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# The Role of Telemedicine in Cross-border Cooperation between West Pomeranian Voivodeship in Poland and Mecklenburg Pomerania in Germany

#### Abstract:

Telemedicine has presented health systems with a number of advantages, including cost savings, convenience and the ability to offer care to patients with mobility issues, or those who reside in rural areas who lack access to local clinics or doctors. The aim of this article was to discuss the role of telemedicine in cross-border cooperation between West Pomeranian Voivodeship and Mecklenburg Pomerania as well as its importance in regional governance. In order to achieve this aim, a secondary literature analysis was assumed. Secondary data was gathered from peer-reviewed literature and government publications on the role played by telemedicine in cross-border cooperation in the region of interest, including the importance of regional governance. Some of the databases used to source the secondary data for this research include EUR-Lex, Scopus, and Web of Science. The analysis found that healthcare-related projects in the EU are governed using hierarchical process, but this needs to be replaced with a more regional, cross-border arrangement in order to improve cross-border healthcare cooperation. This article also found that the importance of regional governance of telemedicine in cross-border cooperation between West Pomeranian Voivodeship and Mecklenburg Pomerania is to help develop sustainable frameworks for cross-border cooperation within other countries/regions of the EU in matters not only healthcare, but others as well. Another important factor that was the maintenance of flexibility when it comes to governance of cross-border cooperation. Lastly, it was found that the roles of telemedicine in cross-border cooperation in this region was to bring about even development and harmonize legal issues that pertain to healthcare. It was recommended that, since cross-border cooperation on matters regarding healthcare normally involve a large group of stakeholders, social and medical institutions, national and local administrative institutions, and insurance providers need to be contacted in such arrangements as they all play a key role in cross-border health cooperation.

Key words: Telemedicine, Cross-Border Cooperation, Regional Governance, Healthcare, Euroregion Pomerania.

## INTRODUCTION

There has always been a constant evolution observed in various aspects of our world. In the field of healthcare, this natural progression has been represented by the advent of telemedicine. According to the World Health Organization (WHO), telemedicine is the provision of health and care using electronic information and communications technologies when distance separates the participants, i.e., the care providers and receivers. In other words, it is a method used to diagnose and treat patients online from anywhere in the world using information and communication technology (ICT). Telemedicine has presented health systems with a number of advantages, including cost savings, convenience and the ability to offer care to patients with mobility issues, or those who reside in rural areas who lack access to local clinics or doctors. Nonetheless, on the downside, it is impossible to remotely do every type of hospital visit as patients still need to visit the hospital for procedures such as blood work and imaging tests, as well as for diagnoses, which demand a more hands-on approach.

Pomerania is a historic region that lies on the southern shore of the Baltic Sea in Central Europe, with the eastern and western parts located in Poland and Germany, respectively. Officially known as

Euroregion Pomerania, the area was created in 1995 to improve cross-border cooperation between Poland and Germany. It is made up of 98 Polish municipalities and 10 German cities and districts. Their sole purpose is to promote the common interests of all members. In 2002, a joint telemedicine project was launched in 11 Polish and 11 German hospitals, some in West Pomeranian Voivodeship and some in Mecklenburg Pomerania with an aim of improving access to specialized medicine. After being approved by the using the European Territorial Cooperation (ETC), also known as Interreg, the specialists who have been taking part in the project include radiologists, pathologists, ophthalmologists, urologists, and otorhinolaryngologists among others.

The telemedicine project was implemented in the Euroregion Pomerania because of two reasons: a) both sides of the region have always been very scarcely populated, and b), as illustrated in Figure 1, the border in the Euroregion Pomerania between Germany and Poland has always left Polish and German hospitals with small catchment areas. According to the final results of the Polish National Population and Housing Census 2021, West Pomeranian Voivodeship in Poland has 75 people per square kilometer. The German Mecklenburg Pomerania has a 69-people-per-square-kilometer population density. Telemedicine was, therefore, considered as a way of delivering healthcare to inhabitants of these two regions due to its ability to enlarge catchment areas.

Despite this, little to no research has been conducted on the role telemedicine in cross-border cooperation between West Pomeranian Voivodeship and Mecklenburg Pomerania. This implies that such stakeholders as scholars/academicians, people who are interested in seeking funding from Interreg for their projects, and inhabitants of this region among others hardly understand the role of telemedicine in cross-border cooperation in the region as well as the important role it plays in regional governance. This article will attempt to bridge this research gap by discussing the role of telemedicine in cross-border cooperation between West Pomeranian Voivodeship and Mecklenburg Pomerania as well as its importance in regional governance. The article will first start by presenting a literature review that discusses the governance of healthcare-related projects in the European Union (EU). It is hoped that after this section, the reader will understand why the hierarchical process of governance in healthcare-related projects needs to be replaced with a more regional, cross-border arrangement. The next section will present that methodological approach of this research. The third section will present the results on the importance of regional governance of telemedicine in cross-border cooperation between West Pomeranian Voivodeship and Mecklenburg Pomerania and the role of telemedicine in cross-border cooperation between in the mentioned region. The fourth section will be the discussion and the fifth and last section will be the conclusion and recommendations.

# LITERATURE REVIEW

While health has always stood at the interface between fiscal, economic, and social systems, the founding treaties of the EU hardly addressed any matters related to healthcare. Nonetheless, from the 90s onwards, due to the rise of numerous health crises, heightened tensions between health systems, and close associations between health and other policies, more harmonized health policies at the EU level were needed. A legal basis for EU participation in matters related to healthcare and an assurance of high-level human health proection were created by Article 129 of the Maastricht Treaty (1992) and Article 168 of the Lisbon Treaty, respectively. Article 168 of the Lisbon Treaty specifically called for EU Member States to ensure health services in cross-border regions were interdependent. In 2011, the European Parliament passed the Directive on Patients' Rights in Cross-Border Healthcare, which acknowledged that patients could be reimbursed for any non-planned hospital treatment they received abroad and had already paid the costs. The reimbursement was to be equal to the patients' current home-country rate. According to Reitel and Wassenberg, the directive not only improved the mobility of patients, but also their access to safe and high-quality healthcare within the region.

Despite this, as stated by European Parliament, the regulation of healthcare in the EU has always assumed a hierarchical process of decision-making. For instance, the policies and regulations mentioned above have always been overseen by what the EU terms as National Contact Points-nations designated to act as information access points by other Member States, e.g., Switzerland, Norway, and Liechtenstein. Nonetheless, as argued by Greer et al., cross-border healthcare governance demands the development of specific cross-border agreements, norms, and rules. This means creating networks of different operators, including different levels of associations, public authorities, and private stakeholders that are unique to the region of governance. A hierarchical or traditional process of governance, as it will be seen in later parts of this article, can hardly be used in cross-border healthcare cooperation. Case studies that date as far back as the turn of the century (e.g., "Introduction: Why Borders Now?") revealed that arrangements, complementary tools, negotiations, and social as well as organizational innovations are required to make cross-border healthcare governance feasible. In such arrangements, hierarchical practices are swapped for multi-level negotiations and the rules are also bent to offer flexibility, even though they need to consider their legal compatibility with the relevant national systems. Therefore, in order to negotiate such arrangements, local stakeholders need to portray strong levels of commitment. For instance, in the case of this article, such commitment requires that local elected representatives prove they understand the importance of effective telemedicine systems.

# METHODOLOGY

In the current research paper, the methodology employed to investigate the role of telemedicine in cross-border cooperation between West Pomeranian Voivodeship in Poland and Mecklenburg Pomerania in Germany primarily depends on secondary literature analysis. The current research applied this methodology to collect insights and information from existing scholarly research and government publications relevant to the research objectives.

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Multiple sources, including peer-reviewed literature and official documents, were used to gather secondary data. The research consulted a number of databases, including EUR-Lex, Scopus, and Web of Science, to guarantee the accuracy and trustworthiness of the data. These databases were chosen because of their comprehensive coverage of academic papers, court cases, and research articles on telemedicine, international collaboration, local administration, and healthcare in Europe.

A methodical review and analysis approach was used to examine the secondary data that was gathered. This required evaluating the data critically, highlighting significant conclusions, and synthesizing pertinent ideas on the function of telemedicine in international collaboration and local government in the designated regions. Understanding the current governance frameworks, difficulties, and potential in cross-border healthcare initiatives inside the European Union was the main goal of the investigation.

## **RESEARCH RESULTS**

#### IMPORTANCE OF REGIONAL GOVERNANCE OF TELEMEDICINE IN CROSS-BORDER COOPERATION

As it will be seen in this section of the article, the importance of regional governance of telemedicine in cross-border cooperation between West Pomeranian Voivodeship and Mecklenburg Pomerania is to help develop sustainable frameworks for cross-border cooperation within other countries/regions of the EU in matters not only healthcare, but others as well. Another important factor that will be discussed in this section is the maintenance of flexibility when it comes to governance of cross-border cooperation.

#### PROVISION OF A SUSTAINABLE FRAMEWORK FOR CROSS-BORDER COOPERATION

The telemedicine network known as Telemedicine Euroregion Pomerania, which was formed in 2002 by the Telemedicine Association of West Pomeranian Voivodeship and Mecklenburg Pomerania proved that bilateral agreements can be signed between local authorities provided they understand the relevant activities and institutions needed to actualize the cross-border cooperation. As noted by Hosten et al., the Telemedicine Euroregion Pomerania framework along with its administrative planning took approximately three years to complete, but it eventually defined the relevant local authorities and objectives of the cross-border cooperation in telemedicine healthcare, while specifying all catchment areas within West Pomeranian Voivodeship and Mecklenburg Pomerania.

According to European Parliament, such kind of negotiation was replicated between Germany and France, France and Spain, France and Luxembourg, and Finland and Sweden. For example, the Franco-German Cross-Border Cooperation Committee, which is governed by the Treaty of Aachen (2019) called for the joint management of such issues as development, employment, health, and transport along the Maginot Line, i.e., the border region between France and Germany. The committee includes only local authority members of the border region in the two countries. The 2007 Franco-Belgian agreement also intended to improve access to emergency medical services for people residing in West Flanders, Hainaut, and Namur in Belgium, and France's regions of Ardennes, Nord, Pas-de-Calais, Somme, Aisne, Oise, and Marne. This agreement too only involved local authorities from the respective regions and it followed similar negotiations that were applied in the Telemedicine Euroregion Pomerania.

Such arrangements go a long way to fulfil the spirt of Article 168 of the Treaty on the Functioning of the European Union (TFEU), which encourages Member States to create strong cooperation that would ensure the rights of patients are respected even in cases of cross-border healthcare. Regional governance tends to encourage cooperation because it not only legitimizes and stabilizes cooperation at the highest level, but it also provides a framework to local authorities to negotiate and plan for extra arrangements. Therefore, as argued at the start of this section, the importance of regional governance of telemedicine in cross-border cooperation between West Pomeranian Voivodeship and Mecklenburg Pomerania is to help develop sustainable frameworks for cross-border cooperation within other countries/regions of the EU in matters pertaining to healthcare and other sectors, as well.

## MAINTAINING FLEXIBILITY BETWEEN FORMALIZED AND LOCAL FORM OF GOVERNANCE

According to Bensemmane and Baeten, cross-border cooperation in matters related to health care either follows a hierarchical/integrated form of governance or a local and pragmatic approach. This is because there are certain cross-border projects or activities, which might hardly require an integrated form of governance, implying that they can best be controlled in a local and pragmatic manner with little or no functional arrangements. If this is not the case, then a formalized institutionalization form of governance is adopted to reinforce the cooperation. Formalized institutions are normally brought into the picture when the cooperation evolves from exchanging information to pooling either expertise or resources. Retaining flexibility is the main aim of having these two approaches. First, partners can maintain regular networking when using the local and pragmatic approach and second, it provides them a learning process as they can still make use of European instruments to come up with formal institutional arrangements of cross-border governance.

The Telemedicine Euroregion Pomerania network between West Pomeranian Voivodeship in Poland and Mecklenburg Pomerania is a perfect example of a cooperation that made use of both local and formalized institutions to achieve flexibility in its regional governance of cross-border telemedicine cooperation. In this arrangement, there was not only cooperation from inter-hospital partnerships and inter-centre conventions and local authorities in the provision of telemedicine, which ensured that quality of patient care was improved, but formal rules that remained legally compatible with the two countries' national systems were also created, which ensured the successful implementation of telemedicine cooperation in West Pomeranian Voivodeship in Poland and Mecklenburg Pomerania. Table 1 shows a list of the formal institutions and local players that are part of the Telemedicine Euroregion Pomerania network.

The telemedicine project between West Pomeranian Voivodeship in Poland and Mecklenburg Pomerania has nine subprojects, all with different aims. These subprojects include: tele-tumor conferencing, patient's informed consent, tele-conference for board meetings, tele-radiology, telepathology, tele-earnose throat, teleophthalmology, and tele-stroke. As noted from the Table 2, the aims of the local and pragmatic approach in an arrangement are different from the formal or hierarchical approach. The objectives of the formal/hierarchical approach have to conform to EU's outcome parameters.

As noted in this section, the presence of two different sets of players in cross-border cooperation in terms of their outcome parameters makes it overly important to have flexibility when making arrangements for cross-border cooperation.

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One of the roles of telemedicine in cross-border cooperation in this region was to bring about even development in matters related to healthcare. In 2002, at the onset of the telemedicine project between West Pomeranian Voivodeship and Mecklenburg Pomerania, the two regions were unevenly developed not only in terms of healthcare services and specialists. This project was initiated by two pathologists from Szczecin, West Pomeranian Voivodeship (404,461 residents), and Rostock, Mecklenburg Pomerania (200,265 residents) (Figure 2 and Figure 3); at that time, the former city (Szczecin) was not even in an area where Interreg used to fund projects.

Nonetheless, at that time, digitalization was considered an important factor for telemedicine because of the region's push to enable the provision of healthcare services over a distance. Despite the fact that one of the initiators of the project came from a region where Interreg was yet to start giving funding, the project was still given the greenlight to proceed. It was a conventional practice for Interreg to only fund cross-border projects in regions that somewhat had a comparable level of infrastructural development, but in this case, the German side of the region was more developed than the Polish side. Each side of the region was given the greenlight to start the project from their own point of development. Even though such critics as Wolf et al. and Brand et al. argued that, at that time, the telemedicine solutions developed were rather unfeasible for the Polish side of the region, it was important to simply kickstart the project with what was possible and make improvements along the way. As Hosten et al. report, great strides were made along the way to improve the data privacy of the participants.

Another role of telemedicine in the cross-border cooperation in this region was to harmonize legal issues that pertain to healthcare. As earlier mentioned, the telemedicine project that was implemented in the West Pomeranian Voivodeship and Mecklenburg Pomerania has both elements of a local/pragmatic and formal/national project. Therefore, it was imperative to transfer into the national law of the two nations the experiences in telemedicine that were obtained from the project. The legal basis of telemedicine was hardly regulated in both Poland and Germany at project's onset; thus, it was unclear for many of the actors that were involved, including healthcare centres, their administrators, and physicians. As the project went on, countrywide regulations for telemedicine were formulated both in Poland and Germany, proving that the EU, through the projects that it funds, could influence not only local health systems, but national law, from which it lacked real legitimization. Hosten et al. write that this project confirmed the undebatable argument that law follows the reality of life.

During the course of this project, it was noted that transferring pilot projects into routine care paused a number of legal issues. While such healthcare professionals (HCPs) as physicians prefer cooperating with hospitals based on personal trust, contracts had to be drawn between hospitals and HCPs to ensure the pilot projects were lawfully executed. This aspect was, nonetheless, overlooked during the implementation of otorhinolaryngology and ophthalmology projects as the implementors chose to focus more on the trust element than the legal element. Both projects eventually failed to due wastage of funds. As Beule writes, to the implementors, it hardly made any sense giving public formalities to projects that were privately owned. The mammography program that was implemented in the region was privately owned with investors who were from Germany. Nonetheless, as it was proved from other subprojects within this venture, simply involving lawyers to standardize the procedures as well as document any contracts can go a long way to ensure the success of a project.

## STATISTICS AND CASE STUDY: A CLOSER LOOK AT CROSS-BORDER TELEMEDICINE PROJECTS

While this research depended on secondary research, delving into some statistics and case studies can present a more comprehensive understanding of the cross-border telemedicine initiatives between West Pomeranian Voivodeship and Mecklenburg Pomerania. As of 2016, the region had 20 hospitals on the German side of the border and 15 hospitals on the Polish side in the teleradiology network. Medical equipment in the participating hospitals were improved as a result of this. Furthermore, more than 40 people were employed as a result of the project, which created six different types of jobs. These initiatives involved various medical specialties, including radiology, pathology, ophthalmology, urology, and otorhinolaryngology, among others. According to the European Commission, a significant 49% increase in patient engagement and access to healthcare services was observed in this region, showcasing the efficacy of these projects.

To illustrate the practicality of regional governance and the importance of flexibility in crossborder healthcare cooperation, the Franco-German Cross-Border Cooperation Committee can be looked at. The committee, which was established by the 2019 Treaty of Aachen, has the mandate of managing such various issues as development, employment, health, and transport in the border region between Germany and France. It comprises of local authorities from both countries, which fosters an environment of trust and collaboration. This committee's effective establishment and the actions that followed serve as prime examples of the advantages of regional governance in international healthcare. Other instances, including the Franco-Belgian accord, may be discovered in the literature in addition to this case study. These agreements place a strong emphasis on the necessity of local authorities working together as well as the major benefits of expanding access to healthcare services.

## DISCUSSION

The findings of this research shed valuable light on the crucial role played by telemedicine in cross-border cooperation between West Pomeranian Voivodeship in Poland and Mecklenburg Pomerania in Germany. This section will provide a cross-analysis of the findings with previous research in order to gain a deeper understanding of these findings and their implications in the field of crossborder healthcare and telemedicine governance.

Firstly, the findings of this research align with prior studies, which have highlighted the traditional hierarchical governance approach in healthcare-related matters within the EU., According to Balogh, the hierarchical approach has been typified by decision-making processes that are overseen by National Contact Points, which has often resulted in complex and less flexible cooperation. Hence, the current research emphasized the need to transition towards a more regional and cross-border governance arrangement so as to improve the effectiveness of cross-border healthcare corporation. This finding resonates with the publication by Pilyasov and Klimenko who argued that cross-border healthcare governance needs unique regional arrangements, negotiations, and rules. Such arrangements tend to replace hierarchical practices with multi-level negotiations and flexible rules that are tailored to the specific needs of certain regions.

Secondly, the findings of this study stress the importance of regional governance in developing sustainable frameworks for cross-border cooperation. This finding aligns with the greater EU objective to encourage cooperation and ensure the rights of patients are respected, even in the case of cross-border healthcare scenarios. The Telemedicine Euroregion Pomerania network serves as an exemplary model, which demonstrates that bilateral agreements between local authorities can be achieved when the relevant stakeholders understand the activities and institutions necessary for successful cross-border cooperation. According to Fleßa, such regional governance approach allows stakeholders to clearly define their objectives and catchment areas within the participating regions.

Thirdly, this research also underscores the importance of maintaining flexibility in governance in order to accommodate both formalized and local forms of cooperation. According to Schernewski et al., such flexibility aligns with the notion that certain cross-border projects might not need extensive integrated governance and can be managed in a pragmatic, locally tailored way. Nonetheless, as highlighted in this research, formalized institutions are also necessary when the type of cooperation involves resource pooling and inter-institutional coordination. The case of the Telemedicine Euroregion Pomerania network shows how such flexibility paved the way for successful implementation of telemedicine cooperation in regions with differing levels of infrastructural development.

Lastly, this research reveals that telemedicine plays a critical role in achieving even development in healthcare and harmonizing legal issues within the regions of interest. This finding is in line with prior research with stress the transformative potential of telemedicine in bridging healthcare disparities and facilitating cross-border healthcare access. Balogh writes that telemedicine projects have been instrumental in persuading national law, which have contributed to the legal regulation of telemedicine in both Poland and Germany.

## CONCLUSIONS

In sum, this article set out to discuss the role of telemedicine in cross-border cooperation between West Pomeranian Voivodeship and Mecklenburg Pomerania as well as its importance in regional governance. The article first started by discussing the governance of healthcare-related projects in the EU. This was followed by a discussion of the importance of regional governance of telemedicine in cross-border cooperation between West Pomeranian Voivodeship and Mecklenburg Pomerania. The final discussion was the role of telemedicine in cross-border cooperation between in the mentioned region. With regard to how healthcare-related projects are governed in the EU, the regional has historically used a hierarchical process of governance, and the reader was informed that there is a need to replace such an approach with a more regional, cross-border arrangement in order to improve cross-border healthcare cooperation. This article also found that the importance of regional governance of telemedicine in cross-border cooperation between West Pomeranian Voivodeship and Mecklenburg Pomerania is to help develop sustainable frameworks for cross-border cooperation within other countries/regions of the EU in matters not only healthcare, but others as well. Another important factor that was the maintenance of flexibility when it comes to governance of cross-border cooperation. Lastly, it was found that the roles of telemedicine in cross-border cooperation in this region was to bring about even development and harmonize legal issues that pertain to healthcare.

Therefore, how can telemedicine be further utilized to improve regional governance of crossborder health in the region of interest in this article? Cross-border cooperation on matters regarding healthcare normally involve a large group of stakeholders, starting from the national authorities, to the central administrative authorities, to the local authorities, and healthcare operators. The preliminary analysis that was carried out revealed the interdependency of healthcare operators on matters regarding cross-border cooperation. Therefore, social and medical institutions, national and local administrative institutions, and insurance providers need to be contacted as they all play a key role in cross-border health cooperation.

Organizing meetings with staff and sharing experiences from both all sides of the divide can go a long way into clarifying any misunderstandings and significantly add to the intercultural atmosphere as European Parliament showcased in the survey it conducted on the medical staff of Hospital of Cerdanya. The hospital, which is situated in Puigcerdà, Spain, not only serves residents from Catalonia, but it extends its services to the over 30,000 French residents of Cerdanya, France (a number which rises to 150,000 during tourist periods), following its cross-border arrangement with France. As proven in the Hospital of Cerdanya case study, cooperation not only demands the participation of medical staff, but social security and healthcare systems and insurance providers, as well.

## **TABLES AND FIGURES**

Table 1. Formality of Players in the Telemedicine Euroregion Pomerania Network

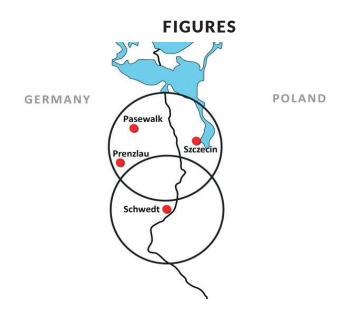
| Player   | Formal       | Local        |
|--|--------------|--------------|
| German Ministry of Economics                         | ✓            |              |
| IT consultancy firms in Germany and Poland           |              | $\checkmark$ |
| EUInterreg   | <b>√</b>     |              |
| The State Court of Auditors                          | $\checkmark$ |              |
| German Medica Trade Association                      | <b>√</b>     |              |
| German and Polish healthcare specialists             |              | $\checkmark$ |
| German and Polish healthcare centres and conventions |              | $\checkmark$ |
| Insurance providers                                  | $\checkmark$ |              |

Source: Hosten et al.

#### Table 2. Objectives of the Telemedicine Project

| Localized and Pragmatic Objectives   | Formalized Institutions Objectives |
|--|------------------------------------|
| Set a twice week video conferencing ser-<br>vice for all hospitals within the region | Joint conceptualization            |
| Scientific evaluation  | Joint implementation               |
| Reduce traveling to hospital board meet-<br>ings                                     | Joint staffing                     |
| Set up a 24-hour computed tomography reporting system                                | Joint funding                      |
| Set up a 24-hour pathology coverage sys-<br>tem                                      |                                    |
| Set up a 24-hour tele-earnose throat cov-<br>erage system                            |                                    |
| Ensure early diagnosis from retina scans   |                                    |
| Set up a tele-stroke network   |                                    |

Source: Hosten et al.



# Figure 1. Small Catchment Areas of Euroregion Pomerania

Source: Hosten et al.



### Figure 2. Szczecin, West Pomeranian Voivodeship

Source: Leloup et al.



**Figure 3. Rostock, Mecklenburg Pomerania** Source: Leloup et al.

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# ROLA TELEMEDYCYNY WE WSPÓŁPRACY TRANSGRANICZNEJ POMIĘDZY WOJEWÓDZTWEM ZACHODNIOPOMORSKIM W POLSCE A MEKLEMBURGIĄ POMORSKĄ W NIEMCZECH

#### Streszczenie:

Telemedycyna zapewniła systemom opieki zdrowotnej szereg korzyści, w tym oszczędność kosztów, wygodę i możliwość zapewnienia opieki pacjentom mającym problemy z poruszaniem się lub mieszkającym na obszarach wiejskich, którym brakuje dostępu do lokalnych przychodni i lekarzy. Celem artykułu jest omówienie roli telemedycyny we współpracy transgranicznej pomiędzy województwem zachodniopomorskim a Meklemburgią Pomorską oraz jej znaczenia w zarządzaniu regionalnym. Aby osiągnąć ten cel, przyjęto wtórną analizę literatury. Dane wtórne zebrano z recenzowanej literatury i publikacji rządowych na temat roli, jaką odgrywa telemedycyna we współpracy transgranicznej w danym regionie, w tym znaczenia zarządzania regionalnego. W badaniu wykorzystano m. EUR-Lex, Scopus i Web of Science. Analiza wykazała, że projekty związane z opieką zdrowotną w UE są zarządzane w oparciu o proces hierarchiczny, który jednak należy zastąpić rozwiązaniem bardziej regionalnym, transgranicznym, aby poprawić współpracę transgraniczną w zakresie opieki zdrowotnej. W artykule tym stwierdzono również, że znaczenie regionalnego zarządzania telemedycyną we współpracy transgranicznej pomiędzy województwem zachodniopomorskim a Pomorzem Meklemburskim ma pomóc w opracowaniu trwałych ram współpracy transgranicznej w innych krajach/regionach UE w sprawach nie tylko opieki zdrowotnej, ale inni też. Kolejnym ważnym czynnikiem było zachowanie elastyczności w zarządzaniu współpracą transgraniczną. Wreszcie stwierdzono, że rolą telemedycyny we współpracy transgranicznej w tym regionie jest zapewnienie równomiernego rozwoju i harmonizacji zagadnień prawnych dotyczących opieki zdrowotnej. Zalecono, aby w ramach ustaleń, ponieważ współpraca transgraniczna w kwestiach związanych z opieką zdrowotną angażowała dużą grupę zainteresowanych stron, należy kontaktować się z instytucjami społecznymi i medycznymi, krajowymi i lokalnymi instytucjami administracyjnymi oraz ubezpieczycielami, ponieważ wszyscy oni odgrywają kluczową rolę w transgranicznej

współpracy w dziedzinie zdrowia.

**Słowa kluczowe**: Telemedycyna, Współpraca Transgraniczna, Zarządzanie Regionalne, Opieka Zdrowotna, Euroregion Pomerania.