidal behaviour").

The main tasks of the Office will cover the following areas:

1. Diagnosis of the situation in the scope of all 10 tasks in the area of preventing suicidal behaviour, including supervision over their implementation;
2. Provision of substantive supervision and coordination of mental health issues;
3. Development and maintainance of a website to provide information on suicide prevention activities, including the creation of a tab with a page with publications in the field of suicide prevention, a tab with a calendar of events, including information about events, congresses/conferences, links to support pages;
4. Establishment of permanent cooperation with the media (following the model of the Pilot Programme Office - informational meetings - the so called breakfast meetings);
5. Ongoing development and publication of positions on emerging misinformation in the media on behaviour and suicide attempts related to mental disorders;
6. Initiation, coordination and publishing positions of experts in the field of mental health in response to false information in the media about behaviour related to mental disorders;
7. Organisation of press conferences;
8. Cooperation with governmental and non-governmental organisations designated to carry out tasks under the National Health Programme.

It is also very important to organise mental health promotion activities to raise the awareness of citizens about the importance of mental health.

It should be noticed that after the introduction of nationwide suicide prevention programmes, a decrease in the overall suicide rate has been recorded.

According to the available sources, based on the data from the years 1980–2004 from 21 OECD countries, it was investigated whether there was a statistically significant difference in suicide rates before and after the implementation of national suicide prevention programmes. It was proven that government-led suicide prevention programmes were the most effective ones in preventing suicide among the elderly population. After their launch, the number of suicides per 100,000 seniors decreased by approximately 3.5. Although somewhat smaller in scale, those programs have also had an impact on suicide rates among those under the age of 25. In turn, the suicide rate in groups of people of working age, regardless of gender, did not change after the introduction of the national prevention programmes[29]. Since the introduction of nationwide suicide prevention programmes in countries with 10 million people (e.g. Sweden), the number of deaths due to suicide has decreased by an average of 140 per year. In countries with 50 million people (e.g. the UK), the number of deaths due to suicide has decreased by 650, and in countries with more than 100 million people (e.g. Germany), approximately 1,350 suicidal attempts have been prevented thanks to comprehensive national suicide prevention programmes[30].

Financing

Financing from public funds under the National Health Fund. With the perspective of reduction of the suicidal rate by 1%, approximately 50 deaths due to suicide could be avoided.

Taking into account the estimation of costs related to suicide in Poland, if the above-mentioned indicator is met,

[29] Matsubayashi T., Ueda M. (2011), *The effect of national suicide prevention programs on suicide rates in 21 OECD nations.* Social Science & Medicine, 73, 1395–1400.

[30] Matsubayashi T., Ueda M. (2011), *The effect of national suicide prevention programs on suicide rates in 21 OECD nations.* Social Science & Medicine, 73, 1395–1400. https://www.researchgate.net/publication/51663589_The_effect_of_national_suicide_prevention_programs_on_ suicide_rates_in_21_OECD_nations

it would be possible to avoid the loss of years of life amounting to approx. PLN 2 million per year[31].

EVALUATION AND MONITORING OF THE ACHIEVEMENT OF EXPECTED RESULTS

Implementation of the Strategy requires actions in the legal, organisational, financial and educational dimensions, coordinated primarily by institutions within the public administration.

An important element will be to coordinate actions of a national nature with actions implemented in different regions.

The Strategy is a document that includes actions to be financed from both national and EU funds. The method of managing both budget and European funds is governed by separate regulations, as is the method of applying for financing of projects from budget and EU funds. Implementation of the Strategy does not affect changes in regulations in the field of managing financial flows and their volume.

The strategy is a framework for the process of deinstitutionalisation of health services - it indicates activities to be implemented and the resources that can be used for that purpose. The proper use of funds is governed by the relevant legislation, both in the case of national and EU funds. There are no plans to establish additional institutions to control the implementation of the actions under the Strategy.

It should be emphasised that the entities monitoring the achievement of the expected results in the areas of mental health defined in this document are primarily the Ministry of Health as the entity responsible for introducing systemic changes in the field of providing health care services and the National Health Fund as the payer of the system.

Undoubtedly crucial in monitoring the expected results is the cooperation of the above-mentioned entities with the Ministry of Funds and Regional Policy, which is responsible for monitoring the allocation of the EU funds for the years 2021-2027 and preparing national documents necessary to activate those funds, and with Managing Authorities and Intermediate Bodies of Regional Operational Programmes.

The implementation of the actions indicated in this document will involve periodic monitoring of indicators included in the expected results (e.g.: the number of trained and educated staff, the number of established Mental Health Centres, the number of liquidated psychiatric beds in monoprofile hospitals, the number of entities covered by support in the field of child and adolescent psychiatry). The sources of data for the objectives selected for monitoring are, inter alia: public statistics, data from the National Health Fund, Maps of Health Needs.

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[31] Baran A., Gmitrowicz A., Koszewska I. at al., *Rola mediów w promocji zdrowia psychicznego i w zapobieganiu samobójstwom. Poradnik dla pracowników mediów* (The role of the media in mental health promotion and suicide prevention. A guide for media professionals). Media Group of the Working group for depression and suicide prevention of the Public Health Council of the Ministry of Health. Warsaw 2018.

Table 14 Number of tasks with an indication of the sources of their financing

Sources of financing for individual expected results	
From 2022, the possibility of supporting professional development of recovery assistants to be able to perform their functions.	**Financing from the EU funds**
By the end of 2021, development and implementation of organisational standards at Mental Health Centres	**Budget of the Minister of Health**
By the end of 2027, increasing the number of Mental Health Centres up to 300 entities - coverage of the entire adult population of Poland by the Mental Health Centres.	**NHF**
By the end of 2027, co-financing of infrastructure (creation and adaptation) of new psychiatric wards in multispeciality hospitals (to reach a total of 8,000 general psychiatric beds in multispeciality hospitals) while eliminating twice the number of beds in psychiatric hospitals (reorganisation in the ratio - creation of one bed in a multispeciality hospital with the elimination of two beds in a psychiatric hospital).	**Financing from the EU funds**
By the end of 2027, infrastructural support for 50 Mental Health Centres and for 250 entities meeting the conditions for establishing a Mental Health Centre.	**Financing from the EU funds**
By 2027, education of at least 1,200 new specialists who will be qualified in the field of child and adolescent clinical psychology or child and adolescent psychotherapy or child and adolescent community-based therapy.	**Financing from the EU funds**
By 2025, development and promotion of organisational diagnostic and therapeutic standards for facilities operating under the new model of mental health care for children and adolescents.	**Financing from the EU funds**
By 2027, infrastructural support for at least 120 medical entities participating in the implementation of the new model of health care for children and adolescents and entities willing to be included in the new model of psychiatric care for children and adolescents.	**Financing from the EU funds**

The table does not include all tasks indicated in the expected results, only those that require separate funding.