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EMERGENCY MEDICAL SERVICES IN THE NATIONAL SECURITY SYSTEM OF THE REPUBLIC OF POLAND

Abstract:
The State Medical Rescue is a system that in its present form was shaped in Poland in the 21st Century, i.e., after 2006, based on the various Emergency Medical systems existing since the 19th Century. The premise and idea of the Krakow Volunteer Rescue Society established in 1891, and the subsequent ambulances in other cities, was to provide help to anyone who found themselves in a state of a sudden health emergency. The current system of the State Emergency Medical Services meets the constitutional provision of ensuring the right to health protection for everyone[4]*. Medical rescue is undoubtedly a public task that is currently performed by state bodies and state organisational units, which was emphasised in the very name of the State Emergency Medical Services. The Emergency Medical service is one of the oldest rescue systems in general. In its present shape, it is very well organised and equipped. Having a highly qualified medical and rescue staff, working in a continuous system that guarantees to help people in the event of a sudden*

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[4] Article 68(1) of the *Constitution of the Republic of Poland of 2nd April 1997*, Journal of Laws of 1997, No. 78, item 483 (here and after *Constitution of the Republic of Poland*).

threat to their health in normal conditions and the resulting events related to the threats of peace and war. It ensures quick transport and transfer of the injured to a stationary specialised medical facility. It is therefore a key link in the national security system of the State. However, the State Emergency Medical Services are marginalised at the expense of other systems, mainly the National Fire and Rescue System. It did not develop a separate position – a separate subsystem in the national security system- but it was included in the civil protection and rescue subsystem. Some people, even those aware that the implementation of the services of the State Medical Emergency Services system is a public task carried out by the state, suggest the privatisation of its services, referring to one of the principles of administrative law and organisation of administration, the principle of subsidiarity[5]*. The different opinions and views of the authors of this article on the above facts have become a premise to present to the reader the information on the State Emergency Medical Services, showing the types of rescue systems in the world, the history and genesis of the emergence and evaluation of the rescue system in Poland over the years, showing its role and place in the Polish national security system and finally the introduction and presentation of the current state of the State Emergency Medical Services, in operation since 2007.*

Keywords:
Emergency Medical Services, Medical Rescue, Poland, Safety, Health Security

National security system. The concept of national security

Undeniably, the highest good and the supreme value of man and the whole nation is their security. Therefore, when presenting the concept of national security, which has a lot of definitions in the literature on the subject, one should present only the selected ones and start with the statement that "National security (state security) is a kind of security whose subject is a nation organised into a state"[6]. Other definitions state that "National security is a state obtained as a result of properly organised defence and protection against all military and non-military threats, both external and internal, using forces and means from various fields of state activity,"[7] or that "National security – the state achieved as a result of organised protection and defence against possible threats,

[5] T. Kocowski, M. Paplicki, *Ratownictwo medyczne – czy wyłącznie państwowe*, [in:] *Prawne aspekty prywatyzacji*, ed. J. Blicharz, Wrocław 2012, p. 200.
[6] *White Book of National Security of the Republic of Poland*, National Security Bureau, Warszawa 2013, p. 248.
[7] *Słownik terminów z zakresu bezpieczeństwa narodowego*, Warszawa 2002, p. 14.

expressed by the ratio of the defence potential to the scale of threats"[8]. In turn, Waldemar Kitler states that "National security is also the most important value, national need and primary goal of the state, individuals and social groups, and at the same time a process involving various measures, guaranteeing sustainable, undisturbed existence and development of the national (state), including the defence of the state as a political institution and the protection of individuals and the whole society, their goods and the natural environment from threats, which significantly restrict its functioning or harm goods subject to special protection"[9].

National security is referred to as the oldest security formula. It is derived from the existential categories of the needs and interests of the communities that make up the state. National security is not only the protection of the nation and the territory of the state or country from physical aggression but also the protection of vital economic and political interests, the loss of which would threaten the fundamental interests of the state. This is the highest need for the values of the nation and the main goal of the state's action. Therefore, in the most important legal act, which is the Constitution of the Republic of Poland, Article 5 states that "the security of citizens is the basic task of the state"[10]. According to this provision, the state must build – to create such a system of national security (state security) that would guarantee the constitutional security of its citizens.

The strategic document (initial – directional) in the field of determining the state and conditions of the country's security and determining the strategic directions of assumptions for building the country's security system is the Security Strategy of the Republic of Poland, which must be correlated with the allied strategies[11], i.e., with the NATO Strategic Concept and the European Security Strategy. The current Security Strategy of the Republic of Poland, at the request of the Prime Minister, was approved by the President of the Republic of Poland on 12th May 2020, replacing the Security Strategy of the Republic of Poland from 2014. Already in the introduction of the current security strategy, there is a provision stating that "The strategy defines a comprehensive vision of shaping the national security of the Republic of Poland in all its dimensions. It takes into account the subjective aspect (the internal dimension of national security and the international environment – bilateral relations, regional cooperation, on a global scale and cooperation in the forums of international organisations) and the subject aspect (it takes into account all dimensions of the functioning of the national security system).

[8] *Słownik podstawowych terminów dotyczących państwa*, Warszawa 1994, p. 6.
[9] W. Kitler, *Bezpieczeństwo narodowe RP*, Warszawa 2011, pp. 22-31.
[10] Art. 5 of the *Constitution of the Republic of Poland.*
[11] *National Security Strategy of the Republic of Poland*, Warszawa 2020, p. 5.

National interests and strategic objectives in the field of national security have been formulated by the national values defined in the Constitution of the Republic of Poland"[12]. Further, the National Security Strategy of the Republic of Poland defines the national interests in the field of national security, which include:

1) Safeguarding independence, territorial integrity, and sovereignty and ensuring the security of the state and its citizens;
2) Shaping the international order, based on solidarity in cooperation and respect for international law, guarantees Poland's safe development;
3) Strengthening national identity and safeguarding national heritage;
4) Ensuring the conditions for sustainable and balanced social and economic development and the protection of the environment[13].

The abovementioned national interests form the pillars of national security of the Republic of Poland. Their implementation is carried out by achieving the resulting strategic goals, requiring planning and implementation of specific tasks and the possession and use of appropriate forces, means and capabilities. They form the basis for building a new or modernising and improving an existing national security system.

A systemic approach to national security

When discussing the issues related to the systemic approach to national security, it is advisable to cite the meaning – the general definition of the system. In encyclopaedic approaches, "System (from the Greek *systema*) – is a set of interrelated elements, functioning as a whole and realising the assumed goals as a whole"[14]. According to P. Sienkiewicz, "System – every complex object distinguished from the studied reality, constituting a whole created by a set of elementary objects (elements) and connections (relations) between them"[15]. In turn, according to Witold Kieżun, "The system is a separate part of the reality that surrounds us, having a certain internal structure, and thus consisting of parts ordered according to the established rules, defining mutual relations"[16].

Considering the above-mentioned definitions of the system, it can be assumed that the system in terms of state security will be constituted by the individual entities and institutions with their mechanisms and principles of

[12] *Ibidem.*
[13] *Ibidem,* p. 11.
[14] *System*, Encyklopedia Zarządzania, <https://mfiles.pl/pl/index.php/System> (30.11.2021).
[15] P. Sienkiewicz, *Inżynieria systemów*, Warszawa 1983, p. 27.
[16] W. Kieżun, *Sprawne zarządzanie organizacją*, Warszawa 1998, p. 13.

operation and the connections between them. According to J. Marczak[17], "national security (in systemic terms) is the totality of the preparation and organisation of the state for the continuous creation of national security, including the following elements:

- the legal basis for security;
- security policies and strategies;
- civilian and military national protection and defence organisations;
- security infrastructure;
- education for security;
- alliances and international cooperation in the field of security"[18].

In turn, according to R. Kulczycki, "The Security System of the Republic of Poland consists of the system of managing the security of the Republic of Poland and eight relatively isolated and subordinate subcontracting security subsystems: political, economic, military, social, internal, ecological, cultural, informational, other"[19]. The last word 'other' in this definition does not close off the list of subsystems, and so D. Majchrzak complements it (which seems obvious) with a defence subsystem[20]. M. Cabaj aptly defines that in the model democratic state, where the security management system consists of three elements – subsystems:

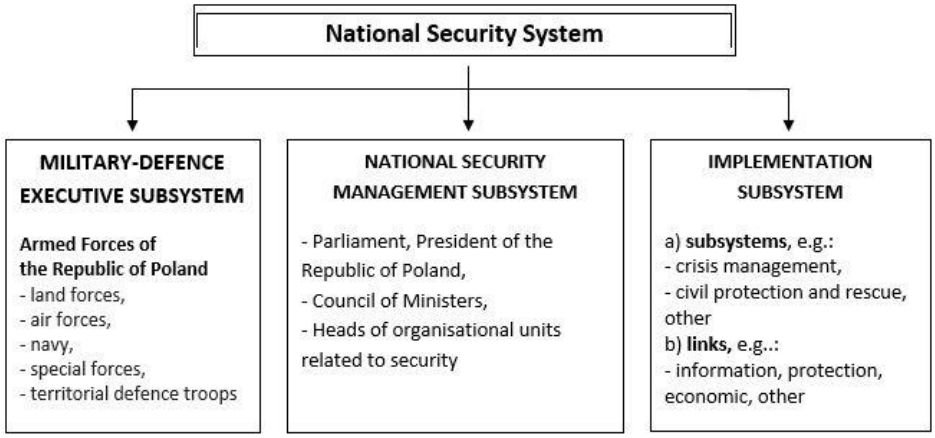
- the management subsystem;
- military executive subsystem;
- a non-military implementation subsystem[21].

At the same time, the management subsystem consists of the Parliament, the President of the Republic of Poland, the Council of Ministers and all public authorities at its various organisational levels and the Heads of the organisational units related to security. The Military Subsystem constitutes the Armed Forces of the Republic of Poland. On the other hand, the executive subsystem is aimed at protecting the population and state structures under conditions of threats both in times of peace and war. It consists of several subsystems, e.g., crisis management, civil protection and rescue, as well as information, protection and economic links, which in the organisational sense appear in the structures of the individual ministries but can also be organised in

[17] G. Sobolewski, D. Majchrzak, *Zarządzanie kryzysowe w systemie bezpieczeństwa narodowego*, Warszawa 2011, p. 51.
[18] J. Marczak, *Bezpieczeństwo narodowe – pojęcie, charakter, uwarunkowania*, Warszawa 2008, p. 13.
[19] R. Kulczycki, *System bezpieczeństwa Rzeczypospolitej Polskiej*, vol. IV, Warszawa 2004, s. 18.
[20] D. Majchrzak, G. Sobolewski, *op. cit.*, p. 53.
[17] M. Cabaj, *Studia z zakresu prawa administracji i zarządzania*, vol. 6, Bydgoszcz 2014, p. 103.

a territorial way, as local security systems. The above line of reasoning is graphically illustrated – it is presented in Figure 1 below.

Figure 1. Structure of the national security system in systemic terms.



Source: own study based on the above-mentioned source materials.

In the summary of the above considerations on the systemic approach to the national security system, it is worth referring to another source, namely: The White Paper on National Security of the Republic of Poland, issued in 2013 by the National Security Bureau, which defines "the system of national security (of the state) as a unity of forces and (entities), means and resources allocated by the State for the implementation of security tasks, organised accordingly (in subsystems and links), maintained and prepared. It consists of a management subsystem (system) and a set of differently related executive subsystems (systems), including operational subsystems (defence and security) and support subsystems (social and economic)"[22]. The current Security System of the Republic of Poland is therefore a set of separate subsystems internally if not entirely logically and closely related to the subsystem of national security management. This is largely due to the numerous inaccuracies in the law, manifested by the lack of indication of responsible authorities or – extremely – duplicated competencies, which results in wastefulness and inefficiency of the system[23]. Therefore, it requires an in-depth, if not reconstruction, then

[22] B. Mikhailiuk, *Podsystem ratownictwa i ochrony ludności*, "Zeszyty Naukowe AON", No. 4(93)/2013, pp. 274-309.
[23] *Ibidem,* p. 276.

definitely modernisation. It should be adapted to the assumptions and provisions of the new national security strategy of 2020[24].

The place of Emergency Medical Services in the National Security System of the Republic of Poland

As indicated in the previous subsection, the non-military executive subsystem constitutes a part of the national security system and is aimed, inter alia, at civil protection. One of the many subsystems included in the non-military implementation subsystem is the civil protection and rescue system. The civil protection and rescue system should guarantee quick and efficient operation in the face of the need to respond to all types of threats to the safety of the people, their property and the environment, both from natural and civilisational disasters[25]. Because this subsystem consists of two parts, the first on civil protection and the second on rescue, it is advisable to discuss and bring the reader closer to the concepts and meanings of both of these parts. Due to the volume constraints of this article, it is impossible to broadly describe the issue of the specificity of the organisation and operation of both members, which is why in the following part the general issues related to civil protection will be presented briefly and separately to those of the Emergency Medical Services (rescue).

In the common understanding, civil protection is associated with civil defence, which is inaccurate. In international legislation[26], it is defined that "civil protection – is the protection of civilians as well as individuals and includes both the public administration and the individual activities aimed at ensuring the safety of life and health of persons and their property". National civil defence legislation[27] has attributed civil protection, rescue and assistance to victims as one of its objectives. Thus, civil protection has entered and entered the area of civil defence activities; it was and is one of its tasks. W. Kitler states that "civil protection – includes the totality of activities of all subjects of state law, each depending on its legal status, aiming to ensure the security of society, property, national heritage and environmental goods in the face of natural and man-made disasters, including war"[28]. Referring solely to

[24] *National Security Strategy of the Republic of Poland*.
[25] T. Terlikowski, *System ochrony ludności i ratownictwa*, "Zeszyty Naukowe SGSP", No. 67/3/2018, p. 92.
[26] Article 50(2) *Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I).*
[27] Art. 137 of the *Act of 21st November 1967 on the General Obligation to Defend the Republic of Poland*.
[28] W. Kitler, *Powszechna ochrona ludności w świetle ustaleń międzynarodowych,* "Zeszyt Problemowy", 1/2001, p. 19.

the content of these three above-mentioned concepts, we can say that the overriding goal of civil protection is to ensure the safety of the people, property but also the goods of national heritage and the environment in the event of a threat caused by the forces of nature, accidents, catastrophes but also threats occurring in times of war. Public administration bodies, at every administrative level of the country, but also ministers of the relevant ministries, commanders of the State Fire Service, police commanders, environmental protection inspectors, sanitary inspectors and others all take responsibility for the protection of civilians.

Rescue, on the other hand, in encyclopaedic terms, means providing emergency aid, especially to protect the health and well-being of people; rescue operations are undertaken both in peacetime (great catastrophes, natural disasters) and in wars[29]. It is also necessary to explain the different and divergent concepts of rescue and rescue operations. Rescue means the activities carried out at all levels of the organisation of the country in all its states (in times of peace, crisis and war) through various methods, forces and means, which aim to save human life and material goods. On the other hand, rescue operations can be defined as help in a difficult emergency, which poses the threat of death to the victims and rescuers and the destruction of the environment and the elements of the material and cultural heritage[30]. There are many ways and typologies of the division of rescue in the literature on the subject; one of them is the division according to the source and the method of financing rescue operations, where the following can be distinguished:

- state emergency services/rescue – financed from the state budget and the local government funds;
- social rescue – the costs of organising and maintaining are fully covered from the sources of non-governmental organisations;
- commercial rescue operating in the 'service' category, which means that rescue operations are payable.

As part of the Emergency Medical Service, the following categories can be used:

- according to the type of rescue forces:
  - Emergency Medical Services/rescue;
  - military rescue;
  - mining rescue;
  - chemical rescue;
  - railway rescue;
  - veterinary rescue, etc.

[29] *Mała Encyklopedia Wojskowa*, Vol. III, Warszawa 1971, p. 34.
[30] B. Michailiuk, *op. cit.*, p. 282.

- according to the type of event (natural disaster, technical, technological, etc.) among others:
  - sea rescue;
  - fire rescue;
  - radiation rescue;
  - air rescue;
  - flood rescue;
  - road rescue;
  - railway rescue[31].

Summing up, the above arguments clearly show that Emergency Medical Services are a state rescue system, and thus one of the members of the civil protection and rescue system, which is a subsystem of the national security system of the Republic of Poland.

Emergency Medical Services in international and national terms. The genesis of the Emergency Medical Services in the world

Emergency Medical Services were born on the battlefield. The first attempts to organise field medical care were made already during the Napoleonic and Crimean Wars under the direction of Jean Dominique Larrey, a Napoleonic field doctor. In his practice, he used light, horse-drawn vehicles, the so-called 'volatile ambulances', to transport military doctors and medical equipment to the first line of battle to help the wounded. In the United States, the first attempts at medical care on the battlefields occurred during the Civil War of 1861-1865, when non-medical 'corpsmen' were trained to provide basic assistance to the wounded soldiers at the scene. The Battle of Solferino in 1859, which took place during the Franco-Austrian War, was a new quality in organising medical assistance to the wounded on the battlefield. Deeply moved by the sight of the wounded left on the battlefield, the writer Henry Dunant wrote a memoir, which was published in 1861 and initiated the signing of the Geneva Convention in 1864, which spoke of the neutrality of the sick and wounded soldiers of both sides of the fighting and their sanitary personnel and facilities. This conference initiated the activity of the Red Cross.

In Europe, the first attempts to organise emergency aid date back to the end of the eighteenth century. Already in 1767, the inhabitants of Amsterdam created rescue houses for drowned people; similar stations were also opened in 1772 in Paris. In the United States, at the end of the nineteenth century, several cities introduced services, equipped with mounted ambulances, which often included doctors. However, they did not include cover areas, where funeral caravans were used for transporting the sick for a long time. The first

[31] *Ibidem.*

association operating in the field of Emergency Medical Services, the Volunteer Rescue Society, was created in 1887 by Dr Jaromir Mundy. The immediate impetus for the creation of the emergency services was the fire of the Vienna Ringtheater in 1881, in which 386 people died[32].

Models and systems of Emergency Medical Services in the world

There are two basic models of Emergency Medical Services in the world, popularly referred to as **'**scoop and run' – the Anglo-American model, and 'stay and play' – the Franco-Germanic model. In many countries, there are also intermediate models. In the 'scoop and run' model, the task of the Emergency Medical Services Team is to get to the scene of the incident as quickly as possible, perform triage, secure vital functions of the patient and transport them to the emergency department[33]. In the literature on the subject, these two systems are quite extensively described in different ways. The authors of the article think that one of the most accessible sources, synthetically capturing the topic, and at the same time graphically showing it is the description of the above-mentioned models presented by M. Romańczuk, which is presented below[34]. Common to both systems is the desire to provide effective and quick assistance in times of threat to life or health (accidents, disasters). However, they differ in the intensity of the use of basic and advanced life-saving treatments at the scene of the incident and the qualifications of the members of the rescue teams.

Table 1. Emergency Medical Services models.

Model:	**Franco-Germanic**	**Anglo-American**
Patients:	Treatment at the scene, a small percentage of victims transported to the hospital	A small percentage of the victims treated at the scene, and most of them transported to the hospital
Staff:	Doctors supported by paramedics	Paramedics supervised by medical staff
Place of patient transport:	A specific department, often bypassing the emergency department	Hospital Emergency Department

[32] *Początki ratownictwa medycznego. Jak zrodziło się pogotowie ratunkowe?*, <https://ratownikmed.pl/poczatki-ratownictwa-medycznego/> (30.11.2021).
[33] *Modele działania służb ratownictwa medycznego*, <https://ratownikmed.pl/modele-dzialania-sluzb-ratownictwa-medycznego> (30.11.2021).
[34] M. Romańczuk, *Prawne aspekty ratownictwa medycznego i zarządzania kryzysowego w Polsce,* "Bezpieczeństwo. Teoria i Praktyka", No. 2/2018.

Coordinating organisation:	Public health service	Public emergency services.

Source: A. Bem, *Organizacja i finansowanie ratownictwa medycznego*, "Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu", No. 319/2013, p. 160.

The Franco-Germanic model – widespread in Europe, operates, inter alia, in Austria, Belgium, France, Germany, Sweden and Switzerland. Medical assistance is provided at the scene. It is provided by doctors supported by paramedics, and it includes resuscitation, stabilisation of the patient's condition and pain control. Ambulance equipment must be capable of carrying out rescue operations at the scene of the incident and during transport. The patient is transferred to a specialised hospital department, often bypassing the hospital emergency department. In this model, the rescue system is usually an element of the state health care system.

In the Anglo-American model – the goal is to transport the patient as quickly as possible to the emergency department. Rescue teams consist of specialised paramedics who are in contact with the emergency department – thus ambulances do not need to be equipped with specialised equipment. In this model, rescue is part of the Emergency Medical Services system, which also includes other rescue services (police, fire brigade). This option operates, inter alia, in the United Kingdom, the United States, Australia, Canada, China, Ireland and Israel[35].

If you are interested in getting acquainted with the detailed solutions of Emergency Medical Services operations in individual countries, we refer you to the thematic study issued by the Bureau of Analysis and Documentation of the Senate of the Republic of Poland[36].

Evolutionary history of Emergency Medical Services in Poland

Following the example of the first Viennese ambulance in Europe, established in 1883, in Krakow, organisationally belonging to the Austrian partition, the first ambulance service in Poland was established in 1891. The initiators of its creation were Dr Arnold Benneta and Dr Karol Wałęcz-Brudzewski. In the buildings of the fire brigade, there were separate premises in which there was an infirmary, a waiting room and a duty station, in which students of the higher years of the Faculty of Medicine of the Jagiellonian University were on duty. The ambulance took the name Krakow Volunteer

[35] A. Bem, *op. cit.*, pp. 160-161.

[36] Office of Analysis and Documentation of the Senate of the Republic of Poland, *Organizacja służb ratownictwa medycznego w wybranych państwach*, Thematic study OT-622 Chancellery of the Senate 2013.

Rescue Society (Polish: KOTR). It consisted of one horse-drawn carriage and five stretchers. The hallmark of the society was a white cross on a blue background.

Over time, the rescue society began shifting from the initially volunteer character to taking on a professional form – although no changes were made to the name. In 1904, duty hours for volunteers began to be introduced, and from 1911 subsequently for doctors. Also, the KOTR equipment was systematically expanded with new equipment, such as folding seats or accident cases. The Krakow Volunteer Rescue Society operated until 1950. The subsequent cities where rescue societies began to be established were: Lviv – in 1893, Warsaw – in 1897, Łódź – in 1899, Vilnius – in 1902, Lublin – in 1917, Poznań – in 1928, and then Białystok, Toruń and Zakopane. These rescue societies were financially independent, had legal status and operated according to their statutes. They were financed by social contributions, social security fees, donations, own funds and municipal subsidies. These societies provided round-the-clock and free assistance to the victims in all incidents.

After the end of World War I in 1919, the Polish Red Cross Society was established in liberated Poland, which, in addition to the services related to helping the wounded as a result of the war, ran medical facilities, also had ambulance stations and conducted rescue activities.

During the interwar period, the issue of Emergency Medical assistance was not considered on a national scale. The Decree of the President of the Republic of Poland on 22nd March 1928 on medical institutions did not take into account the ambulance station.

Also, the "Act of 28th October 1948 on social health care institutions and planned economy in the health service"[37] did not directly apply to ambulance facilities. However, under this act, health care facilities (maintained by foundations, congregations, religious associations and societies, and non-profit medical institutions of other legal entities) were included in the social health service. At the request of the Minister of Health, the Council of Ministers decided on 29th September 1948 to instruct the Ministry of Health to organise a network of emergency aid and to allocate appropriate amounts from the State Treasury for its organisation and supply of sanitary cars. The implementation of this resolution on behalf of the state was taken care of by the Polish Red Cross. The activity of all stations was to be uniform, and the task of each of them was to provide emergency assistance to anyone who faced the threat of loss of health or life. All stations were to be open 24 hours a day, on weekdays and holidays, and the ambulance crew was to be a medical team (doctor, paramedic and driver) or a transport team (paramedic and driver).

[37] *Act of 28th October 1948 on Social Healthcare Institutions and Planned Economy in Healthcare*, Journal of Laws, 1948 No. 55, item 434 – document repealed.

At the end of 1950, Polish Red Cross handed over the ambulance network organised so far to the authorities of the Ministry of Health. The administrative authorities divided the ambulance stations into municipal, district and provincial. Ambulance services also covered rural areas[38].

In 1951, the Minister of Health issued the first document after the war, in which the principles of operation of sanitary transport were defined. After the administrative reform of the country in 1976, an instruction was issued regarding the framework organisation of the Provincial Columns of Sanitary Transport (Polish: WKTS). Units were established as independent budgetary units created in each voivodship, subordinate to the competent voivode. In the years 1990-1999, WKTS were still organisational units of a budgetary nature and voivodship coverage. They ensured the fulfilment of transport needs for the entire health service. The budget was determined for a given year according to the Budget Act, and transport tasks were carried out as part of these funds. In 1992, the Ministry of Health purchased 80 modern ambulances, which were transferred free of charge to WKTS in individual voivodships. Since then, it has been possible to carry out rescue operations at the time of transporting the victim to the hospital. In the years 1989-1999, due to the lack of legal regulations, as well as limited financial resources, the functioning of these units left much to be desired.

The process of creating the State Emergency Medical Services system took place in many stages. The concept of the current system dates back to the 90s of the twentieth century. Poland, following the experience of other countries, undertook further initiatives aimed at creating a fully modern system of the state Emergency Medical Services. In 1999, the health policy program Integrated Emergency Medical Services was implemented, which was planned for the years 1999-2003. The most important goal of the program was both the preparation of qualified medical personnel and the infrastructure, as well as the development of procedures for the proper functioning of the Emergency Medical Services system throughout the country. In 2001, the program was divided into six task packages, in which the main links are the creation of, inter alia, emergency notification centres, Hospital Emergency Departments (HED), or a network of emergency ambulances. A huge breakthrough in the creation of the State Emergency Medical Service system was the first act of State Emergency Medical Services adopted on 25th July 2001. Even though it regulated many issues only superficially, this law initiated a new era in the development of Emergency Medical Services in Poland. However, its dysfunction caused work on new solutions to be undertaken. Work on the amendment lasted until 6th September 2006, while on 12th October the President

[38] *Początki ratownictwa medycznego…*

of the Republic of Poland signed the Act on Emergency Medical Services[39]. Under this act, a Polish model was created – the system of State Emergency Medical Services described in Chapter 4 of this article.

Legal basis and legal aspects of the State Emergency Medical Service operation in Poland

The current model of the state Emergency Medical Services formed post-2006 operates based on the legal provisions (the Regulation Act), thanks to which this system should function efficiently. The most important of these have been presented below:

- Act of 8th September 2006 on the State Emergency Medical Service40, the aim of which is to introduce the functioning of the Emergency Medical Services system, both through a high level of providing health services based on the applicable standards of Western countries, as well as providing the desired solutions in the area of emergency notification.
- Regulation of the Minister of Health of 4th February 2019 on guaranteed benefits in the field of Emergency Medical Services41. It is an implementing act to the Act of 27th August 2004 on health care services financed from public funds (Journal of Laws of 2018, item 1510, as amended), and in its content includes a list of guaranteed services in the field of Emergency Medical Services and the conditions for the implementation of the guaranteed benefits.
- Act of 22nd November 2013 on the emergency notification system42, regulating the technical functioning of the system, which provides for the separation of the function of receiving emergency calls from the function of disposing of rescue resources. The assumption of the system is the functioning of professional Emergency Notification Centres handling all emergency calls according to the same procedures.
- Regulation of the Minister of Internal Affairs and Administration of 30th April 2021 on the organisation and functioning of the emergency

[39] *Organizacja systemu Państwowe Ratownictwo Medyczne w Polsce – służba pacjentom w stanie zagrożenia zdrowia lub życia*, <https://ratownikmed.pl/organizacja-systemu-panstwowe-ratownictwo-medyczne-w-polsce/> (30.11.2021)

[40] *Act of 8th September 2006 on State Emergency Medical Services*, Journal of Laws, 2021, p. 2053.

[41] *Regulation of the Minister of Health of 4th February 2019 on benefits guaranteed in the scope of Emergency Medical Services*, Journal of Laws, 2019, item 237.

[42] *Act of 22nd November 2013 on the Emergency Notification System*, Journal of Laws of 2021, item 268.

call centre and the procedures for handling emergency calls,43 that Regulation shall specify:

  - the organisation of the centre and the branches of the emergency notification centre;
  - the functioning of the centre and the manner of performing tasks by emergency number operators, coordinators and coordinators-trainers;
  - the procedures for handling emergency calls and how they are prepared and updated;
  - the procedures for handling emergency calls where it is not possible to transmit an emergency call as part of the emergency notification system and how they are prepared and updated;
  - the maximum number of emergency number operators, senior emergency number operators, coordinators, coordinators-trainers and the method of its division into individual centres.

- Regulation of the Minister of Health of 27th June 2019 on the hospital emergency department,44 which specifies:
  - the specific tasks of hospital emergency departments;
  - detailed conditions for conducting medical segregation in hospital emergency departments;
  - specific requirements concerning the location of hospital emergency departments within the hospital structure and the technical conditions;
  - minimum equipment, organisation and minimum human resources of hospital emergency departments.
- Regulation of the Minister of Health of 3rd July 2019 on the Command Support System of the State Emergency Medical Services45.
- Regulation of the Minister of Health of 19th August 2019 on the framework procedures for handling emergency notifications and notifications of events by a medical dispatcher46.
- Regulation of the Minister of Health of 8th November 2018 on the

[43] *Regulation of the Minister of Internal Affairs and Administration of 30th April 2021 on the organisation and functioning of the emergency call centre, and procedures for handling requests Alarm,* Journal of Laws, 2021, item 832.

[44] *Regulation of the Minister of Health of 27th June 2019 on the hospital emergency department,* Journal of Laws, 2021, item 2048.

[45] *Regulation of the Minister of Health of 3rd July 2019 on the Command Support System of the State Emergency Medical Service*, Journal of Laws, 2019, item 1310.

[46] *Regulation of the Minister of Health of 19th August 2019 on the framework for handling notifications (alarms) and event notifications by a medical dispatcher*, Journal of Laws, 2019, item 2464.

Provincial Action Plan of the State Emergency Medical Services System[47].

As noted at the beginning, the regulations presented above do not constitute all the regulations regarding the State Emergency Medical Service and its units and the medical personnel. Depending on the needs of the system itself as well as the external conditions in which this system operates, new legal provisions appear, or existing ones are constantly updated, changed or repealed.

Polish model of Emergency Medical Services

The State Emergency Medical Services system in Poland was organised to fulfil one of the most important obligations of the state, which is to help every person, regardless of their age and citizenship status, who is in a situation of sudden health emergency on the territory of the Republic of Poland.

In Poland, the emergency medical system is based on the Anglo-American model, in which emergency medicine is an independent medical discipline, educating specialised staff to work in the Emergency Medical Services.

The process of creating the State Emergency Medical Services system took place in several stages. The concept of the current system dates back to the 1990s. Poland, following the experience of other countries, took further initiatives to create a fully modern and integrated EMS system. In 1999, the health policy program Integrated Emergency Medical Services, planned for the years 1999-2003, was implemented. The most important goal of the program was both the training of qualified medical personnel and the infrastructure, as well as the development of procedures for the proper functioning of the emergency medical services system throughout the country. In 2001, a program was created in which the main links forming an integrated emergency medical services system were established. As part of this system, the following were to be created: Emergency Notification Centres (ENC), Hospital Emergency Departments or networks of outgoing teams called Medical Emergency Services Teams[48].

The first Act on the State Emergency Medical Services passed on 25th July 2001, which regulated many issues, if only briefly, was a huge breakthrough in the creation of the State Emergency Medical Services system.

This act, however, initiated a new era in the development of Emergency Medical Services in Poland. Its imperfection made the commencement of work on the new solutions possible. Work on the amendment lasted until 6th

[47] *Regulation of the Minister of Health of 8th November 2019, in the case of the Voivodship Action Plan of the State Emergency Medical Services System*, Journal of Laws, 2018, item 2154.

[48] J. Konieczny, *Ratownictwo w Polsce. Lata 1990-2010*, Poznań 2010.

September 2006, while on 12th October, the President of the Republic of Poland signed the act on Emergency Medical Services, which is still in force today.

It is the Act of 8th September 2006, on the State Emergency Medical Services. The purpose of this act is to introduce the functioning of the Emergency Medical Services system, both through the high level of providing health services based on the applicable standards of the Western countries, and to provide the required solutions in the area of emergency notification[49].

The Act defines in detail the principles of organisation, operation and financing of the system as well as the principles of providing first aid education. Moreover, the Act on EMS broadly regulates the issues related to the empowerment of medical personnel in the system and the principles of functioning of the EMS system units. The Act also defines the tasks of government administration bodies competent for the performance of the system's tasks, and the principles of creating the Provincial Action Plan for the system. The Act also contains general provisions defining the dispatcher of a unit, qualified first aid, medical rescue operations, first aid, emergency health, area of operation, command support system for EMS or the rules of medical triage. Following the Act on EMS, many ordinances and legal acts were issued regulating the issues of its areas in detail.

Structure and principles of operation of state medical emergency services units

The State Emergency Medical Services system was created to assist every person in need who is in a state of a sudden health emergency. The administrator of an EMS system unit must ensure the readiness of people, resources and organisational units. The units of the EMS system providing services only in the event of a medical emergency include:

- medical rescue teams, including air medical rescue teams
- hospital emergency departments.

The system cooperates with trauma centres and organisational units of hospitals specialised in providing health services necessary for medical rescue, which were included in the plan. The following units also cooperate with the system:

1) organisational units of the State Fire Service;
2) fire protection units included in the national rescue and firefighting system;
3) organisational units of the Police and Border Guard;
4) units subordinate to the Minister of National Defence;

[49] *Act of 8th September 2006 on State Emergency Medical Services…*

5) entities authorised to perform mountain rescue based on the provisions of the Act of 18th August 2011 on safety and rescue in the mountains and organised ski areas;
6) entities authorised to perform water rescue based on provisions of the Act of 18th August 2011 on the safety of persons staying in water areas;
7) entities authorised to perform mine rescue under the provisions of the Act of 9th June 2011 – Geological and Mining Law;
8) organisational units of the Maritime Search and Rescue Service, referred to in the Act of 18th August 2011 on maritime safety;
9) entities not listed in points 1-8 and social organisations within their statutory or statutory tasks are obliged to help people in a state of a sudden health emergency – those which have been entered in the register[50].

Hospital Emergency Departments

Hospital Emergency Departments (HED) were established in Poland at the end of 1999 when the implementation of the Integrated Medical Rescue program was introduced. Most often, the creation of the HED was based on the transformation of the existing admission rooms, and not on the construction of new departments. This project assumed the creation of approximately 278 hospital emergency departments nationwide (a hospital with a population of approximately 150,000 and 16 children's hospitals). The Hospital Emergency Department is the most appropriate place for further diagnosis and initial treatment of a severely injured person. However, HED cannot be only a relay station between Emergency Medical Services Teams and an intensive care unit or operating room. Appropriate conditions must be created in it for admitting a seriously ill patient in a life-threatening condition by the emergency medical team. In the Hospital Emergency Department, the patient undergoes initial diagnostics and treatment to the extent necessary, especially if he is in a state of emergency[51].

The tasks and rules for the organisation of the Hospital Emergency Department are set out in the Regulation of the Minister of Health of 27th June 2019, on the Hospital Emergency Department. This regulation specifies:

1) detailed tasks of hospital emergency departments;

[50] *Ibidem.*
[51] P. Zuratyński, D. Ślęzak, K. Krzyżanowski, R. Szczepański, S. Jatuszewska, *Państwowy System Ratownictwa Medycznego w Polsce*, "Postępy Nauk Medycznych", 4/2019, pp. 155-164.

2) detailed conditions for conducting medical triage in hospital emergency departments;
3) detailed requirements for the location of hospital emergency departments within the hospital structure and technical conditions;
4) minimum equipment, organisation and minimum human resources of hospital emergency departments.

The department is organised within a medical entity with such hospital departments as:

- General surgery ward with a trauma unit (paediatric surgery ward - in the case of hospitals providing health services for children)
- Internal Medicine Department, and in the case of a hospital providing services for children – the Department of Paediatrics,
- an Anaesthesiology and Intensive Care Unit, and in the case of a hospital providing services for children – Anaesthesiology and Intensive Care Unit for children.

In addition, in the hospital where the HED is organised, there is a 24-hour Imaging Diagnostics Laboratory and a place for providing night and holiday healthcare services.

The Regulation defines the rules of medical triage by introducing the TOP HED (Polish TOP SOR) system aimed at monitoring the course of patient treatment in the Ward. The organisational structure of the HED includes the areas of activity in the field of:

- medical triage, registration and admissions;
- resuscitation and treatment;
- initial intensive therapy;
- immediate therapy;
- observation;
- consultation;
- stationing emergency medical teams, if the department has emergency medical teams in its structure;
- administrative and economic facilities[52].

The Hospital Emergency Department should have continuous access to:

- diagnostic tests carried out in a medical diagnostic laboratory;
- computerised tomographic examination and endoscopic examinations;
- a 24/7 airstrip or airport located at a distance that enables the transport of patients in a state of emergency without the use of an ambulance. However, when this condition is not met, the landing site located in the vicinity of the HED is allowed, and transport from the landing site to the HED must be less than 5 min;

[52] *Regulation of the Minister of Health of 27th June 2019 on the hospital emergency department*, Journal of Laws of 2021, item 2048.

– guaranteed equipment for examinations at the patient's bedside (the minimum equipment includes a bedside X-ray set, critical parameters analyser (blood gas analyser) and a portable ultrasound scanner).[53]

The minimum team in the Hospital Emergency Department includes:

1) head of the ward (doctor in charge of the ward),
2) ward nurse, who is a system nurse,
3) the number of doctors necessary to ensure the proper functioning of the ward, including at least one system physician residing in the ward permanently,
4) nurses or paramedics in the number necessary to ensure the proper functioning of the ward.

Regardless of the place of residence or the place of the event, the patient may use the Hospital Emergency Department without a referral. In this ward, the injured person will be under the professional care of qualified personnel[54].

Medical Emergency Services Teams

The Act of 8th September 2006, on the State Emergency Medical Services, allowed for the creation of a uniform medical rescue system in Poland, with the same standards, both in terms of personnel and equipment. Under Art. 36 of this Act, "Emergency medical teams are equipped with specialised means of sanitary transport, meeting the technical and quality characteristics specified in Polish Standards transposing European harmonised standards". Emergency medical teams are divided into:

– Team 'S' – a specialist team consisting of at least 3 people authorised to perform medical rescue activities, such as: a system doctor and system nurse or paramedic;
– Team 'P' – a basic team consisting of 2 people qualified to perform medical rescue activities. This team has the means of ambulance transport, but it is not specified who should be in charge of it. However, it is not forbidden to employ an additional person for the team for the position of a driver, for economic reasons this function is performed simultaneously by one of the two paramedics[55].

However, if none of the persons in the medical rescue teams mentioned above has a category B driving license and does not meet the conditions

[53] *Szpitalne oddziały ratunkowe*, <https://www.gov.pl/web/zdrowie/szpitalne-oddzialy-ratunkowe> (30.11.2021).
[54] Ł. Szarpak, *Organizacja ratownictwa medycznego w Polsce*, Warszawa 2012.
[55] P. Zuratyński et. al, *op. cit*., pp. 155-164.

specified in Art. 95a paragraph. 1 of the Act – Road Traffic Law – the EMS team must additionally include a driver.

Under Article 36a, of the EMS Act, during the period of announcing the state of an epidemic threat or in the state of the epidemic, the specialist team may include three people with the qualifications required for a paramedic or system nurse.

Organisationally, the deployment of emergency medical teams must ensure the following parameters of the time of arrival at the scene of the incident from the moment the notification is received by the emergency call centre:

- median travel time (every month) – not more than 8 minutes in a city with more than 10,000 inhabitants and 15 minutes outside the city above 10 thousand residents;
- the third quartile of travel time (every month) – is not more than 12 minutes in a city with more than 10,000 inhabitants and 20 minutes outside a city above 10 thousand residents;
- the maximum travel time cannot be longer than 15 minutes in a city with more than 10,000 inhabitants and 20 minutes outside a city above 10 thousand inhabitants[56].

The conditions for the implementation of guaranteed services in the field of medical rescue provided by a specialist medical rescue team, Basic Medical Rescue Team and Aviation Medical Rescue Team are regulated by the Regulation of the Minister of Health of 4th February 2019, on guaranteed services in the field of medical rescue.

Air Medical Emergency Services Teams

In addition to ground medical rescue teams, the State Medical Emergency Services (EMS) system also includes medical air rescue teams that form part of the Polish Medical Air Rescue structure. Helicopter Emergency Medical Service/Air Ambulance Service continues the tradition of pre-war and post-war medical aviation in Poland. The current organisational form of Helicopter Emergency Medical Service (HEMS) has been in operation since 2000. At the beginning of 2000, HEMS was established, the name of which was changed on 12th May 2000 to the Independent Public Healthcare Institution, Air Ambulance Service (Polish: SP ZOZ LPR). The entity received funds directly from the budget of the Ministry of Health. In November 2016, the Independent Public Healthcare Institution (Air Ambulance Service) changed its name to the Air Ambulance Service (Polish: LPR). Command Support System of the State

[56] Article 24 of *Act of 8th September 2006 on State Emergency Medical Services*…

Emergency Medical Services from the Ministry of Interior and Administration[57].

HEMS performs functions in the field of:

1) Emergency Medical Services (flights to accidents and emergencies and assisting their victims);
2) medical air transport performed outside of the tasks of the State Emergency Medical System (transport of patients requiring medical care between medical entities);
3) air medical transport from abroad (e.g., transport of Polish citizens, the victims of accidents or sudden illnesses to Poland);
4) medical air transport outside of the country.

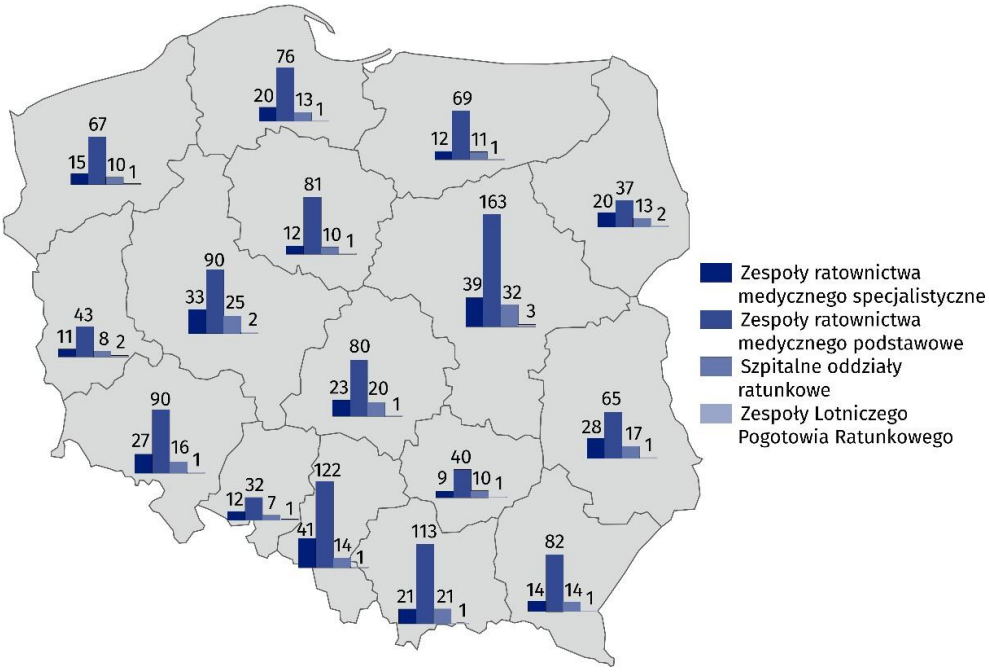
The Air Ambulance Service operates on twenty-one permanent bases where helicopter medical rescue teams are stationed. With the delivery of the new EC 135 helicopters to the Air Ambulance Service, the operational capabilities have increased. Gradually, preparations were made to extend the night-time duty on subsequent bases. Currently, Air Ambulance Service has 4 bases 24/7 and 17 working hours from 7 am to 8 pm. HEMS consist of a pilot, paramedic/nurse and a doctor[58].

When an epidemic threat is declared or during a state of the epidemic, the Air Medical Rescue team consists of at least three people, including at least one professional pilot and a system doctor or paramedic, or a system nurse[59].

The units of the EMS system closely cooperate, which is a very important aspect of coordinating the effectiveness of the system.

[57] LPR, *Historia i dziś*, <https://www.lpr.com.pl/pl/o-nas/historia/> (30.11.2021).
[58] *Lotnicze zespoły ratownictwa medycznego*, <https://www.gov.pl/web/zdrowie/lotnicze-zespoly-ratownictwa-medycznego/> (30.11.2021).
[59] Article 37a of *Act of 8th September 2006 on State Emergency Medical Services*…

Figure 2. EMS System units by voivodeships in 2021[60].



Source: own studies.

In 2019, as part of the State Emergency Medical Services system, there were 1,577 medical rescue teams (369 specialised and 1,208 basics). As in previous years, the number of specialist teams decreased, while the number of basic teams increased at the same time. This is mainly due to the lack of system doctors who are part of the EMS teams. Therefore, specialist teams are being gradually replaced by basic teams, which do not consist of an EMS system physician.

Emergency medical aid was also provided by Air Medical Rescue teams/Helicopter Emergency Medical Services teams (HEMS) from 21 bases of the Air Ambulance Service and 237 hospital emergency departments (HED). 155 admission rooms, 17 trauma centres providing healthcare services to patients with multiple multi-organ injuries and 8 trauma centres for children cooperated with the system. Emergency medical teams provided medical assistance outside the hospital to people in a state of emergency. As part of medical rescue operations, almost

[60] Legend (in sequence): Specialised Emergency Medical Services Teams,Basic Emergency Medical Services Teams, Hospital Emergency Medical Services Teams, Helicopter (Air Ambulance) Emergency Medical Services Teams.

3.1 million dispatches/departures were performed. Most often, emergency medical teams provided help at the patient's home (72.2% of cases).

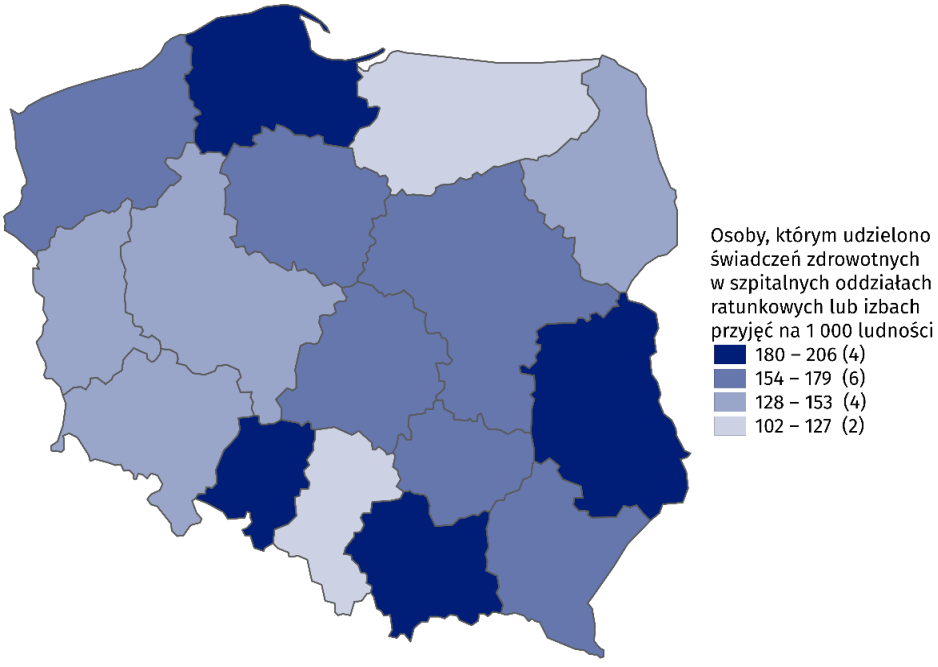
Hospital Emergency Departments (HED) provided health services in two modes: outpatient (not completed with hospitalisation) and inpatient. In admission rooms and hospital emergency departments, most services were provided on an outpatient basis.

From the further data of the Central Statistical Office for 2019, almost 4.6 million people were provided with emergency medical care in admission rooms or HED. The number of patients treated in the stationary mode amounted to over 1.5 million people. Children accounted for 18.4% of the total number of patients treated in the emergency room or HED, and people aged 65 and more - 25.4%.

Nationally, per 1 thousand 160 people received health services in hospital emergency departments or emergency rooms. Most people who benefited from assistance in this type of place per 1 thousand inhabitants were recorded in the Lubelskie Province – 206 people, and the lowest in the Śląskie Province – 102 people.

Outpatient patients most often accessed trauma and orthopaedic surgery (23.3% of patients), surgery (17.9%) and internal diseases (15.0%).

Figure 3. People who were provided with health services in hospital emergency departments or emergency rooms per 1,000 population by voivodships in 2019.



Source: own studies.

The data on the functioning of the HED as a unit of the system clearly shows that most consultations were provided in the field of outpatient procedures, which were not completed with admission to the hospital and further treatment. The question is, did all patients require specialist HED assistance and were they in a state of a health emergency?

The answer to this question may be found in the Report of the Supreme Audit Office of 29th December 2020, on the Functioning of Emergency Medical Services, in which it was noted that hospital emergency departments provided medical assistance (health services) to all reporting persons, including those who were not in the state of a sudden health emergency. HED patients who did not require urgent emergency medical procedures, depending on the data source, in 2018 – from 28% (HED data) to 71% (NHF data) and in the first half of 2019, respectively: from 29% to 69%. The burden of HEDs on patients who did not require emergency medical care extended the waiting time for urgent medical help for patients who required such assistance. The conclusion of this observation resulting from the inspection is the observation that the reason for this state of affairs is the limited availability of Basic and Specialised Healthcare and the lack of a mechanism allowing for limiting the provision of services in hospital emergency departments to people who did not require it[61].

As can be deduced from the above, the EMS system operating in Poland is not perfect, and the lack of system doctors in HEDs and specialist departments as well as the burden on the emergency departments in hospitals with patients who are not in a state of emergency contributes to limiting the availability of emergency medical services to patients who require immediate help to save their health and life and also lowers the standards of health services provided.

State Emergency Medical Services Personnel

The Act on the State Emergency Medical Services also specified in great detail the medical professions that carry out the tasks in the field of treating emergency medical emergencies in units of the system and provide services outside of it. These professions include:

- System doctor
- System nurse
- Paramedic

With the emergence of new medical professions, new specialisations in this area were established: medical specialisation in emergency medicine and nursing specialisation in emergency nursing, which granted the right to provide health services in the units of the EMS system.

[61] NIK, *Funkcjonowanie systemy ratownictwa medycznego, Informacja o wynikach kontroli*, Warszawa 2020.

A doctor of the National Emergency Medical Services Under the Act on EMS, the system physician is:

- a doctor with a specialisation or the title of a specialist in the field of anaesthesiology and intensive care, emergency medicine or neurology;
- a doctor after the second year of specialisation in this field, who continues their specialisation training;
- a doctor with a specialisation or the title of specialist in the field of internal medicine, cardiology, general surgery, paediatric surgery, orthopaedics and traumatology of the musculoskeletal system, orthopaedics and traumatology or paediatrics;
- a doctor who completed the basic module in the field of internal medicine, paediatrics, or general surgery as part of the specialist training and continues or completed the specialist training and obtained the title of specialist;
- system doctors undertaking specialisation in anaesthesiology and intensive care, emergency medicine or neurology (mentioned above), by Art. 16r paragraph 11 of the Act of 5th December 1996 on the Professions of Physicians and Dentists (Journal of Laws of 2020, item 514, as amended), within 5 years from the date of confirmation of completion of specialisation training or the date of the decision on recognition of their scientific and professional achievements will remain doctors of the system. About doctors for whom the status of a doctor depends on having a particular specialisation, i.e., specialists in internal medicine, cardiology, general surgery, paediatric surgery, orthopaedics and traumatology of the musculoskeletal system, orthopaedics and traumatology or paediatrics (Article 3 (3) (b)) of the Act on EMS), the provision of art. 16r paragraph 11 of the Act on the Professions of Physicians and Dentists will not apply[62].

Until 31st December 2020, a system physician could also be a physician with 3,000 hours of practice as a physician in a hospital emergency department, medical rescue team, aviation medical rescue team or hospital emergency room, provided that they began their specialisation in emergency medicine by 1st January 2018, and therefore this provision is no longer valid[63].

The lack of system doctors in both EMS and HED results in the number of departing specialist teams being significantly reduced in favour of basic teams, which do not require a system doctor. In Hospital Emergency Departments, the number of system doctors is also insufficient, which results in many hours of doctor's duty, which was also indicated by the Supreme Audit Office in its December 2020 report. There were cases where only one doctor was on duty in

[62] *Personel medyczny*, <https://www.gov.pl/web/zdrowie/personel-medyczny/> (30.11.2021).
[63] Art. 57 of the *Act of 8th September 2006 on State Emergency Medical Services*…

the HED, and not always an emergency medicine specialist. The doctors employed in the HED were on duty continuously for up to 79.6 hours[64].

Paramedic. Paramedic is a relatively new profession in the medical field. For the first time in an act of statutory rank, it appeared in the Act of 25th July 2001, on the State Emergency Medical Services[65].

The legal basis for practising the profession of a paramedic has been defined since 2006 by the Act on the State Emergency Medical Services, specifically its second chapter. This act has already been amended many times, and the competencies of paramedics have expanded over the years. In addition, what medical activities can be performed by a paramedic is specified in the Regulation of the Minister of Health on medical rescue activities and health services other than medical rescue activities that can be provided by a paramedic. In the near future, paramedics are waiting for further changes, because the Ministry of Health is working on a draft act on the profession of a paramedic and the self-government of paramedics, extending the competencies of paramedics in the field of endotracheal intubation using sedation, ultrasound examinations, bladder catheterisation and performing minor surgical procedures; following obtaining the specialisation of a surgeon's assistant, increasing the powers in the field of self-administration of medications used, inter alia, in the sedation of the patient[66].

After obtaining professional qualifications, in the course of their education, a paramedic carries out activities in the field of:

- securing people at the scene of the accident, and taking measures to prevent an increase in the number of casualties and environmental degradation,
- assessing the health condition of people in a state of emergency and undertaking medical rescue activities,
- transporting the injured,
- communicating with the victim and providing him/her with mental support in a situation that causes a state of a sudden health threat,
- organising and conducting classes in the field of first aid, qualified first aid and medical rescue operations[67].

- Under Art. 10 of the Act, a person who:
- has full legal capacity;

[64] NIK, *Funkcjonowanie…*

[65] *Act of 25th July 2001 on the State Emergency Medical Services*, Journal of Laws 2001, No. 113, item 1207.

[66] J. Ojczyk, *Minister zwiększy uprawnienia ratowników medycznych*, <https://www.prawo.pl/zdrowie/jakie-nowe-czynnosci-moga-wykonywac-ratownicy,5153-57.html> (30.11.2021).

[67] P. Zuratyński P., et al., *op. cit.*, pp. 155-164.

– their state of health allows them to practice this profession;
– demonstrates knowledge of the Polish language sufficiently to perform this profession and has made a relevant declaration of knowledge of the Polish language in words and writing.

In addition, the profession of a paramedic requires the following education and meets the following requirements:

– before 1st October 2019, they commenced higher education in the field of (specialisation) medical rescue and obtained the professional title of bachelor or master in this field (specialisation);
– they commenced higher education studies after the 2018/2019 academic year, preparing them to work as a paramedic, conducted by the regulations issued under Art. 68 sec. 3 point 1 of the Act of July 20, 2018 – Law on Higher Education and Science, and obtained a bachelor's degree and passed the State Emergency Medical Services Examination with a positive result;
– before 1st March 2013, they started education at a public post-secondary school or a non-public post-secondary school with the rights of a public school and obtained a diploma confirming obtaining the professional title of a paramedic or a diploma confirming professional qualifications in the profession of a paramedic;
– hold a diploma issued in a country other than a Member State of the European Union, the Swiss Confederation or a Member State of the European Free Trade Association (EFTA) – a party to the agreement on the European Economic Area, recognised in the Republic of Poland as equivalent to the diploma obtained in the Republic of Poland, confirming the professional title paramedic, and obtained the right to stay in the territory of the Republic of Poland by separate regulations;
– have qualifications to practise as a paramedic acquired in a member state of the European Union, the Swiss Confederation or a member state of the European Free Trade Association (EFTA) – a party to the Agreement on the European Economic Area, recognised in the Republic of Poland by the provisions of the Act of 22nd December 2015 on the principles of recognition of professional qualifications acquired in the Member States of the European Union (Journal of Laws of 2016, item 65 and of 2018, item 650)[68].

The scope of activities that a paramedic may perform as part of medical rescue activities and health services other than medical rescue activities are specified in the Regulation of the Minister of Health of 16th December 2019 on medical rescue activities and health services other than medical rescue activities

[68] Art. 10 of the *Act of 8th September 2006 on State Emergency Medical Services…*

that may be provided by a paramedic. This regulation broadly defines the detailed scope of the activities undertaken by a paramedic on their own or the physician's referral, both in system units and other health care units.

A paramedic may perform their professional tasks consisting of the provision of health services, including medical rescue activities provided independently or on the physician's referral, in the following entities and organisational units:

- in medical entities, e.g., in hospitals
- as part of mountain and ski rescue,
- as part of the water rescue referred to in Art. 2 point 4 of the Act of August 18th, 2011, on the safety of people in water areas,
- as part of mine rescue,
- as part of the Maritime Search and Rescue Service
- in non-medical entities subordinate to the Minister of National Defence,
- in fire protection units,
- as part of anti-terrorist activities carried out by services subordinate to or supervised by the minister responsible for internal affairs,
- in separate prevention departments,
- as part of the tasks of the State Protection Service,
- as part of the Border Guard's tasks, at airports
- as part of a medical entity, performing tasks in the field of medical support for a mass event,
- as part of sanitary transport
- in sobering-up stations
- as a medical dispatcher

Therefore, since the amendment to the act in 2018, the list of places where a rescuer can work has been significantly expanded.[69]

Expanding the competencies of paramedics and increasing the number of units in which they can carry out their tasks is related to, inter alia, reducing the availability of system doctors, and thus reducing the number of medical rescue teams at the expense of primary dispatch teams. Paramedics are also an important link within the healthcare entities such as hospitals, especially where emergencies that threaten health and life are being treated.

System Nurse State Emergency Medical Services. The EMS system is one of the possible jobs for nurses. The legal standards for practising the profession of a nurse are primarily regulated by the Act of 15th July 2011 on the professions of nurse and midwife. It is customary to practise the profession of a

[69] *Zakres czynności i standardy wykonywania zawodu ratownika*, <https://www.prawo.pl/zdrowie/zakres-czynnosci-i-standardy-wykonywania-zawodu-ratownika,262152.html/> (30.11.2021).

nurse by providing health services to a person having appropriate qualifications and the right to practice.

The system nurse can only be a nurse with specific, additional qualifications, obtained as part of postgraduate education, and having relevant work experience.

Under the statutory definition contained in Art. 3 of the EMS Act, a system nurse may be a nurse holding the title of specialist or specialising in emergency nursing, anaesthesiology and intensive care, surgery, cardiology, paediatrics, as well as a nurse with a completed qualification course in emergency nursing, anaesthesiology and intensive care, surgery, cardiology, paediatrics and with at least 3 years of work experience in departments of these specialities, emergency departments, admission rooms or ambulance service[70].

A nurse with the status of the so-called system nurses can be a member of the emergency medical team (both primary and specialist).

The detailed scope of preventive, diagnostic, therapeutic and rehabilitation services to which nurses are entitled is specified in the Regulation of 28th February 2017 on the type and scope of preventive, diagnostic, therapeutic and rehabilitation services provided by a nurse or a midwife without a doctor's referral, which has been in force since 23rd March 2017 with a list of medical rescue activities that may be performed by a nurse independently, including an EMS nurse[71].

Competence of authorities at different levels of public administration

The EMS system consists of two divisions. The first is government administration bodies competent to perform the tasks of the system, i.e., the Minister of Health and the voivodes. Their task is to organise, plan, coordinate and supervise the implementation of the system's tasks and partially finance system units. The supervision and organisation of the EMS system at the central level, which is the responsibility of the Minister of Health, results not only from the Act on EMS but also from the provisions of the Act of 4th September 1997 on government administration departments, where it is stated that the competences of the Minister of Health include the organisation and supervision over the State Emergency Medical Services system. This means that the Minister of Health has the right (but also an obligation towards the people in a state of health emergency) to carry out all checks related to the

[70] Article 3 of the *Act of 8th September 2006 on State Emergency Medical Services…*

[71] § 4 of the *Regulation of the Minister of Health of February 28th, 2017, on the type and scope of preventive, diagnostic, therapeutic and rehabilitation services provided by a nurse or midwife independently without a medical referral.*

planning, organising and coordinating of the emergency medical system and complying with the provisions of the EMS Act throughout the country.

As part of supervision, the minister is competent for health matters:

1) approves the voivodship system operation plan and its updates;
2) may request any information concerning the functioning of the system in the voivodeship from the voivode;
3) may require the voivode to perform inspection activities;
4) may inspect the dispatchers of units and the medical dispatching room on the terms specified in section VI of the Act of 15th April 2011 on medical activities.

Within his/her powers, the minister competent for health may appoint a national coordinator of Emergency Medical Services. This function is performed by the secretary of state or the undersecretary of state in the office supporting the minister responsible for health[72].

The responsibilities of the national coordinator of emergency medical services include:

1) resolving disputes concerning the admission to the hospital of a person in a state of emergency, in a situation where the dispute concerns the admission of a person transported by a medical rescue team or a sanitary transport team from a province other than the one in which the hospital is located;
2) coordination of the cooperation of voivodeship medical rescue coordinators in the event of events requiring the use of system units referred to in art. 32 sec. 1, from outside one province;
3) cooperation with the chief medical dispatcher and their deputy.

The national coordinator of emergency medical services performs tasks in cooperation with a team consisting of 5 members who are representatives of: the Minister of National Defence, the minister responsible for health, the minister responsible for internal affairs, the National Health Fund and the administrator of air medical rescue teams being a unit supervised by the minister in charge of health – appointed and dismissed by the minister in charge of health.

The Minister of Health also supervises the organisation and functioning of the Command Support System of the State Emergency Medical Services (Polish: SWD PRM); determines the directions of the development of the Command Support System of the EMS; is the administrator of the Command Support System of the EMS; is the entity responsible for the development and modification of the Command Support System of the EMS[73].

[72] Ch. 3 of the *Act of 8th September 2006 on State Emergency Medical Services…*
[73] Article 24a of the *Act of 8th September 2006 on State Emergency Medical Services…*

The State Medical Rescue System operates in the voivodship based on the system operation plan prepared by the voivode and approved by the minister responsible for health.

Each voivode prepares a plan that describes in detail the method for securing emergency services in the voivodeship.

The plans contain information on:

- possible threats;
- number and distribution of emergency medical teams, hospitals and medical dispatching rooms;
- the method of cooperation with other voivodships;
- the number and distribution in the voivodeship of the system units referred to in Art.;
- areas of operation and operating areas;
- the method of coordinating the activities of the system units;
- calculation of the operating costs of emergency medical teams;
- method of cooperation with public administration bodies and system units;
- referred to in Art. 32 sec. 1, from other provinces, ensuring efficient and effective saving of life and health, regardless of the boundaries of the voivodeships;
- the manner of cooperation of system units referred to in Art. 32 sec. 1, with units cooperating with the system, referred to in art. 15, with particular emphasis on the method of notifying, alerting and disposing of units, referred to in Art. 15 and art. 32 sec. 1, organisation;
- information on the location of emergency notification centres within the meaning of the Act of 22nd November 2013, on the emergency notification system;
- description of the structure of the emergency health emergency notification system for telecommunications undertakings to compile the necessary telecommunications links, ensuring the possibility of the necessary redirection of calls from the emergency notification centre to the appropriate organisational units of the Police, State Fire Service and the dispatcher of Emergency Medical Services teams;
- data on medical dispatching rooms (their location, number of positions, cooperation between medical dispatching rooms, number and professional qualifications of medical dispatchers, medical emergency team trips, taking into account the median time to reach the scene of the event, the maximum time to reach the scene of the event, the number of hospital patients emergency department and hospital emergency room);
- the method of organisation and operation of radio communication, including the use of assigned identification numbers of emergency medical teams and medical dispatching rooms, ensuring efficient

communication between emergency medical teams, medical dispatchers, voivodeship coordinator of emergency medical services and hospital emergency departments, hospital admission rooms, trauma centres, trauma centres for children, organisational units of hospitals specialised in the provision of health services necessary for emergency medical services, and units cooperating with the system.

The voivodeship action plan of the EMS system, after consultation with the director of the competent voivodeship branch of the National Health Fund, also includes (Article 21 (4) of the Act on EMS):

1) the appropriate number of hospital emergency departments and their distribution, taking into account the appropriate time for reaching the emergency department from the scene of the incident and the number of incidents (median time and maximum time of the EMS team reaching the scene of the incident).
2) a list of organisational units of hospitals specialised in the provision of health services necessary for emergency medical services;
3) information about the trauma centre and trauma centre for children, together with a reference to the scope of healthcare services necessary for the performance of its tasks, if the trauma centre or trauma centre for children is located in a given voivodeship.

In addition, the elements of the plan regarding the cooperation of system units with the units cooperating with the system must be agreed upon with the competent (Article 21 (5) (2) of the EMS Act):

1) the provincial commander of the State Fire Service,
2) the provincial Police Commander,
3) the director of the Maritime Search and Rescue Service,
4) the commanding officer of the Border Guard unit, if the units subordinate to or supervised by these authorities have been entered in the register.

In the case of updating the plan, the authorities of local government units and other entities are required to provide, at the written request of the voivode, all the information necessary to prepare the draft update of the plan.

The voivode submits the draft update of the plan to the minister competent for health for approval. The minister competent for health, within 30 days from the date of receipt of the draft update of the plan, supplements the draft update of the plan with a part concerning air medical rescue teams; they may raise objections to the individual provisions of the draft update of the plan (Article 21 (10) of the Act on EMS)[74].

[74] M. Paplicki, *Bezpieczeństwo zdrowotne obywatela w polskim systemie ratownictwa medycznego*, Wrocław 2020, pp. 182-191.

The voivodship system action plan, which is an official document drawn up by the voivode, and approved by the Minister of Health, is a tool that enables efficient, effective and successful operation of the EMS system not only in the voivodship but throughout the country.

Another task of the Voivode in the field of supervision, coordination and organisation of the EMS system in the voivodeship is to ensure the maintenance and operation of the Command Support System of the EMS in the voivodeship.

In addition, the Voivode, in the scope of the functioning of the EMS system, supervises the functioning of the system in the following areas: control of the dispatchers of the EMS system units, control of units cooperating with the EMS system in the field of tasks related to medical rescue, control of entities conducting courses in the field of qualified first aid, in terms of their compliance with the requirements set out in the Act on the State Emergency Medical Services, control of entities conducting training courses for medical rescuers and training courses for medical dispatchers in terms of meeting the requirements specified in the Act on the State Emergency Medical Services.

The voivode is also responsible for developing and presenting to the minister competent for health the assumptions regarding the financing of emergency medical services teams, psychological support for medical dispatchers, and medical dispatch centres, and cooperates in this respect with the Provincial National Health Fund Department. He entrusts the conduct of the procedure for concluding contracts with the dispatchers of emergency medical services teams for the performance of tasks of emergency medical services teams, concluding and settling the performance of contracts to the director of the competent regional branch of the National Health Fund. A very important aspect in terms of the role and tasks performed by the Voivode in the organisation of the EMS is cooperation with other voivodeship offices in the event of random events requiring coordination of activities and mutual support of medical services.

The voivode is also responsible for the 24-hour duty of the voivodeship medical emergency services coordinator[75].

Conclusion

Given the growing social expectations regarding the safety of human health and life, property and the environment against the effects of natural and civilisation disasters, saving the life and health of people in states of a sudden health emergency is undoubtedly a public task, which was emphasised in the name of the State Emergency Medical Services. State authorities have created

[75] Ch.3 of *Act of 8th September 2006 on State Emergency Medical Services…*

this system and are absolutely interested in its running and its effective operation.

The Emergency Medical Services system, which is an element of the civil protection and state security system, should aim at, inter alia, increasing the efficiency and reliability of its operation, especially in situations of complex and extreme threats. The organisation of this system by state administration bodies is focused on integrating the activities of various rescue entities by using modern IT and telecommunication systems, consolidating the training system of all entities performing the tasks for civil protection and rescue, both in the management subsystem and in the executive subsystem.

The State Emergency Medical Services System is an organisational system relying on the cooperative and coordinated readiness of people, resources and organisational units activated as a matter of urgency to overcome sudden health threats. The detailed task of this system is to provide pre-hospital medical services, carried out at the scene and during transport, as well as hospital emergency medical services, carried out in emergency departments, which are a continuation of the previous rescue activities. The EMS system created based on the provisions of the Act of 8th September 2006 on the State Emergency Medical Services is an organisational component of the health protection structure because medical services are provided in the event of a sudden health threat to everyone, without exception, and therefore it plays a fundamental role in ensuring the health safety of all citizens.

The established EMS system is integrated, i.e., there is a combination of forces and resources of all institutions dealing with medical emergency services, i.e., Ambulance Service, water and mountain ambulance, medical aviation, etc., and non-medical services – mainly fire brigades and various specialist groups, such as mine rescue, technical, chemical, ecological, energy services, and, if necessary, the army and the police. This system has become an executive unit of the state's tasks consisting in assisting every person in a state of sudden health emergency[76].

Over the last 20 years, a lot of progress has been made in the State Emergency Medical Services. New professional specialities were created, such as doctors or nurses specialised in providing emergency services to people in an emergency, a new profession of the paramedic. The system includes modern ambulances, hospital emergency departments, trauma centres and a fully computerised system of dispatching and supervising the movement of ambulances. The minister of health and voivodes have all the tools to supervise the system from the national and provincial level down to access to activities performed by each unit of the system separately.

[76] M. Paplicki, *op. cit.*, pp. 313-333.

The introduction of the Command Support System of the State Emergency Medical Services has significantly increased the quality of services provided by enabling continuous monitoring of the activity of emergency medical teams and their actions, and thus the quality of supervision. The data collected in this system, as well as data from the voivodship system operation, plans and obtained from the National Health Fund, allow for the assessment of the functioning of the individual units of the system in terms of the number of patients served, the type of ailments and activities performed by the staff[77].

Currently, the Command Support System of the EMS functions in all 1,585 emergency medical services teams (EMS teams), places where EMS teams are stationed in 39 medical dispatching rooms (including 221 dispatcher positions) and 16 positions of voivodeship emergency medical services coordinators. Each call made to the 999 emergency number and reports submitted by the operators of the 112 emergency number are handled by the Command Support System of the EMS. Moreover, each EMS team's trip to the event is supported and operated by the Command Support System of the EMS[78].

Recent years have shown that the EMS system is evolving and still requires further organisational actions to ensure its full effectiveness, which necessitates an in-depth look at the activities within the system and is also associated with the need to create a long-term medical emergency services plan, which will be consistently implemented and shaped by the constantly changing epidemiological, social and geopolitical conditions.

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