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The Impact of the COVID-19 Pandemic on the Cross-Border Healthcare

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Abstract:

Purpose: *This article presents an overview of cross-border healthcare provided in the Member States based on Directive 2011/24/EU of the European Parliament and of the Council of 9 March 2011 on applying patients' rights in cross-border healthcare. Geographical and cultural proximity is among the most critical drivers for cross-border healthcare in the EU. Several restrictions, including the freedom of movement, were introduced to prevent the further spread of the SARS-CoV-2 virus. These restrictions impacted payer expenditure, healthcare providers' income, and patients' access to healthcare services.*
Design/Methodology/Approach: *Overall, when comparing data from the full calendar years 2019 and 2020, one may conclude that the expenditure related to patient migration based on the social security systems was not influenced significantly. However, there is a significant difference in the cost of the utilization of cross-border healthcare based on patient migration.*
Findings: *The data on the latter should be interpreted with caution due to the frequent changes in the regulations regarding prior authorization of healthcare and the freezing of elective care during the pandemic.*
Practical Implications: *This paper also provides insights into the ongoing digitalization of Poland's healthcare system.*
Originality/Value: *These efforts in improving interoperability and enabling patient data exchange can contribute to the further development of cross-border healthcare.*

Keywords: *Cross-border healthcare, pandemic, patient migration.*

JEL Classification: *I0, I1.*

Research Type: *Research article.*

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1. Introduction

Solutions for coordinating social security systems and health policy at the European Union level contributed to the emergence and development of cross-border healthcare. The historical overview of this type of care, therefore, includes changes that took place in the above two areas and contributed to the development and subsequent adoption of Directive 2011/24 / EU of the European Parliament and of the Council of March 9, 2011, on the application of patients' rights in cross-border healthcare.

The Treaty of Rome, which established the European Economic Community, introduced the free movement of goods, services, capital, and people (workers) on January 1, 1958. Provisions on the migration of persons were introduced gradually, starting with Regulation No. 15/1961 / EEC on the gradual withdrawal from immigration controls and protection of workers already in the territory of another member of the Community, and then-No. 38/64 / EEC, which strengthened this protection.

Later regulations were adopted because of a revision of the existing changes in the social security systems and the situation of the Member States (Regulations No. 1408/71 and 574/72), gradually extending the scope of benefits. The term "social security" has been repeatedly considered by the European Commission and the courts to define the range of benefits that would not restrict workers' access to their freedoms and care, in line with the objectives of the Treaties. Court decisions and conclusions from intergovernmental arrangements contributed to the adoption of new regulations. Currently, as of May 1, 2010, three regulations constitute the legal basis for the functioning of the social security coordination system:

- Regulation (EC) No. 883/2004 of the European Parliament and the Council on the coordination of social security systems and No. 988/2009 amending Regulation (EC) No. 883/2004,
- Regulation (EC) No. 987/2009 of the European Parliament and the Council on implementing Regulation (EC) No. 883/2004.

Under these regulations, persons entitled to receive health services have the right to healthcare following the legislation of one of the Member States of the European Union or the European Free Trade Association (EFTA). Depending on the scope of services and the circumstances of their provision, various documents are required. The right to benefits necessary to save health or life in a country other than the country providing insurance is confirmed based on the European Health Insurance Card (EHIC) or the Certificate temporarily replacing the EHIC. Planned treatment, such as planned surgery with hospitalization, is available to EU / EFTA patients based on Form E112 / S2, while benefits for an accident at work or occupational disease are granted based on Form E123 / DA1.

These forms are issued by payers-insurers from the Member States and result from the payer consenting to cover specific medical costs. Patients can benefit from healthcare services provided in facilities that provide services under the public care system in the Member State concerned. After meeting all the above conditions, the costs of care are covered by the state (body) of health insurance, unless the care is provided at additional cost to the patient, in which case both the insurer and the patient cover the costs. Payer insurers of individual EU/EFTA countries offer detailed information on the scope of benefits, and their financing is provided by payer insurers of respective EU / EFTA countries.

Adopted in 2011 to protect patients' rights in cross-border treatment, the Directive enabled two parallel systems under which patients can receive treatment outside their country of nationality in the European Union. The Directive in no way affects the provisions on the coordination of social benefits. The distinction between these two legal bases is presented in the table below (Table 1).

Table 1. *Distinction between legal bases for cross-border planned and acute health care*

	Planned health care		**Acute health care**
	Coordination of social security systems, Regulation 1408/71 (later 883/04)	Directive 2011/24 of the European Parliament and of the Council on the application of patients' rights in cross-border healthcare	Coordination of social security systems, Regulation 1408/71 (later 883/04)
Legal basis	art.48 TFEU: free movement of workers	Art.53 TFEU: free movement of services	art.48 TFEU: free movement of workers
Prior authorization for hospital treatment	Obligatory	May be required by Member States (MS)	Not obligatory
Prior authorization for outpatient treatment	Obligatory	May be required by MS for highly specialized and cost-intensive treatments	Not obligatory
Conditions of payment	The benefits are provided on the basis of the regulations of the MS, making it possible to pay in some countries. The costs of treatment are covered by state insurance (the flow of funds between health insurance institutions of both countries)	Out-of-pocket payments and subsequent reimbursement in the state of affiliation as required by that state	Benefits are provided in accordance with the regulations binding in the state where treatment is provided. The costs of treatment are covered by the state of insurance (the flow of funds between the health insurance institutions of both countries).

Level of reimbursement	It depends on the MS where treatment takes place. If the cost of treatment is higher in the state of treatment than in the state of affiliation, consent is required for the state of affiliation to cover the difference.	It depends on the state of insurance. Only actual treatment costs are reimbursed.	It depends on the member state where the treatment takes place

Source: *Own creation.*

2. Literature Review

On 19 January 2011, the European Parliament and on 28 February 2011, the Council of the European Union adopted the final text of the Directive on applying patients' rights in cross-border healthcare. The EU legislator introduced a definition of cross-border healthcare, i.e., care provided or prescribed in a Member State other than the Member State of affiliation, and adopted the general rule that a patient covered by the health insurance system of one of the EU countries would be able to receive reimbursement of healthcare services received in another EU country at the rates applied by the home insurance institution, without the need to apply to that institution for authorization to receive treatment abroad, provided that the benefit in question is a benefit guaranteed in the state providing the health insurance (Article 7 of the Directive). The patient - a beneficiary with health insurance in a country of the EU - is entitled to reimbursement of the costs of guaranteed services provided in another EU country, except for preventive vaccinations, long-term care, and transplantation of cells, tissues, and organs.

If a patient has received cross-border healthcare and further medical observation is necessary, the Directive ensures that the same medical comment is available as would be provided if healthcare were received on its territory. In addition, it is the responsibility of the Member State to ensure that patients who will receive or benefit from cross-border care have at least one copy of their medical records or have remote access to them (Article 5 of the Directive). At the same time, the Directive allows the Member State to introduce mechanisms and measures to protect the efficiency of the health system (cost control and protection of financial, technical, and human resources) to ensure permanent access to high-quality treatment.

However, such mechanisms and measures should only be used as necessary and following the principle of proportionality (Article 4 of the Directive). For this purpose, among the premises for the possibility of introducing a system of prior authorization to use cross-border healthcare services, Art. 8 addresses:

- the need to plan services and ensure constant access to them and hospitalization for at least one night or the use of highly specialized and expensive medical infrastructure or equipment;

- treatment that imposes particular risks for the patient or society;
- the healthcare provider raises reasonable doubts about the quality and safety of care.

The national contact points established in the directive exchange information between the Member States and patients, including formal requirements. They also consult patients' organizations, healthcare providers, and insurers (companies and institutions offering health insurance in a given EU country).

Under Art. 42c of the Act on Healthcare Services Covered by the public funding, the National Health Fund reimburses the costs of cross-border healthcare in the amount corresponding to the cost of healthcare services guaranteed in Poland, with four grounds for determining the number of payments. The first one results from the amount used in settlements between the National Health Fund and service providers under the contract for the provision of healthcare services. In the case of highly specialized services, medical rescue operations performed by emergency medical teams, and services provided under health programs financed from the state budget, it is assumed that the amount of the reimbursement corresponds to the amount of financing for a given service.

In the third case, i.e., the refund of the costs of drugs, foodstuffs for nutritional uses or medical devices, for which a reimbursement decision has been issued, and consequently included in the list of reimbursed products in specific indications (Article 37 (1) of the Act on the amount of the funding limit for a particular product). In the case of medical devices that constitute services guaranteed under Art. 38 (4) of the Reimbursement Act, i.e., issued on request, the amount of the refund corresponds to the value of the medical device but is not higher than the limit of public funding for a given device.

Healthcare baskets (or catalogs) of guaranteed benefits vary from country to country. The same applies to the names of services and the scope of medical procedures included in them. Therefore, if a medical process conducted based on the cross-border Directive in another EU country does not have an exact equivalent in Poland, then the basis for the reimbursement is the amount of financing for the medical procedure falling within the scope of the guaranteed service that is most medically similar to the one being provided. Differences in the baskets of benefits may also mean that some medical procedures constitute two separate benefits in another EU country, and in Poland constitute one guaranteed health service. Therefore, their implementation will result in two applications for reimbursement.

Consequently, they will be treated by the National Health Fund as the basis for the refund of the amount equal to the financing of this guaranteed service. The total amount of reimbursement based on these requests, following Art. 42 c of paragraph 1. 4 of the Act on benefits cannot exceed the amount of financing for this benefit.

3. Discussion

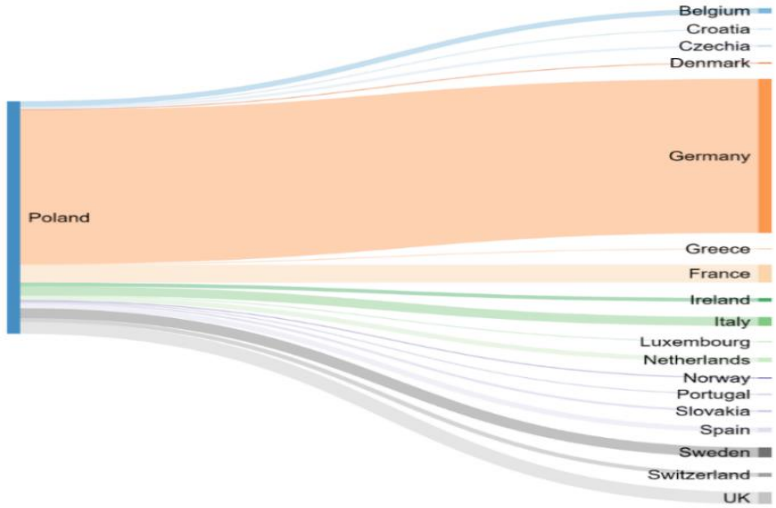
The pandemic caused by the SARS-CoV-2 virus forced many changes to protect lives. A key consequence was the "freezing" of healthcare: due to the recommendations of the National Health Fund (NFZ), in March, facilities began to suspend planned health services, including surgical procedures. Consultations in primary care (POZ) and outpatient specialist care (AOS) began to be performed remotely, mainly by phone.

As part of the reorganization of the system for managing the epidemic situation, the Ministry of Health decided in mid-March 2020 to transform 19 facilities into infectious hospitals, intended to treat only patients with suspected and confirmed SARS-CoV-2 infection. In the weeks that followed, the number of such hospitals increased to 21. The transformed institutions, often among the largest in their respective regions, were assigned a different legal status. The move had an overall negative impact on access to healthcare.

Along with the sanitary regime, the Member States temporarily restricted the free movement of people. In 2019, Poland spent approximately 423 million PLN on cross-border healthcare based on the regulations on coordination of social security systems. This breaks down to the app. 268,3 million PLN for treatment delivered in Germany, app. 7,5 million PLN in the Netherlands, approximately 31 million PLN in France, app. 15,8 million PLN in Austria, app. 15,3 million PLN in Italy; app. 7,8 million PLN in Spain; app. 8,9 million PLN in Belgium; app. 17,1 million PLN in Sweden; app. 20,6 million PLN in the United Kingdom; app. 6,3 million PLN in Ireland; app. 1,8 million PLN in Norway; app. 3,4 million PLN in the Czech Republic; app. 3,3 million PLN in Slovakia; app. 6,7 million PLN in Switzerland; app. 1,8 million PLN in Denmark; app. 1,4 million PLN in Luxembourg; app. 1,3 million PLN in Greece and Finland; with the remainder spent in 13 other countries respectively. Data on the value of healthcare services reimbursed by the National Health Fund in 2019 are depicted in Figure 1 for values over 1 million PLN.

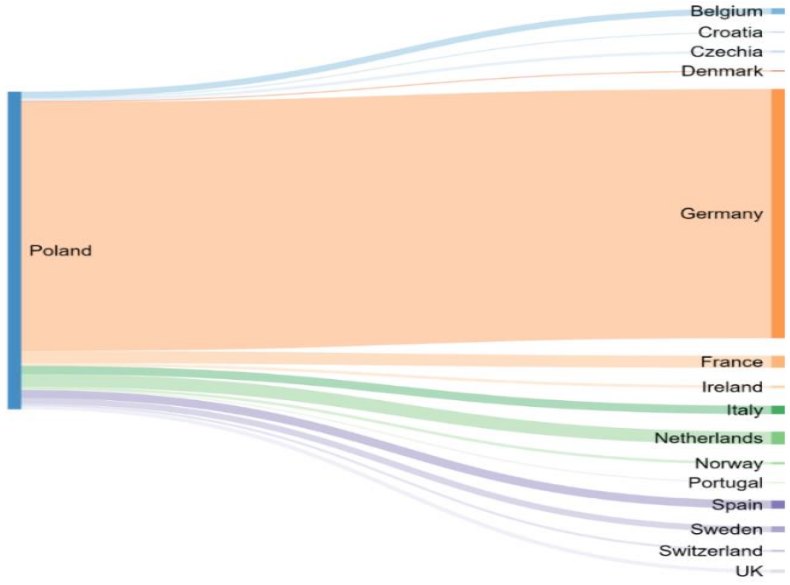
In 2020, Poland spent approximately 498 million PLN on cross-border healthcare based on the regulations on coordination of social security systems. This breaks down to the app. Three hundred sixty-seven million PLN for treatment delivered in Germany, app. 18,6 million PLN in the Netherlands, app. 17,7 million PLN in France, app. 12,4 million PLN in Austria, app. 12,1 million PLN in Italy; app. 11,9 million PLN in Spain; app. 21,6 million PLN in Belgium; app. 8,7 million PLN in Sweden; app. 8,7 million PLN in the United Kingdom; app. 4 million PLN in Ireland; app. 3,8 million PLN in Norway; app. 3,7 million PLN in the Czech Republic; app. Three million PLN in Switzerland; app. 1,4 million PLN in Denmark; app. 1,1 million PLN in Portugal, with the remainder spent in 15 other countries. Figure 2 presents data on the value of over 1 million PLN of healthcare services reimbursed by the National Health Fund in 2020.

Figure 1. *Coordination of social security systems – Utilisation values 2019*



Source: *Own creation.*

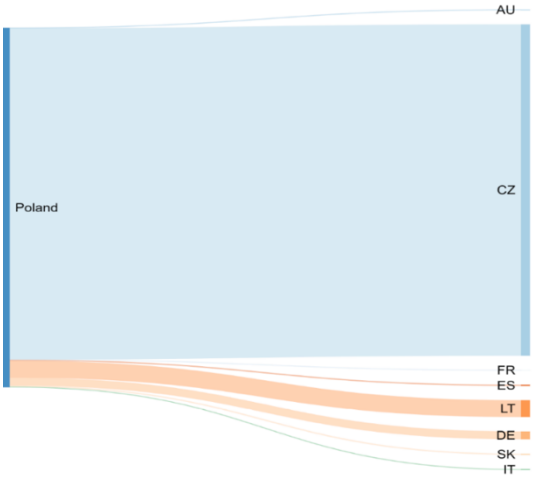
Figure 2. *Coordination of social security systems - Utilisation values 2020*



Source: *Own creation.*

In 2019, Poland spent approximately 32 million PLN on cross-border healthcare based on the patients' directive. This breaks down to app. 29,5 million PLN for treatment delivered in the Czech Republic, app. 1,5 million PLN in Lithuania, app. 0,7 million PLN in Germany, app. 0,1 million PLN in Slovakia with the remainder spent in Spain, Italy, Austria, and France, respectively.

Figure 3. *Patient's directive - Utilisation values 2019*

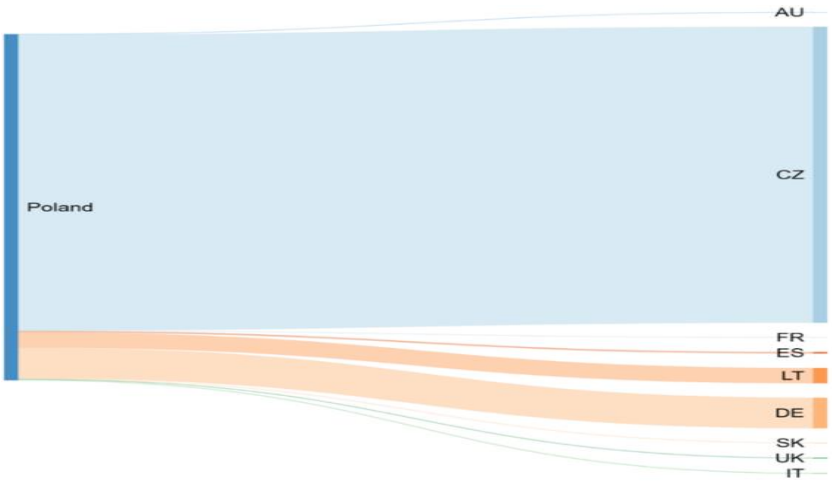


Source: *Own creation.*

Figure 3 presented data with the flows giving the value of healthcare services reimbursed by the National Health Fund in 2019.

In 2020, Poland spent approximately 20,3 million PLN on cross-border healthcare based on the patients' directive. This breaks down to the app. 17.4 million PLN for treatment delivered in the Czech Republic, app. 0,9 million PLN in Lithuania, appr.1,8 million PLN in Germany, and the remainder spent in the United Kingdom, Slovakia, Spain, Italy, Austria, and France. Figure 4 presents data with the flows of healthcare services reimbursed by the National Health Fund in 2020.

Figure 4. *Patient's directive - Utilisation values 2020*



Source: *Own creation.*

4. Conclusions

Poland has benefited from worker migration since it joined the EU and labor markets opened up to the Polish workforce. Overall, when comparing data from the full calendar years 2019 and 2020, one may conclude that expenditure related to patient migration based on social security systems was not influenced significantly. This is perhaps because Polish residents maintain continuous employment in the other EU Member States, so the system does not recognize them as migrant workers. Another reason could be that patients in Poland cannot access specific medical procedures in Poland. These two factors can, in parallel, impact the cost of expenditure and the volume of Utilisation of cross-border services based on the regulation of social security systems in the EU.

Interpreting the data about expenditures on cross-border healthcare based on the patients' directive is far more complex. One reason is that the order is a relatively new regulation (transposed into the Polish legal system in 2014). The Polish authorities were reluctant to support the EU level in fear of unpredictable demand for cross-border services and healthcare spending constraints. The need to control the budget and non-authorized spending has resulted in a shifting approach to the regulation each year based on the utilization data and the attendant expenses. Undoubtedly, restrictions on the free movement of people and accelerated introduction and freeze in elective care impacted patient volumes in cross-border healthcare and resulted in refraining from its use unless it was necessary to protect patients' lives.

Patient mobility has received a great deal of political attention in the EU. It is also a subject of regulation because each member state can assess its financial impact and regulate access to cross-border healthcare to limit Utilisation and ensure that the funding goes to the national health providers. However, the scale and nature are increasingly contested as it is recognized

that different actors have divergent interests. Geographical and cultural proximity is among the most critical drivers for cross-border healthcare in the EU (Glinos *et al.*, 2010). This is also reflected in the data for patient migration in 2019 and 2020. Regardless of external conditions such as the pandemic, the most robust flows of migration are visible between regions with geographic and cultural ties (Poland-Germany for coordination of social security systems, and Poland - the Czech Republic for the patients' directive).

Regionally driven collaboration across countries is particularly important and may require less political commitment. Relative geographical isolation or medical deserts (i.e., rural areas with provider shortages) may also drive cross-border healthcare. Additionally, regions with a higher degree of innovative capacity might compensate for geographical disadvantages by showing a higher commitment to digital technologies (eHealth) in healthcare through investments in necessary infrastructure and reimbursement models.

In recent years, the digitalization of health services in the EU has increased, with the adoption of an eHealth agenda across the EU, impacting patient migration. Before the pandemic, there were few arguments used to rationalize digitalizing healthcare. On use, while processing legal initiatives was to ensure the safety and quality of healthcare services. Another was that digitalization and subsequent exchange of patient data could save time and reduce workloads and associated costs for health providers in the longer term.

Alongside the promising benefits of eHealth come concerns over the legislative, governance, technological issues. These have been recognized at the regional, national, and EU levels. Various digital solutions can be used in eHealth, including telehealth, electronic health records (EHR), online prescription, and health information systems. However, these solutions require the user's acceptance and training for widespread adoption and ensure adequate infrastructures so that the quality of services can be maintained and used throughout the health services. Further challenges include:

- Interoperability of health information systems.
- We update the administrative and organizational structures of existing health institutions and the legal and financial aspects of implementing and running eHealth services.
- We are ensuring secure data exchange.

With the proper infrastructure, transparent legal framework, appropriate funding, and government support, eHealth can facilitate cross-border healthcare and ensure that EU resident's healthcare needs are met.

Developments in eHealth will require a more consistent and comprehensive policy and regulatory framework to facilitate data exchange among healthcare providers at the national level and across the EU. The pandemic has shown that there is no long-term vision for telemedicine, its use, or reimbursement in some countries, including Poland. This means the solutions in place and their impact on cross-border healthcare are temporary and difficult to assess. The lack of evidence-based decisions in healthcare can negatively influence access to overall healthcare and patient safety.

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