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POTENTIAL BENEFITS OF CROSS-BORDER HEALTH CARE: THE CASE OF POLAND AND GERMANY

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ABSTRACT. Cross-border health care enhances the choices of patients but also involves both general and specific barriers which may explain why it currently occurs on a rather small scale. The paper investigates different pathways to cross-border health care, emphasizing barriers at the national level as a driving force. In general, a variety of benefits may accrue, relating to a higher quality of health care, better access or lower costs of provision. For border regions, these benefits will be particularly important. Based on empirical evidence, we argue that cross-border collaboration is the preferable option to improve the provision of health care to patients. For Poland and Germany, the potential benefits are indicated for each pathway, with a focus on the benefits derived from collaboration in border regions.

JEL Classification: H55, I11, I18

Keywords: Cross-border health care, Cross-border collaboration, Border regions, European Union.

Introduction

It is a remarkable feature of the last decades that our world is becoming more integrated, both with respect to economic activities and in a more general sense. While there are many other observations to corroborate this statement, one indicator is that people increasingly tend to move from one country to another, e.g., as commuters or as tourists. It is important to note that this potentially has implications for health care: First, a need for health care may arise while being in a foreign country, either suddenly due to some developing illness or because of a persistent health problem. Second, people may also wish to go abroad in order to obtain health care. Hence, cross-border health care may be a by-product of people working or temporarily staying in another country while its availability may also constitute the prime reason for crossing national boundaries.

Basically, cross-border health care will enhance individual choice sets, by providing another option to obtain health care which may either exhibit a better quality or be available at a lower cost in comparison with a purely national provision. From an economic point of view, it would be desirable to have cross-border health care whenever it could reasonably be expected to generate a net benefit to society, i.e., to the countries involved. However, with individual countries relying on their own system of health insurance, a number of barriers may exist which prevent mutually beneficial transactions. In particular, this is true for social health insurance which, due to restrictions on the benefit package and specific ways of

financing, naturally involves a focus on care provided within the country for which it has been designed.

Turning to the European Union (EU), health policy has not been on the agenda for many years because the founding treaties contain no specific article explicitly referring to it. Moreover, as the Treaty on the Functioning of the European Union acknowledges, every EU Member State is first and foremost responsible for organizing its own health care system. However, the implementation of the European Single Market, one of the EU cornerstones today, has affected the health care sector of the Member States by means of the "four fundamental freedoms": These imply free movement of goods (e.g., medicinal products and medical devices), freedom of movement for workers (e.g., mobility of health care professionals), the right of establishment and freedom to provide services (e.g., social and private health insurances), and free movement of capital (e.g., investment in health infrastructure), respectively. In addition, the EU is engaged in the coordination of social security systems, and it also assumes a strong role in improving health in areas such as the environment and the workplace (Greer *et al.*, 2014).

For a long time, cross-border health care in the EU for individuals with social health insurance has been based on a Social Security Regulation which took effect in 1971. However, this Regulation has been applied in a rather restrictive manner. As a consequence, the number of patients going abroad in order to receive planned health care remained fairly small. The main reason was that prior authorization had to be obtained from domestic authorities who often refused to grant it on the grounds that the requested health care was also available at home. Over time, several EU citizens have challenged this position, either by complaining about long waiting times at home or by arguing more generally that prior authorization would interfere with their right to choose health care in other Member States.

In ruling on these cases, the European Court of Justice with its judgements created case law which has, in effect, enhanced patients´ rights considerably with respect to cross-border health care (Palm *et al.*, 2011). In turn, this led to a major revision of the Social Security Regulations which took effect in 2010. While maintaining prior authorization of cross-border health care, the new Regulations contain provisions that limit its use such that a refusal will most likely involve no harm to the health of the patient. Furthermore, in 2011 the EU Directive on patients´ rights in cross-border health care (European Commission & Report from the Commission to the European Parliament and the Council, 2011) has been issued and was to be transposed into national law by October 25, 2013 (Marschall & Brümmer, 2014). In effect, as will be shown in the next section, for patients there now exists a dual system for cross-border health care.

Given that patients´ entitlements have been enhanced substantially in recent years, one could reasonably expect a surge in cross-border health care within the EU. However, the few data that are available do not lend support to this view (European Comission & Directorate-General for Health and Consumers (SANCO) (2015), the Krankenhaus Barometer (2014) (Deutsches Krankenhausinstitut, 2014) for cross-border health care in German hospitals). In fact, in the large majority of Member States, cross-border health care still occurs on a very small scale.

Two possible explanations come to mind. On the one hand, benefits due to cross-border health care could be rather small in general, suggesting that this type of health care simply is not an attractive option except for a few rare cases. On the other hand, it might be the case that substantial benefits could be attained in principle but in practice this is not feasible currently due to the presence of barriers. Clearly, in order to assess the future of cross-border health care within the EU, it is necessary to resolve this issue: If the first explanation is correct, there will be no significant increase. However, if the second explanation holds true, such a rise is possible and will likely occur if barriers can be removed.

In order to contribute to the economic analysis of cross-border health care, the key aim of the present paper is to examine the potential benefits associated with this type of care. More specifically, we will identify different cases in which substantial benefits may arise and indicate the corresponding type of benefit. While part of the analysis deals with the EU in general, the case of Poland and Germany will be taken as an example. Our analysis will also be relevant with respect to plans promoting economic integration of these two countries, e.g., the Stettin Metropolitan Area, as these must also include health care as an important part of services of general interest.

The structure of the paper is as follows. First, different pathways to cross-border health care within the EU are briefly described in section two, with a focus on the EU Directive. Next, section three identifies several barriers which act to prevent people from obtaining health care in another Member State. Section four looks at the potential benefits of cross-border health care in general while section five takes up the case of Poland and Germany, two Member States sharing a border of considerable length. The last section concludes.

1. Patient pathways to cross-border health care in the European Union

In the member states of the EU, health care is provided through a wide range of different health systems run at the national level. In general, cross-border health care can be defined very broadly to include every transaction which implies either a patient, or a service, or a provider to move across national boundaries (Wismar *et al.*, 2011, p. 2). On the whole, this leads to four categories since providers may either move temporarily, e.g., for the purpose of training, or stay longer to establish themselves abroad. In what follows, however, we will focus exclusively on the first category, i.e., on patients receiving health care abroad which is taken to mean another EU Member State. In addition, we will consider only individuals covered by social health insurance. More specifically, social health insurance is taken as a generic term which includes both Statutory Health Insurance systems that are financed by income-related contributions (e.g., Germany) and National Health Systems (e.g., Poland) that rely on tax financing.

For an EU citizen covered by social health insurance at home (henceforth: Member State of affiliation), several pathways exist to obtain health care abroad (henceforth: Member State of treatment). While a full discussion is well beyond the scope of the present paper, we will present briefly the main principles of each pathway to give an idea of the underlying mechanism. First of all, it is useful to distinguish between unplanned and planned health care. More specifically, with respect to cross-border health care the first case usually refers to a sudden need for treatment which arises during a temporary stay abroad. In contrast, planned health care relates to the intentional search for health care in another Member State based on medical need that does not require immediate treatment.

Turning to the case of an unplanned need for health care in another Member State, the relevant procedures are governed basically by EC Regulation No. 883/2004. More specifically, health care that is medically necessary can be obtained through the European Health Insurance Card (EHIC). The EHIC is identical for all EU member states and testifies that the cardholder is covered by social health insurance. As for the entitlements of the patient, these are determined by the benefit package and the reimbursement tariffs of social health insurance in the Member State of Treatment. Hence, the patient has access to health care under the same conditions as citizens of that state with social health insurance.

In some instances, another pathway to cross-border health care will also be available for the patient. More specifically, this will be true in the case of cross-border contracting, i.e., if social health insurance in the Member State of affiliation has established contracts with at

least some provider in the Member State of treatment (Nebling & Schemken, 2006). Then, a patient with an unplanned need for health care may also receive health care from this provider. Whether this option is feasible and under what conditions, will depend on national legislation. E.g., in Germany, sickness funds may enter direct contracts with public health care providers in another EU Member State such that the patient is entitled to only health care that is also part of the benefit package in Germany.

As for planned health care, a first pathway relies on Social Security Regulations, essentially on Regulation 883/2004, which require the patient to obtain prior authorization from social health insurance in the Member State of affiliation before going abroad. For care that is part of the benefit package at home but cannot be provided within medically necessary time, it is not possible to refuse prior authorization. If it is granted, the patient has access to health care in the Member State of treatment under the same conditions as citizens of that state with social health insurance. Specifically, this excludes health care from providers having no contract with social health insurance. Reimbursement of health care costs is organized between the two Member States, with copayments borne by the patient.

A second pathway to cross-border health care is offered by the EU Directive 2011/24/EU which differs from the route just described in several important respects (European Patients´ Forum, 2013). First, in general it is not necessary to obtain prior authorization in order to seek planned treatment in another Member State. However, there are exceptions relating to, e.g., hospital stays, the use of highly specialized medical equipment or providers raising serious concerns about the quality or safety of care. For such cases, a Member State may require the patient to obtain prior authorization. Second, under the Directive, the patient has access to health care in the Member State of treatment at the same conditions as at home, i.e., to the benefit package and under the reimbursement tariffs holding for social health insurance in the Member State of affiliation. More specifically, reimbursement of cross-border health care will at most cover the cost incurred. For tax financed health care systems with salaried providers, the cost of care has to be assessed separately since it cannot be derived from remuneration. Third, access to providers in the Member State of treatment is wider than under the Social Security Regulations as it will also include, in general, providers who have no contract with social health insurance. Fourth, patients have to pay for cross-border health care upfront but are entitled to reimbursement by their insurer at home.

In addition, the Directive requires Member States to set up National Contact Points (NCP) which provide information to patients intending to use cross-border health care. More specifically, the NCP of a Member State is to serve two groups of patients, i.e., patients of that Member State as well as patients from other Member States. E.g., for patients who consider going abroad for medical treatment, information on the rights and entitlements as well as on administrative procedures for reimbursement must be available. Likewise, for patients from another Member State, information about health care providers and on patient rights must be provided. In brief, a patient wishing to be fully informed about the use of cross-border health care in another Member State will have to look at the NCP in both the Member State of treatment and the Member State of affiliation.

Apart from this dual system (Palm *et al.*, 2011), in some cases a further option may be available. As in the case of unplanned health care, this relates to contracts between social health insurance in the Member State of affiliation and providers in the Member State of treatment. To some extent, this option combines elements from the other two pathways. With respect to treatment, the patient will usually have access to health care that is included in the benefits package at home. On the other hand, reimbursement will typically be settled such that the patient does not have to pay upfront.

Let us briefly look at the motivation of patients for cross-border health care. *Figure 1* is based on recent data from the TK, currently the largest German sickness fund. The TK has carried out several EU cross-border surveys, in which randomly chosen members of the fund who had received health care abroad were asked about their motives and perceptions. While no clear picture emerges for the case of unplanned health care, a few driving factors can be identified for planned health care. More specifically, "holiday" relates to the option of combining health care abroad with a vacation. Apart from that, other important factors such as "Costs", "good experience", "Trust relationship", "Higher comfort" and "Higher quality of care" seem to indicate that patients perceive cross-border health care to offer benefits in comparison with health care at home.

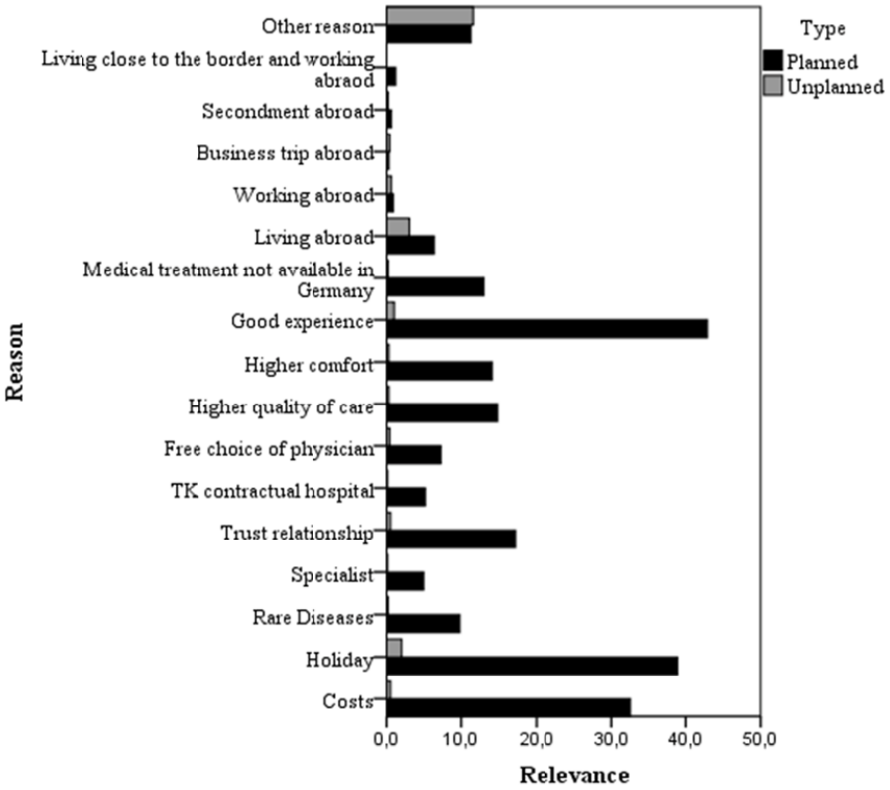

Figure 1. Motivation for seeking cross-border health care
Source: TK Cross-border Health Care Survey 2012, Complete sample, n = 17,543; for background information see Kifmann & Wagner (2014).

2. Barriers

As a general description, barriers to health care relate to factors which, from the viewpoint of the patient, may impede or even prevent access to health care (Busse *et al.*, 2011, pp. 49-76). First, a barrier will exist for health care services which do not belong to the benefits package of social health insurance. More specifically, the service may either not be available at all in a Member State or it may be provided privately such that the patient has to cover the full cost. As in the latter case, copayments for health care services included in the

benefits package also constitute a financial barrier, albeit a smaller one because part of the cost is borne by health insurance. Next, geographical factors may also have an impact on access to health care. More specifically, for individuals living in a remote area with a low density of providers and a low level of transport infrastructure, each of these factors represents a barrier to the use of health care. Furthermore, if the capacity to serve patients is low in comparison to the need for health care, waiting lists will be the result, perhaps imposing waiting times up to several months upon the patient.

Turning to cross-border health care, differences among Member States and, in particular, among their health systems, may have an impact upon barriers to health care for patients. To the extent that such differences actually lead to better access, they give rise to a benefit which will be discussed in the next section. In the present section, the focus lies on barriers inhibiting cross-border health care in comparison with health care received at home. On the one hand, there are general barriers which relate to the fact that health care, as a service, is highly dependent on mutual trust. For many patients, it is important that he or she is able to communicate with health care workers. Thus, if a different language is spoken in the other country, this will constitute an important barrier. Similarly, cultural differences can matter, e.g. the attitude about who should treat women. On the other hand, for obvious reasons a patient will usually be less familiar with the health system of another country and, in particular, with the pathways to cross-border health care. This lack of familiarity and the specific properties of each pathway give rise to further barriers (Busse *et al.*, 2011, pp. 49-88).

Consider cross-border health care obtained through the Social Security Regulations. In the case of unplanned health care, it is well known that providers in the Member State of treatment may not accept the EHIC but rather demand direct payment from the patient (Nebling & Schemken, 2006). In addition, as entitlements are limited to publicly contracted providers, the patient has to check whether his provider meets this requirement. For planned health care, the patient will take into account the size of copayments and the quality of care as well. Specifically, for a treatment involving a higher copayment than in the Member State of affiliation, an additional financial barrier exists. While prior authorization can be interpreted as a device to reduce uncertainty with respect to important aspects of cross-border health care, it cannot eliminate them entirely.

For cross-border health care obtained by relying on the EU Directive, the patient enjoys more freedom to choose because prior authorization either is not used at all or restricted to a subset of care. In addition, providers without a contract with social health insurance are also eligible. On the other hand, this option may involve a higher financial risk since the patient has to pay for health care before claiming reimbursement. Specifically, for a treatment involving a higher cost than in the Member State of affiliation, an additional financial barrier exists. In a similar vein, for a treatment not included in the benefit package of social health insurance at home, there will be no reimbursement at all. Whereas the EU Directive acts to enhance the patient´s choice set, it also increases uncertainty with respect to salient aspects of cross-border health care. This is where the National Contact Points come in: A NCP can be understood as a device to reduce this uncertainty.

Finally, turning to the pathway of direct contracting, it is difficult to derive general observations as this option depends on national law and is exercised at the discretion of social health insurance in each Member State. However, the available empirical evidence seems to suggest that a prime motive for setting up such contracts is to provide health care at similar conditions as in the Member State of affiliation for a target group of patients. Therefore, this pathway is associated with no or almost no additional uncertainty with respect to important aspects of cross-border health care.

Summing up, both general and specific barriers to cross-border health care have been identified. At this stage, two things should be noted. First, further barriers may exist with

respect to the continuity of care, e.g., for patients who are chronically ill, or concerning redress and compensation in the case of medical malpractice. Clearly, these issues may also arise for treatment received in the Member State of affiliation, but in another Member State they will likely be more difficult to deal with due to, e.g., a lack of established procedures. Second, as will be argued in the next section, the fact that there are barriers to cross-border health care should not be (mis)taken to imply that there can be no incentive to use this option.

3. Potential benefits

Cross-border health care may offer a number of potential benefits to patients in EU Member States. If these potential benefits are big enough to justify incurring the costs relating to the barriers exposed in the previous section, they will become real and accrue to patients. However, as explained in the introduction, we will focus on benefits and, therefore, it seems appropriate to describe these as potential benefits.

A first potential benefit of cross-border health care is that the patient may obtain a higher quality of care. In addition, further potential benefits relate to barriers which may exist at the national level, thus restraining individuals from exercising their right to access to health care. More specifically, barriers to health care in the member state of affiliation will act as driving factors for cross-border health care if these barriers turn out to be substantially lower in the Member State of treatment. E.g., for the patient cross-border health care may involve a significant reduction in the cost of care (i.e., copayments), or in waiting time, or in the time necessary to reach the nearest provider.

Moreover, cross-border health care may also generate benefits for other actors. For example, insurers will save on expenditure if reimbursement for health care provided in the Member State of treatment is lower than at home. For the pathway relying on the EU Directive, a sufficient condition is that reimbursement of care in the Member State of affiliation exceeds the cost of care in the Member State of treatment. Likewise, providers of cross-border health care may obtain a benefit from serving more patients. Clearly, a direct contract between social health insurance in the Member State of affiliation and providers in the Member State of treatment can be interpreted as evidence of benefits arising for both insurers and providers.

In general, both the potential benefits and the barriers to cross-border health care will vary across countries and, within each country, across the population. Hence, one would expect the net benefit or the willingness to travel to another country to differ among EU Member States. *Figure 2* presents results from the Special Eurobarometer 425, a recent survey conducted in EU Member States in 2014, which confirm this conjecture. More precisely, in the EU28 (Germany; Poland), 27,868 (1,532; 1,010) people were interviewed about topics covered by the EU Directive 2011/24/EU. While the outer pie in each part exhibits the results for the entire EU28, i.e., the 28 EU Member States, the results for Poland and Germany as shown by the inner pies turn out to be quite different. Specifically, while in Poland the share of respondents acknowledging a willingness for cross-border health care is the same as for the EU28, the corresponding share for Germany is much lower. Moreover, the share of individuals refusing to go abroad for medical care is above average in Germany while it is below average in Poland. These results lend support to the hypothesis that, for patients in Germany, the net benefit from cross-border health care is (or is perceived to be) much smaller than for patients in Poland.

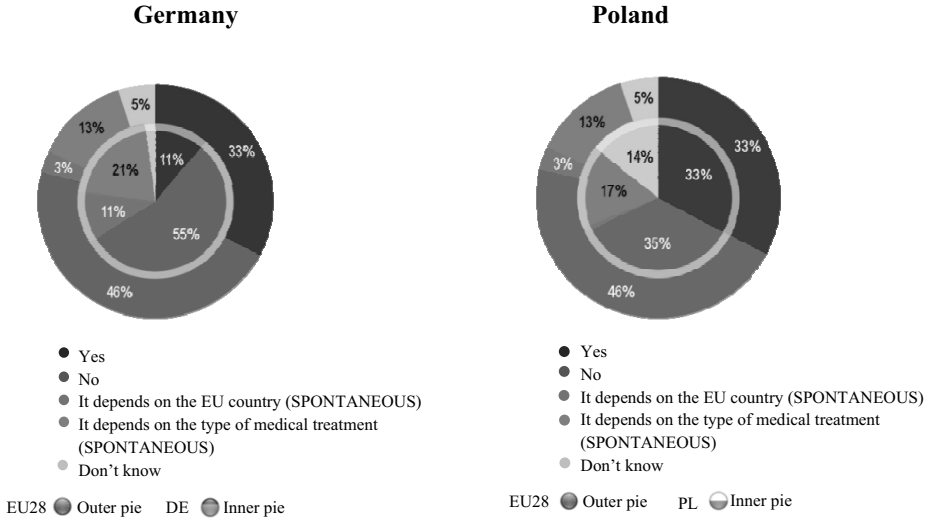

Figure 2. Willingness to travel to another EU country to receive medical treatment – Special Eurobarometer 425
Source: European Commission, Directorate-General for Health and Consumers (SANCO) (2015).

In border regions, the benefits from cross-border health care may turn out to be particularly high because of big potential benefits on the one hand and low barriers on the other. To begin with, regions on both sides of a border separating two Member States often share the same culture with minor or even no language problems. Next, border regions within a country tend to be under-supplied with respect to specialist treatment. Thus, with common utilisation of supply capacities by means of cross-border health care, border regions may enhance health care provision for the local population. E.g., the nearest hospital for a patient living in one Member State may be located across the border. Technically, it may be possible to realize economies of scale due to a higher usage of existing facilities such as, e.g., hospital beds.

A pioneering role in cross-border health care activities within the EU was taken by the Euregios at the borders of Belgium, the Netherlands and Germany. These regions serve as bridges between EU Member States and also operate as transmission belts for further integration. The cross-border cooperation in the Euroregios Meuse-Rhine, Rhine-Meuse-North and Rhine-Waal is based on a long-standing cooperation in the border-region of these countries and provides an excellent example of successful collaboration (Brand *et al.*, 2008). Even though the patient flows involved are rather small, the collaboration does make life easier for citizens in the border regions (Landesinstitut für Gesundheit und Arbeit Nordrhein-Westfalen (lögd), 2008). Another example relates to the Euregios Maas-Rhein, Rhein-Waal and Rhein-Waal-Nord. More specifically, two big German insurers have set up contracts with insurers in the Netherlands involving a number of providers on both sides of the border (Nebling & Schemken, 2006, pp. 148-152). For German patients, these contracts offer specialized treatment just across the border which would be available at home only at a much larger distance. Moreover, Dutch patients enjoy a significant reduction in waiting time for some types of care that are readily available for them in Germany.

Since 1987, the cross-border collaboration in health care between the Danish county of Southern Jutland and German health care providers has become closer step by step. At first,

the collaboration focused on the treatment of breast cancer at the Malteser St. Franziskus hospital in Flensburg (State Schleswig-Holstein, Germany) which acted as partner on the German side. Moreover, in 1998 St. Franziskus hospital and the County of Southern Jutland agreed on the provision of radiotherapy according to Danish guidelines to a maximum of 100 Danish patients per year (Augustin *et al.*, 2013). In 2001, a cooperation agreement between St. Franziskus hospital and the Danish community Sønderjylland Amt was signed. Four years later, the collaboration was extended to the Syddanmark region (Schleswig-Holsteinscher Landtag, 2002; Schleswig-Holsteinscher Landtag, 2003). Because St. Franziskus hospital was listed as official site of the Danish health care system, patients could then choose whether to receive treatment in Odense (Denmark) or in Flensburg, respectively. Later, the agreement was extended to the case of other diseases. Currently, most of the hospitals in Schleswig-Holstein also treat Danish patients. For example, after the maternity ward in the Danish city Tønder has been closed, the nearest Danish clinic offering birth assistance is located more than 70 kilometres away from Sønderborg. Therefore, many Danish children are now born in Niebüll, Germany. According to available data, the number of Danish patients treated by physicians in the ambulatory sector in Germany has also increased (Hedde, 2010). Furthermore, a successful cooperation covering emergency services exists since 2005, as there is a common rescue helicopter for both sides of the borderland (Eick, 2010).

In extending the cross-border collaboration, additional measures have been undertaken. For example, in the project "Cross-border Collaboration on Population Breast Cancer" experiences in the fields of prevention, screening and therapy of cancer were exchanged at the expert level to improve the quality of care in the region. Medical knowledge (e.g., patient flow and pathway), technical resources (e.g., co-financing of expensive equipment) and capacities were shared to guarantee the short-time availability of high-level medical services. In addition, differences in standards (diagnosis, treatment, control) based on quality indicators were discussed and adjusted, and responsibilities clarified (Project "Cross-border Breast Health", 2010). Similarly, the implementation of shared emergency services was not easy, as those assistances relied on different principles in Denmark and Germany, but in the end these obstacles could be removed.

Analysing the case of Southern Denmark and Germany, some important success factors for cross-border health care can be identified. First of all, there must be a clear benefit for at least some patients relating to a need for treatment which cannot be satisfied adequately in their own country. In the case of radiotherapy provided at St. Franziskus Hospital, this led to a substantial reduction in travel time for Danish patients living close to the border. It is interesting to note that the collaboration has been extended in 2011 even though Danish patients could now be served within reasonable travel time at home due to an increase in capacity (Augustin *et al.*, 2013). In addition, it is certainly helpful to bring the process on the political agenda and to have support from decision makers and stakeholders in both countries. Most important, however, seems to be a close collaboration between social health insurance and providers, both by way of direct contracts or other formal agreements. By relying on these instruments, cross-border collaboration acts to reduce or even eliminate the uncertainties which otherwise may inhibit the use of cross-border health care (Glinos, 2011).

4. The case of Poland and Germany

Before turning to the benefits which cross-border health care may potentially offer for Poland and Germany, a very brief description of the health system in either country is in order, relying on the broad definition of social health insurance introduced in section 2. In Poland, people are entitled to health care through the National Health Fund (NFZ) which is tax-financed (Sagan *et al.*, 2011). While coverage of health care by the NFZ is comprehensive

and often involves no copayment at all, it is well known that, for many services, waiting lists exist which imply that a patient may have to wait several months or even longer before receiving treatment. In other words, the publicly contracted supply of specialist inpatient and outpatient treatment is scarce. Alternatively, patients can receive treatment immediately from private providers if they are willing to pay for it. Thus, the benefit of skipping the waiting list must be weighed against the additional cost borne by the patient.

In Germany, the overwhelming majority of the population is insured with Statutory Health Insurance which is financed primarily by income-related contributions. As in Poland, coverage of health care is comprehensive albeit with somewhat higher copayments on average. For some types of specialist outpatient treatment, patients may have to wait several weeks for an appointment. On the whole, however, health care supply is sufficient in the sense that there are no waiting lists. Yet, in regions remote from regional centres, access to health care may be difficult for patients due to geographical factors.

Which benefits could be attained by Poland and Germany from cross-border health care in general? Consider first the Social Security Regulations. Relying on this pathway, patients in Poland would receive treatment in Germany with the NFZ reimbursing the cost according to the German tariff. While this would be an attractive way to skip the waiting list at home without incurring a substantial payment, it would put a high financial burden on the NFZ. Thus, there is a strong incentive to refuse prior authorization whenever this is feasible. For patients in Germany, there is no incentive to rely on this pathway as reimbursement of a treatment received in Poland according to the rules of the NFZ will be substantially lower than what can be attained by means of another pathway.

Consider now the pathway offered by the EU Directive. For Polish patients, the cost of treatment in Germany would then be reimbursed by the NFZ according to the tariffs in Poland. Given that the cost of health care is much higher in Germany, this would involve a substantial payment from the patient. Thus, it is not clear whether this option of skipping the waiting list is more attractive than going private in Poland. In contrast, for patients in Germany, reimbursement of treatment received in Poland according to the German tariffs may involve a financial benefit. More specifically, if a health care service in Germany requires a substantial copayment, the patient may save on this by receiving treatment in Poland. E.g., this is true for dental services.

According to data from the NFZ for the years from 2004 to 2011, a considerable part of cross-border health care between Poland and other countries relates to Germany. More specifically, about 28% of all foreign patients treated in Poland were Germans while more than 68% of all health care received by Poles abroad was provided in Germany (Lesniowska & Karpa, 2013). *Figure 3* presents empirical evidence on the use of cross-border health care by patients of the German insurer TK. More precisely, the data relate to the health care facility last visited and cover patients living close to the border, i.e., at a distance of no more than 30 kilometres. Even though the sample size is rather small, a clear picture emerges for the case of planned health care (N=24). More specifically, patients have either been at a stationary health spa or received dental or orthodontic care.

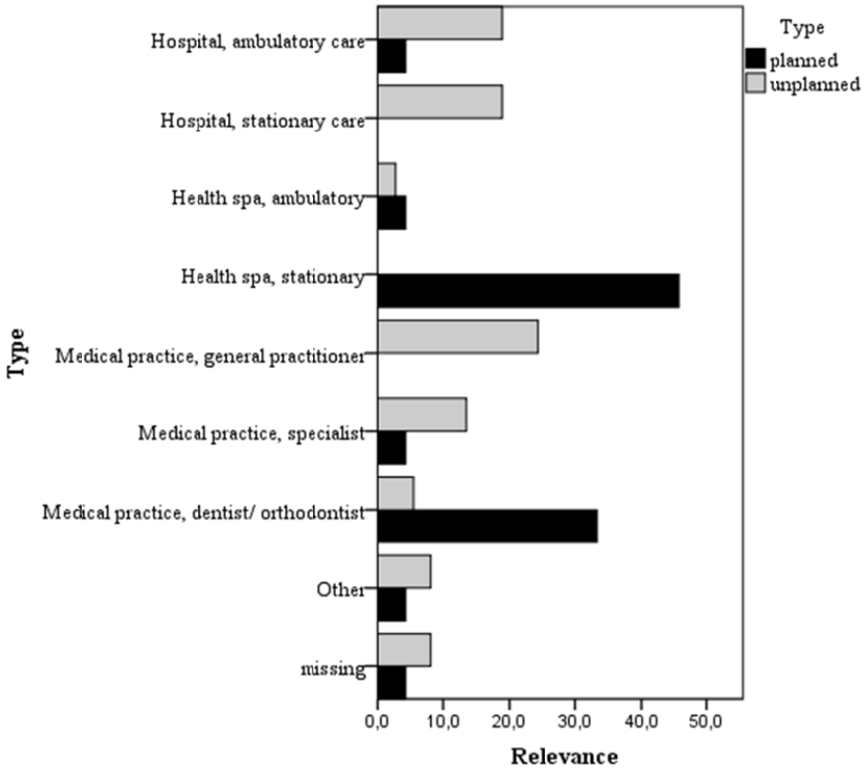

Figure 3. Health care facility type last visited
Source: TK Cross-border Health Care Survey 2012, Regional sample, n= 61.

Apart from these general observations, more specific benefits may arise for border regions. Along the border separating Poland from Germany, some of the regions are sparsely populated and geographical factors may impede access to health care for a sizeable part of the local population. E.g., on the German side of the border, this is true for the regions belonging to Western Pomerania. Relying on public transport, individuals living in remote areas either have no access at all to specialist treatment or need more than 4 hours (one way) to reach the nearest specialist or hospital ward (Van den Berg *et al.*, 2015). Especially for elderly people suffering from chronic diseases, this may constitute a very high barrier to health care.

It is not difficult to see that cross-border health care could alleviate such problems which, presumably, beset some border regions in Poland as well. By relying on cross-border collaboration, insurers and providers together may improve access to health care. One way to achieve this would be arrangements which enable patients on both sides of the border to choose, e.g., the nearest provider of specialist treatment. For regions with a major town on one side of the border (e.g., Stettin), this is likely to induce cross-border health care to a considerable extent, with a patient flow predominantly in one direction. In other cases, the use of health care facilities could be coordinated such that patient flows in both directions will come about.

Thus, in border regions, cross-border health care may considerably improve access to health care for patients in Poland and Germany. Even though there are other pathways, cross-border collaboration represents the preferred option because, as argued in section 4, it almost eliminates the barriers associated with cross-border health care. In particular, this is true for

the general barriers relating to differences in language and culture which are more relevant for the case of Poland and Germany along the border than for the case of, e.g., Southern Denmark and Schleswig-Holstein. Referring to the use of highly specialized equipment, a successful cross-border collaboration may also reduce the cost of provision due to a better use of capacity, i.e., due to economies of scale.

As a final example, consider emergency care. In an emergency, the patient needs treatment as fast as possible since any unnecessary delay may cause severe health problems or even death. Along the border, this may imply a patient in Germany to be delivered to a hospital in Poland and vice versa. However, even though a framework agreement exists between the two countries on the collaboration in emergency care (Bundesministerium für Gesundheit, 2011), at present the provision of such care works differently for a number of reasons. As a consequence, patients on both sides of the border may suffer unnecessarily with respect to their health. In turn, this suggests that cross-border collaboration in emergency care would provide substantial health benefits for some patients.

Conclusion

Cross-border health care may offer benefits which would otherwise not be available for patients or other actors in the national health system. Thus, a patient may derive a net advantage from going abroad. For individuals in the Member States of the EU, two general pathways to cross-border health care are available. While the first is based on Social Security Regulation 883/2004, the second relies on the EU Directive 2011/24/EU. Hence, for patients it has become easier to circumvent barriers to health care existing at the national level. However, there are also barriers to cross-border health care which may explain the rather low use of this option up to now.

For Poland and Germany, the potential benefits of cross-border health care can be substantial. Patients from Poland may benefit from saving on waiting time if they receive treatment in Germany. Likewise, patients from Germany may save on the cost of treatment when obtaining health care in Poland. As in the general case, the rather small extent of cross-border health care suggests that, in most instances, other barriers inhibit patients from going abroad. Apart from differences in language and culture, these barriers include a lack of information on the relevant procedures.

Turning to border regions, it has been argued that cross-border collaboration can be expected to involve substantial benefits for patients in both countries. More specifically, contracts or other types of formal agreements between an insurer in one country and a provider in the other may act as a device to overcome the barriers which are associated with the other pathways to cross-border health care. In this manner, cross-border health care may contribute to overcoming problems of access to health care which typically beset sparsely populated regions.

Given that cross-border collaboration involves substantial costs, it seems reasonable to apply it only in cases where large potential benefits can be expected. This is very likely to be true for emergency care, with the benefit primarily relating to patients´ health. Another example is the use of highly specialized equipment which could be coordinated across the border in order to improve access for patients and to save costs. However, in order to be able to assess the potential benefits due to cross-border collaboration, information on the distribution of equipment on both sides as well as on current access problems is needed. While such information has been compiled recently for the regions of Western Pomerania, it is presently not available for the other border regions of Poland and Germany.

Lastly, it is important to bear in mind that cross-border health care also has an impact upon national health systems. Since it is now easier to go abroad in order to receive treatment,

competition among health systems for patients has become more intense. Clearly, in each EU Member State this puts pressure on social health insurance to offer a benefit package and reimbursement tariffs such that the use of cross-border health care will, in general, not be attractive for patients. In this regard, somewhat paradoxically, cross-border health care yields a benefit even though people decide that there is no need to use this option.

References

Augustin, U., Panteli, D., Busse, R. (2013), Radiotherapy across the border: treating Danish patients in Flensburg Malteser hospital (Germany-Denmark), In*:* Glinos, I. A., Wismar, M. (eds.) *Hospitals and Borders*, Copenhagen: World Health Organization, pp. 75-91.

Brand, H., Hollederer, A., Wolf, U., Brand, A. (2008), Cross-border health activities in the Euregios: Good practice for better health, *Health policy*, Vol. 86, pp. 245-254.

Bundesministerium für Gesundheit (2011), *Rahmenabkommen zwischen der Bundesrepublik Deutschland und der Republik Polen über die grenzüberschreitende Zusammenarbeit im Rettungsdienst*, available online at: http://bmg.bund.de/fileadmin/dateien/Downloads/A/Abkommen/Polen/Rettungsdienstabkommen.pdf (referred on 02/04/2016).

Busse, R., van Ginneken, E., Wörz, M. (2011), Access to health care services within and between countries of the European Union, In*:* Wismar, M., Palm, W., Figueras, J., Ernst, K.van Ginneken, E. (eds.), *Cross-border Health Care in the European Union: Mapping and analysing practices and policies*, Copenhagen: World Health Organization, pp. 47-90.

Deutsches Krankenhausinstitut (2014), *Krankenhaus Barometer 2014*, Düsseldorf.

Eick, J. (2010), Cross-Border-Projekt zwischen Deutschland und Dänemarkt, *Schleswig-Holsteinsches Ärzteblatt*, Vol. 63, pp. 14-17.

European Comission, Directorate-General for Health and Consumers (SANCO) (2015), *Patient's rights in cross-border healthcare in the European Union Special Eurobarometer 425.*

European Commission, Report from the Commission to the European Parliament and the Council (2011), *Directive 2011/24/EU of the European Parliament and of the Council of 9 March 2011 on the application of patients' rights in cross-border healthcare*, Strasbourg.

European Patients´ Forum (2013), *EU Directive 2011/24/EU on the application of patients´ rights in cross-border healthcare: Legislation Guidance for Patient Organisations*, Brussels.

Glinos, I. A. (2011), Cross-border collaboration, In*:* Wismar, M., Palm, W., Figueras, J., Ernst, K.van Ginneken, E. C. (eds.), *Cross-border health care in the European Union - Mapping and analysing practices and policies*, Copenhagen.

Greer, S. L., Fahy, N., Elliott, H. A., Wismar, M., Jarman, H., Palm, W. (2014), *Everything you always wanted to know about European Union health policies but were afraid to ask*, World Health Organization, European Observatory on Health Systems and Policies.

Hedde, P. H. (2010), *Grenzuberschreitende Aktivitaten als Triebfedern des Europaisierungs- und Integrationsprozesses in der Gesundheitspolitik*, Kiel, Christian-Albrechts-Universität, Diss., 2009.

Kifmann, M., Wagner, C. (2014), Implications of the EU Patients' Rights Directive in Cross-Border Healthcare on the German Sickness Fund System, In*:* Levaggi, R.,

Montefiori, M. (eds.), *Health Care Provision and Patient Mobility*, Milan, Heidelberg, New York, Dordrecht, London: Springer, pp. 49-66.

Landesinstitut für Gesundheit und Arbeit Nordrhein-Westfalen (lögd) (2008), *(Integration) Zorg op Maat - (I)ZOM*, available online at: http://www.euregio.nrw.de/project-descriptions/id-047-%28i%29zom.descr.pdf (referred on 02/04/2016).

Lesniowska, J., Karpa, W. (2013), Cross-border healthcare: an outlook for Polish medical services providers, In*:* Rudawska, I., Fleßa, S. (eds.), *Recent Challenges of Health Care Management in Poland*, Greifswald.

Marschall, P., Brümmer, D. (2014), Kosten- und Nutzenkomponenten grenzüberschreitender Patientenmobilität in der Europäischen Union: Theorie und Empirie, In*:* Matusciewicz, D. Wasem, J. (eds.), *Gesundheitsökonomie: Bestandsaufnahme und Entwicklungsperspektiven*, Berlin: Duncker & Humblot, pp. 315-330.

Nebling, T., Schemken, H.-W. (2006), Cross-border contracting: The German experience, In*:* Rosenmöller, M., McKee, M.Baeten, R. (eds.), *Patient Mobility in the European Union. Learning from experience*, World Health Organization.

Palm, W., Wismar, M., van Ginneken, E., Busse, R., Ernst, K., Figueras, J. (2011), Towards a renewed Community framework for safe, high-quality and efficient cross-border health care within the European Union., In*:* Wismar, M., Palm, W., Figueras, J., Ernst, K.van Ginneken, E. (eds.), *Cross-border health care in the European Union - Mapping and analysing practices and policies*, Copenhagen, pp. 23-46.

Project "Cross-border Breast Health" (2010), *Project* [Online], available online at: http://www.crossborderbreasthealth.net/en/project/ (referred on 02/04/2016.

Sagan, A., Panteli, D., Borkowski, W., Dmowski, M., Domański, F., Czyżewski, M., Goryński, P., Karpacka, D., Kiersztyn, E., Kowalska, I., Księżak, M., Kuszewski, K., Leśniewska, A., Lipska, I., Maciąg, R., Madowicz, J., Mądra, A., Marek, M., Mokrzycka, A., Poznański, D., Sobczak, A., Sowada, C., Świderek, M., Terka, A., Trzeciak, P., Wiktorzak, K., Włodarczyk, C., Wojtyniak, B., Wrześniewska-Wal, I., Zelwiańska, D., Busse, R. (2011), Poland: Health system review, *Health Systems in Transition*, Vol. 13, pp. 1-193.

Schleswig-Holsteinscher Landtag (2002), *Grenzüberschreitende Inanspruchnahme von Gesundheitsleistungen, Beschluss des Landtages vom 13. September 2002, Drucksache 15/2067*, Kiel.

Schleswig-Holsteinscher Landtag (2003), *Grenzüberschreitende Zusammenarbeit mit Dänemark, Beschluss des Landtages vom 9. Mai 2003, Drucksache 15/2620*, Kiel.

Van den Berg, N., Radicke, F., Stentzel, U., Hoffmann, W. (2015), *Versorgungsatlas Vorpommern*, Greifswald, Institut für Community Medicine.

Wismar, M., Palm, W., van Ginneken, E., Busse, R., Ernst, K., Figueras, J. (2011), The Health Service Initiative: supporting the construction of a framework for cross-border health care, In*:* Wismar, M., Palm, W., Figueras, J., Ernst, K.van Ginneken, E. (eds.), *Cross-border health care in the European Union - Mapping and analysing practices and policies*, Copenhagen: European Observatory on Health Systems and Policies.