Mapping Health Services Access: National and Cross-Border Issues (HealthACCESS)

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Reinhard Busse*, Markus Wörz*, Thomas Foubister**, Elias Mossialos** and Philip Berman***

*Dept. Health Care Management, Berlin University of Technology, Berlin/ Germany • **LSE Health and Social Care, London School of Economics and Political Science, London/ UK • ***European Health Management Association (EHMA), Dublin/ Brussels

with

Marie Brady, Katherine Gavin, Institute of Public Administration, Dublin/ Ireland • Martine M. Bellanger, Veneta Cherilova, Karine Chevreul, Veronique Lucas, Aude-Emmanuelle Develay, Florence Thesmar, Ecole nationale de la santé publique (ENSP), Paris/ France • Marianna Cavazza, CEFASS (European Training Centre for Social Affairs and Public Health), Milano/ Italy • Vilmos Ivady, Kinga Jákó, Semmelweis University Health Management Services Management Training Centre, Budapest/ Hungary • Katrien Kesteloot, School of Public Health, Leuven University, Leuven/ Belgium • Adam Kozierkiewicz, Jagiellonian University Medical College, Cracow/ Poland • Ted Kraakman, Public Health and Health Care, Nederlands Instituut Zorg en Welzijn / International Centre, Utrecht/ Netherlands • Guido Offermanns, University of Klagenfurt, Klagenfurt/ Austria

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Summary and Policy Recommendations

1. According to the EU Charter of Fundamental Rights, 'Everyone has the right of access to preventive health care and the right to benefit from medical treatment under the conditions established by national laws and practices'. The Health ACCESS project has examined whether any of six hurdles (population covered for health insurance, benefits covered, cost-sharing arrangements, geographical barriers, organisational barriers and utilization of accessible services) make it harder or even impossible to access health care within 10 EU countries, and whether cross-border arrangements between actors of different countries can effectively alleviate such problems. European integration has the potential to alleviate some but not all access barriers. However, it can also make access more problematic.

2. The first hurdle relates to whether or not health care coverage is extended to the whole population. Formally, most of the countries examined have universal coverage in a legal sense – but even this will exclude, depending on the country, certain groups (such as refugees). However, even in systems of universal coverage, serious access barriers remain, which appear to fall disproportionately on those least able to overcome them. If there is one key message to emerge from this broad survey of access issues across the health care systems of the EU, it is that it is necessary to look beyond the presence or absence of coverage per se – and, moreover, beyond the assumption of coverage's universality – if persisting inequities are to be addressed. Most importantly, population coverage remains a national issue, i.e. those not covered inside a country cannot benefit from cross-border arrangements. It therefore remains the task of the Member States to ensure that population coverage is both legally and de facto universal.

3. The second hurdle relates to benefits covered under this system of primary coverage. While no major differences can be seen in regard to major sectors of health care, the growing explicitness of services covered as well as exclusions – but also inclusions – may make benefit packages more diverse, and therefore create access problems which patients may wish to overcome through accessing health care abroad. As the benefit packages are currently decided nationally, arrangements for patients to receive explicitly excluded services under public funding elsewhere basically do not exist. Rather, patients are "forced" to use the E111 procedure by pretending that the need for such a service has arisen while visiting another country. EU Member States should therefore seriously

discuss whether to organise a process to address this issue, for example by using similar criteria to determine inclusion or exclusion.

4. Cost-sharing, the third hurdle, is an important consideration for patients but less for purchasers; predictably, patients' cost-sharing requirements are given as a reason for the existence of cross border arrangements only in a handful of 'other arrangements', e.g. where providers attract patients from other countries where the services in question require significant cost-sharing and where providers can offer them considerably cheaper than in the home country (prime example: dental care in Hungary for patients from Austria). Policy-makers need to be aware that such a diversion of care to other countries may increase inequities as those most suffering from cost-sharing can often not afford travel costs.

5. Of the various geographical reasons as the fourth hurdle within countries – i.e. rural or remote areas, insufficient density of providers and closeness to borders where providers across the border may be closer to patients than national providers – only the latter can be addressed through cross-border contracts. Such a situation is the reason stated most often for cross-border contracts. Many cross-border arrangements, especially in the Euregios between Belgium, France, the Netherlands, and Germany, are seeing improvements in access to hospital and emergency care services in particular. Policy makers should seriously consider whether the general limitation of contracted care to providers within the country can be upheld or whether the right to access health care should not "automatically" be extended to foreign providers if they are geographically closer or are delivering the service at a higher quality. While some may argue that this would violate the subsidiarity principle in health care, it is clearly in line both with the European Court of Justice's rulings regarding ambulatory care and the idea of European Centres of Reference (see No. 9).

6. Countries experiencing domestic waiting list problems – as a visible sign that a fifth hurdle impedes access – are sending (or have sent) patients abroad to take advantage of spare capacity there. If such problems are the rationale for patient mobility, the arrangements are often time-limited. Such cross-border arrangements are still insignificant between old and new member states and among new member states, but are likely to be developed in future. However, if the access problem is primarily due to undercapacity (or organisational problems), then Member States have to make a clear

decision whether to send patients abroad or to address problems at home by investing in adequate human and/ or infrastructural capacities.

7. Other arrangements, especially those which are sickness fund-driven, do not primarily address any of the first five access hurdles but provide more choice which could be seen in the light of the sixth hurdle (acceptability of available services due to personal preferences). However, similarly to the cost sharing-driven patient mobility, such offers may increase a pro-rich inequity, already seen for specialist care in most countries. Additionally, they may increase – or create – access problems in the receiving country.

8. In total, the project has identified some 130 cross-border arrangements in the countries studied for a variety of reasons, between different actors and of different size and duration. In many instances, the actual size in terms of money or patients involved could not be established. Similarly, statistics on overall numbers and expenditure of cross-border patients (including E 111, E 112, contracted care, self-organised care under "Kohl/ Decker") often do not exist or are not made available. Where figures exist, their basis is often either unclear (e.g. whether "foreign" patients are those living abroad or those being insured abroad) and/or are cannot be compared as some countries only count the numbers of E 112 issued, others the number of invoices, others the amounts spent etc. The Health ACCESS project partners have come to the conclusion that this problem cannot be overcome by further research. Rather, it is now up to the policy-makers at the EU level to decide what data they require and then to set up appropriate systems. A harmonised process of data collecting and reporting is long overdue and should urgently be determined and implemented.

9. European integration also has the potential to improve the quality of treatment of rare illnesses or rare and expensive procedures. As cross-border patient flows increase, and as those with rare conditions are directed towards 'European Centres of Reference', it is important that these Centres provide equal access for all citizens regardless of country of origin or personal resources. In the absence of other agreed processes, a data-driven process of identifying which conditions and procedures require European Centres of Reference as well as identifying true Centres of Reference with a European dimension is needed. Such a designation may be based on actual referrals (rather than a self-subscribed or nationally determined "status"); but this requires that (potential) centres of reference data need to be made availability. Such a process also requires an open recognition of a potential conflict with the national responsibility to determine the

benefit basket: The rarer the disease, the more consensus is needed on the technologies covered and the costs reimbursed as European centres of reference need to be recognised by all or at least a group of EU Member States.

10. Last but not least: Cross-border care is not an end but an instrument to improve accessibility, quality and cost-effective care. Its potential – and its relationship with quality, equity and cost-effectiveness of care – needs to be carefully evaluated. Policy-makers at EU and at national level should draw the necessary conclusions.

Introduction

This report describes the present situation regarding formal cross-border arrangements for health care among ten Member States of the European Union (EU). It also covers arrangements with Member States outside this group of ten, but involving one of the ten as a party. The Member States examined are Austria, Belgium, France, Germany, Hungary, Ireland, Italy, the Netherlands, Poland and the United Kingdom (focusing on England and Northern Ireland). This report is based on information supplied by country correspondents, whose reports can be consulted at http://www.ehma.org/projects/.

Access to health care within countries

The assumption throughout this report has been that cross-border arrangements exist to address domestic health care access problems. This is not to suggest that such arrangements exist solely to address access problems. However, it has been possible to identify an 'access enhancement' dimension in all the arrangements, and it seems plausible that, as a general rule, access enhancement would feature as a baseline objective of at least one of the parties to a cross-border arrangement.

The report begins by discussing barriers to access within the health care systems of the ten Member States. On the basis of the broadly defined term "universal" coverage, access has often been assumed to exist, on the basis that "coverage" and "access" are identical. However, "coverage" and "access" are not the same, and barriers – or more specifically "hurdles" – to access services may exist despite the presence of universal coverage. These include the fact that some services are not covered in the benefit package, or are covered but not available; that cost sharing policies are in place which may be too expensive for some people, that the geographical distribution of services means that some have greater difficulty in accessing health care than others (despite equal entitlement); that the organisation and operation of the system can produce hurdles to access (often visible in the form of waiting lists); and that some have 'better' access than others based on gender-related, socio-economic and cultural factors. Equally important, the presence of near-universal access has distracted from the fact that there are population groups who remain without coverage and without adequate access to health care. These would include those with uncertain residential status (refugees and failed asylum seekers) as well as illegal immigrants. It should be emphasised, however, that lack of coverage is a hurdle that cannot be addressed by the use of cross-border arrangements.

The use of cross-border arrangements to enhance access

The report then presents the main findings of the project: the number of cross-border arrangements in existence (at the start of 2006) in the ten countries studied, how these arrangements are distributed, and the types of access hurdles that the arrangements are intended to address. In the final section these findings are analysed. Cross-border arrangements take a wide variety of forms, but despite this there are a number of shared features that can be considered key characteristics. Foremost among these is the location of agency at the local level (as opposed to with a central authority), that is to say there is normally no central planning of cross border arrangements but in general they are initiated on a local level. But they also include features that can be understood equally as preconditions for the success of an arrangement, such as incentive alignment among the parties to an arrangement, and presence of stakeholder support.

Cross-border arrangements are one mechanism that may be used to address problems relating to access to health care in the home country. In some instances they will be the most appropriate mechanism, in others more cost-effective means of reducing a hurdle to access may be found domestically. The cross-border arrangement is not, therefore, to be seen as the only solution to access problems in the country of residence. The high number of such arrangements in place would lead us to believe that cross-border arrangements will continue to play an important part in enhancing population access to health care – in particular, where access hurdles are geographical in nature.

What is missing from this picture is any consideration of the wider health system impact of cross-border arrangements. These arrangements have rarely been subject to formal evaluation, and when they have this has appeared to address only issues of immediate or local relevance. If the number of such arrangements is to continue to grow, and if these arrangements are to achieve their full potential as a mechanism of access enhancement, their wider health system impact has to be studied. It is perhaps unlikely, but it is equally not inconceivable, that the establishment of a cross-border arrangement could lead to the emergence of new access-related problems within the domestic health care system.

I. Access to health care within countries

Universal access is usually considered to be a fundamental feature of the health care systems of European Union (EU) member states. Reform debates on other continents regularly look to the European experience as a model to be emulated or as a showcase for methods of preserving access in contexts of marketization and privatisation. In the EU, the universal access is indeed a governing principle. It is captured in several country constitutions and health service founding documents, and has been incorporated into the EU Charter of Fundamental Rights as Article 35, whose first part reads 'Everyone has the right of access to preventive health care and the right to benefit from medical treatment under the conditions established by national laws and practices' (Council of the European Union 2001).

This priority accorded universal access reflects the belief that access to health care is a precondition for active membership of society. Two strands of thought in particular have informed the development of universal access in the EU – the basic minimum approach and the equalising approach. The former seeks to ensure that no citizen falls below a particular level of subsistence, the latter that the *same* level or quality of health care be *equally* accessible to all, regardless of status. The health care systems of the EU combine both these strands, sometimes in complex ways. Generally, they strive for equality by taking the basic minimum approach and setting this 'minimum' at a level that is sufficiently high so that the "private" demand for health care is afforded only a residual role (but a role nonetheless).

Six hurdles to access health care services

Against this background, the precise meaning of "access" has been the subject of debate. However, there is a consensus view that health care should be distributed according to need. Thus, the World Health Organization (WHO) defines accessibility as 'a measure of the proportion of the population that reaches *appropriate* health services' (WHO Regional Office for Europe 1998 – emphasis added). Nevertheless, where universal access is formally in place, hurdles may persist whose effects are distributed unevenly across the population (thus diminishing the impact of the equality objective).

The Health ACCESS project has investigated access issues arising from the experience of ten EU member states: Austria, Belgium, France, Germany, Ireland, Italy, Poland, Hungary, The Netherlands and the United Kingdom (especially England and Northern Ireland) (Fig. 1).

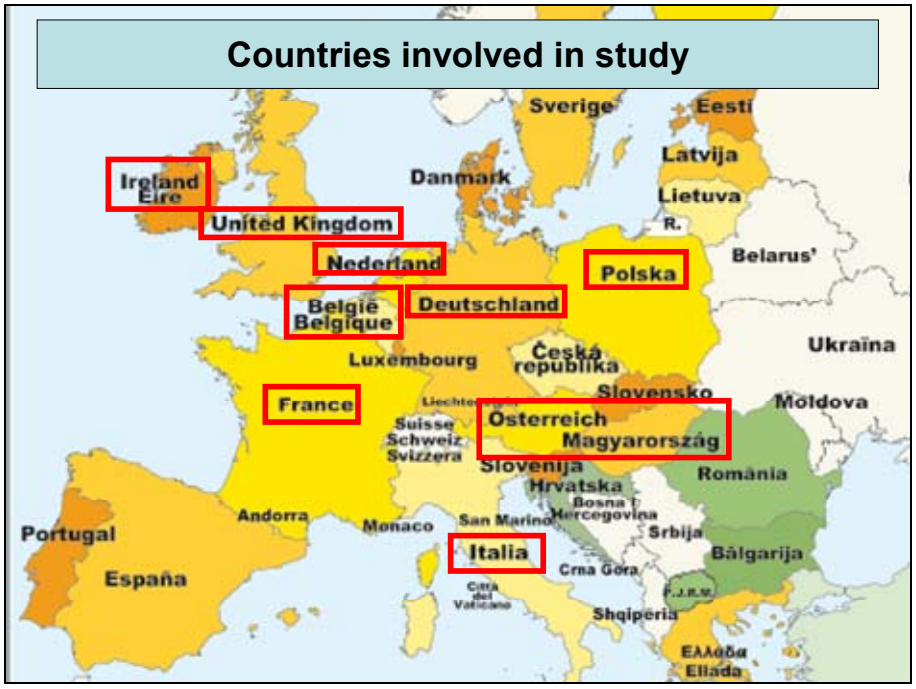

Figure 1: Countries involved in the study

As a framework to analyse barriers to access, a model was developed which identifies six potential access barriers, orders them and presents them in the form of a filter (Fig. 2). Each of the potential barriers can be thought of as constituting a hurdle to be surmounted if universal access is to be realised.

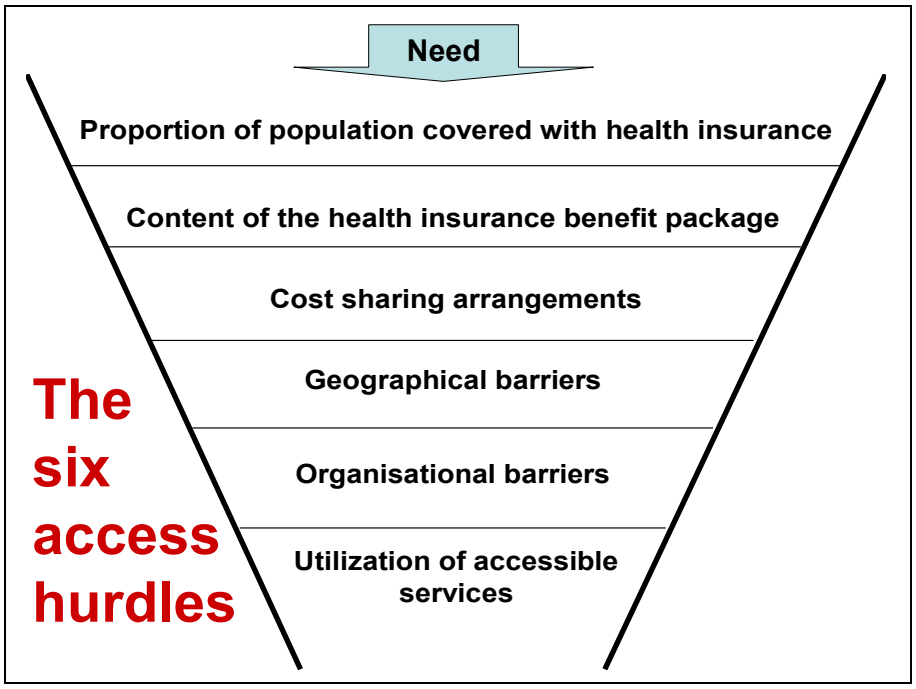

Figure 2: The six access hurdles

The first hurdle relates to whether or not health care coverage is extended to the whole population. Primary coverage will usually be through the public system (whether financed on the basis of social health insurance or taxation, or a mixture of the two), but it may be via substitutive voluntary health insurance (VHI). Strictly-speaking, complementary VHI may also be thought of as playing a primary coverage role in so far as it provides cover for benefits, or the part of the cost of care, not covered by the public system. Our focus here is primarily on public system coverage (for further discussion of issues relating to primary coverage through VHI, see the full project report for Phase I Wörz et al. 2006, on VHI see also Thomson & Mossialos 2004). The second hurdle relates to benefits covered under this system of primary coverage. These two hurdles are fundamental, and conceptually have priority. The remaining four are without strict order of precedence among themselves but are presented in descending order from (normally) national responsibility via regional and institutional issues to mainly personal preferences and choice. They relate to geography, supply-side organisation and behaviour (here, we take cost-sharing as a supply-side factor, albeit one intended to operate on demand) as well as personal and cultural preferences. Clearly, other factors – especially information on entitlements and available providers – are additional factors which will determine actual access to health services.

Some of these hurdles to access can be considered static, others more dynamic. For example, population coverage is rarely subject to fundamental change (even though The Netherlands have seen such a change at he beginning of 2006), and significant change in the geographical distribution of providers usually takes place only over long time-spans, if at all. In comparison, cost sharing policies and composition of benefits packages have been subject to a greater degree of alteration, and are liable to remain among the more dynamic of the hurdles. These areas lend themselves more readily to policy intervention but, because of this, policy changes have been common, and therefore there is little evidence regarding the precise nature of the impact of these areas on access. Nevertheless, these levers can be mobilised to effectuate access (for instance though reducing cost sharing or improving systems of exemption from cost sharing).

Hurdle 1: The proportion of the population covered for health care

Most EU member states operate systems of universal public coverage, with coverage being extended, in principle, to the entire population (usually defined by legal residence or citizenship).

Universal systems share the following five characteristics:

i. they provide the primary mode of insured access to health care;

ii. public funding dominates, but there is usually cost sharing;

iii. participation is mandatory;

iv. benefit coverage is broad; and

v. access (and resource allocation) is based on need.

Having said that, universal coverage tends to be "universal" only in principle. The entitlement status of some vulnerable groups may be unclear. Most notably, for failed asylum seekers and illegal immigrants, access to formal health care may be non-existent. , Problems may also arise for legal residents or citizens from the way in which coverage is organized. Coverage for the unemployed, for instance, may require certain administrative requirements, as in Austria; contribution record keeping may not function effectively, as in Poland; or coverage may be lost following divorce if certain administrative requirements are overlooked under systems of social health insurance.

Ireland (a tax-financed system) and Germany (an SHI system) constitute anomalies, since the public systems cannot strictly be described as systems of universal coverage. In these countries, it is VHI that provides the primary mode of coverage for part of the population. In Ireland people are eligible for full membership of the tax-financed public system if they meet certain hardship criteria relating to income, household size, household expenditure, and further factors including the presence of chronic disease. Those who do not meet these criteria are only covered by the public system for core services (inpatient care in public hospitals) and are subject to user fees. This group must purchase VHI to secure full primary coverage.

In Germany, whose public system is financed largely through social health insurance, employees with a gross income above a specified threshold (€ 47,250 annually in 2006) are able to choose whether or not to remain in the public system. If they choose to opt out, primary coverage for health care is through substitutive VHI. Alternatively, they may remain uninsured and pay for care on an out-of-pocket basis. Some occupational groups are excluded from the public system regardless of income status – most importantly civil servants. In Germany, circa 88% of the population is covered by Statutory Health Insurance, with a further 10% having full primary coverage through VHI. In 2003, only approximately 0.2% had no health insurance at all.

Hurdle 2: Benefits covered by health care systems

Among the ten countries, there is some – but seemingly little – variation in the range of benefits provided to citizens and residents by public systems of coverage for health care (termination of pregnancy being a notable exception). The package framework does, however, differ. In general, benefits packages fall into one of three categories:

i. undefined but broadly comprehensive;

ii. defined by general categories only (hospital care, outpatient care etc.); and

iii. explicit lists of benefits (or rather, a combination of lists for some areas of care with a general categories listing for other areas).

There is a trend towards increasing explicitness in the definition of benefits packages (particularly in terms of what is excluded from cover), with potential implications for access. In some cases, this is related to the introduction of payment technologies which attach prices to specific procedures. For example, the way some countries are using DRGs or 'payment by results' may lead to the emergence of a more explicit benefits package in the area of hospital care, as items without a price attached may eventually not be reimbursable. In addition, criteria for the inclusion of a benefit have tended to become more formal and restrictive. Thus in The Netherlands, with the introduction of universal coverage in 2006, the standard package provides essential curative services that are tested for efficacy, cost-effectiveness, and for the need for collective financing. The erosion across several EU member states of public system coverage for ophthalmic and dental care is well known – even though some other countries (e.g. Spain) are moving in the opposite direction.

Additional factors to be taken into account is the conditions for receiving benefits – such as going through a GP gate-keeper before receiving specialized services.

Hurdle 3: Cost-sharing arrangements

Demand-side cost sharing is present in all ten countries. All impose charges for pharmaceuticals and dental care (except Poland, which does not impose cost sharing for dental care). About half also impose charges for primary and secondary health care. In each country, however, measures are in place to provide some level of protection from high out-of-pocket expenditure for specific groups. These include exemptions based on age (children and pensioners), income (those on low income or benefits), and health status or type of illness (for example pregnant women or those with chronic illnesses). Aside from full exemptions, protective mechanisms include the use of discounts, out-of-pocket maxima (annual or

monthly), tax relief (this operates only in the Netherlands); and complementary VHI (with access facilitated by the Government for low income individuals in France; see also: Jemiai, Thomson, & Mossialos 2004).

Cost sharing is usually applied uniformly across the public system, but Italy (where health care has been devolved to regional governments) is an exception, with a significant degree of regional discretion in the application of cost sharing arrangements within a framework set at the national level. Thus, in the case of pharmaceuticals, ten regions out of 21 do not require cost sharing. Similar variation is present in cost sharing for non-emergency access to emergency services.

While cost-sharing arrangements are seen as a major potential hurdle to access in many, if not most, countries, sound studies demonstrating that they – in the forms used in these countries – actually impede access are rare. It seems very likely, however, that cost sharing (in particular informal payments to doctors) constitutes a, if not *the* most severe access problem in Hungary. Among the few countries with longitudinal survey data on this issue is Poland where the magnitude of this hurdle has generally decreased in the first half of this decade but still differs greatly between sectors (i.e. is 15-times greater for drugs than for hospital care; cf. Fig. 3).

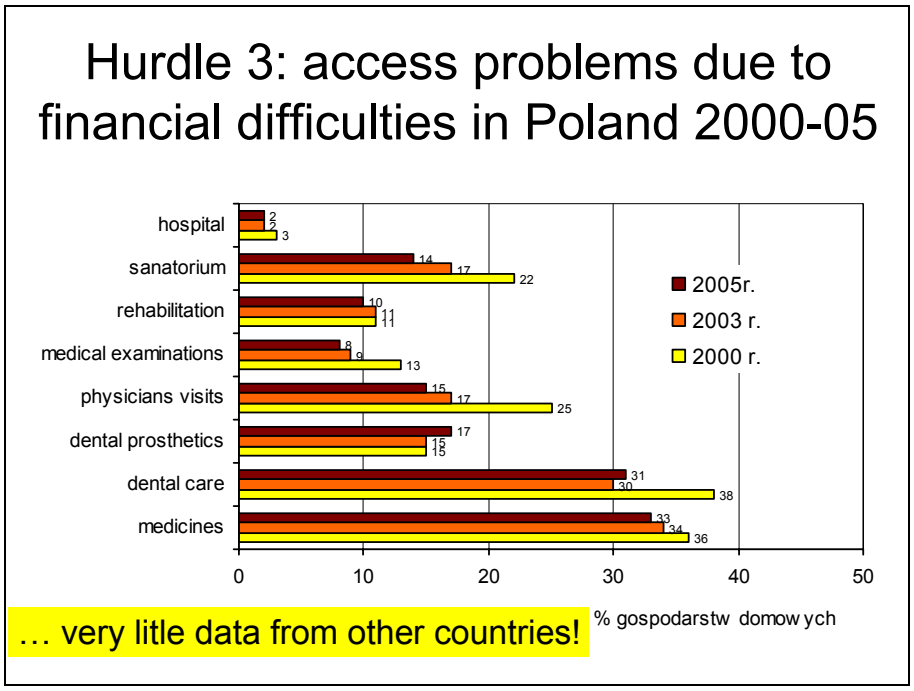

Figure 3: Financial difficulties as an access problem in Poland, 2000-2005

It remains to be seen whether two indicators of the survey *Community Statistics on Income and Living Conditions (EU-SILC)*, namely PH040 "Unmet need for medical examination and treatment" and PH050 "Main reason for unmet need for medical examination or treatment" (which gives "could not afford – too expensive" as an answer option), will produce reliable data across the EU Member States regarding the cost-sharing hurdle.

Hurdle 4: Geographical barriers to access

Geographical aspects are playing at least three roles regarding access:

1. the remoteness of an area,
2. the density of providers, and
3. the closeness to a national border.

Many parts of the European Union are relatively densely populated, and therefore geographical distance to health care facilities appears not to be a major concern. Moreover, most countries have some form of health facilities' planning in place which counteracts any inequitable distribution of providers of health care. Survey data support the view that geographical access is not a major problem. According to Eurobarometer data on proximity to health care providers analysed by Alber & Kohler (2004), on average about 48% of the EU-25 population have access to a hospital less than 20 minutes away (approx. 53% of the former EU-15 and 35% of the new 10 member states; Fig. 4).

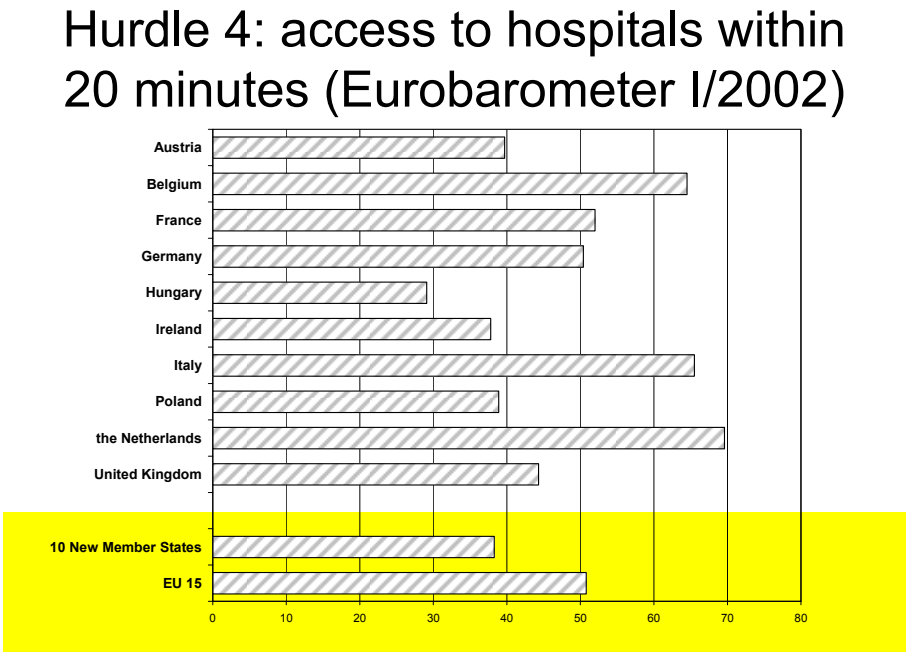

Figure 4: Geography as a hurdle – access to hospitals within 20 minutes in the ten study countries

One the other hand, the proportion of people whose access to hospital is severely impeded by distance is quite low: on average only about 6 % in the EU-25 population (approx. 4% of the former EU-15 and 13% of the new 10 member states) needs an hour or more to get to a hospital. In terms of proximity to a GP, on average about 82% have access in less than 20 minutes (approx. 85% of the former EU-15 and 68% of the new 10 member states).

However, these aggregate figures can conceal regional variation within countries. In Austria and Hungary, for example, there is significant variation in the provision of hospital beds by region. The Netherlands is among the countries with the highest proportion of people with uniform proximity to hospitals and GPs. In addition to its high population density, this is due to regulatory intervention. The Ministry sets a standard for maximum travelling time to hospital of 30 minutes and to a GP of 15 minutes.

Geographical access to health care providers can be more difficult at the periphery of countries. The nearest appropriate health care provider for patients may be located across the border. Under these circumstances, movement of patients across borders and arrangements across borders between institutions may ease geographical access to providers of health care (see second part of this report).

Again, it remains to be seen whether the EU-SILC data – where "too far to travel/ no means of transportation" is one answer option in item PH050 – will produce reliable data on the actual relevance of the geographical hurdle.

Hurdle 5: Organisational barriers to access

Even if the patient is covered for a wide range of benefits, cost sharing is affordable, and providers are geographically close, there may be organisational barriers to access. Among the most significant of this type of barrier are waiting lists and waiting times. Waiting lists are a feature of the British, Irish, Italian, Polish and Dutch health care systems – although the Netherlands and the UK have been able to reduce their lists by, for example, increasing funding, by restructuring provision (including sending patients abroad), and by reforming reimbursement. Item PH050 of the EU-SILC data includes "waiting list" as one answer option for unmet need, so that potentially comparable data on the actual size of waiting lists as a barrier will become available.

Another barrier may emerge if VHI co-exists with public insurance schemes and both cover the same services. Access inequities have been noted for France, Germany, and Ireland (see the full project report for Phase I Wörz et al. 2006). Even in the UK, where VHI plays a small role, it is thought that the presence of private medicine can lead to higher waiting lists in the

public system (Yates 1995). There has been little empirical research into this question, but the reasoning is that because doctors work in both the private system and the public system, time given to paying patients is time lost to publicly-financed patients, resulting in longer public system than they would otherwise need to be. A similar problem relates to the persistent use of informal payments in Hungary where 'brown envelope' payments could grant accelerated access to services for those who can afford to pay.

Hurdle 6: Utilization of accessible services

This hurdle relates to a fundamental distinction: the availability of services and the utilization of services. Availability constitutes a potential; it is not a proof of access. The relation between socio-economic status and utilization of health services has been researched extensively, and one finding has been that there is little income-related inequity in the utilization of GPs but that there is pro-rich inequity in the utilization of specialists, particularly in countries where VHI or private options are available (van Doorslaer, Koolman, & Jones 2004). Less is known, however, about the relation between other socio-economic or demographic variables (including ethnicity and religion) and access problems beyond pure utilization rates (and even such data are often lacking). In relation to gender, for example, hospitalization rates for women exceed those of men up to the age of 55 in the EU-15 countries, whereas men are hospitalized more frequently than women above the age of 55 years. To what extent such differences are explained by gender-specific access issues (rather than by differences in the underlying morbidity) remains to be studied in more detail.

II. Cross-border arrangements and European patient mobility

Background

In the framework of the EU, the principle of access to health care has played an important role. EC Regulation 1408/71/EEC provides for health care access for migrant workers and their families and some other groups. The material scope of the Regulation, however, only refers to national social security benefits, while health care covered by substitutive VHI or subject to a means-test is not covered by this regulation (Hervey & McHale 2004). Elsewhere, the European Court of Justice has acted as an engine of integration in the area of health care on the basis of rulings relating to Article 49 of the EC Treaty, which have made access to health care in other member states (under certain conditions) a reality.

European integration has the potential to alleviate some access hurdles (primarily geographical and organisational). We present below the findings of the Health ACCESS project which maps arrangements facilitating cross-border access of patients to health services and also relates them to the six access hurdles identified in the preceding section. A further area of investigation is the extent that current arrangements acknowledge, de facto, the existence of European Centres of Reference by providing access for entire groups of patients to specific providers in other Member States. Moreover individual streams of patient mobility are also taken into account.

Clearly, the Health ACCESS project is not the first to investigate cross-border patient flows. European integration in health care in general and European mobility of patients in particular has received increasing attention in recent years from many quarters, from the European Commission, European associations of providers and financers of health care or academia.

The political relevance is reflected for example by two recent decisions and papers by the Council (of ministers) and the Commission. In Council conclusions dated 26th of May 2006 "Statement on common values and principles" the importance of "providing clarity for our citizens" was highlighted. This included specifically the "overarching values of universality, access to good quality care, equity and solidarity having been widely accepted in the work of the different EU institutions." The Council pointed out that "universality means that no-one is barred access to health care; solidarity is closely linked to the financial arrangement of our national systems and the need to ensure accessibility to all; equity relates to equal access according to need, regardless of ethnicity, gender, age , social status and ability to pay". The Council invited "the European Institutions to ensure that their work will protect these values as work develops to explore the implications of the European Union on health systems as well as the integration of health aspects in all policies."

Partly in response to these Council demands the Commission has decided on the 5th September 2006 to develop a "Community framework for safe, high quality and efficient health services" including legal and practical issues concerning cross-border access. The Commission has launched a public consultation on these issues based on a Commission Communication, seeking input from the Member States, the European Parliament and other stakeholders such as patients and health professionals as well as purchasers and providers of care, with a view to bringing forward specific proposals in 2007

Earlier, the High Level Group on Health Services and Medical Care commenced work in July 2004 on the following seven areas: cross-border healthcare purchasing and provision, health

professionals, centres of reference, health technology assessment, information and e-health, health impact assessment and health systems, and patient safety.

In relation to cross-border healthcare purchasing and provision, the High Level Group developed guidelines for purchasers buying healthcare in other Member States (European Commission, Health & Consumer Protection Directorate-General 2005). There were also surveys by European associations of providers and financers of health care in order to investigate the degree of cross border cooperation in health care (e.g. Bassi et al. 2001Observatorium EUREGIOsocial 2005; Standing Committee of the Hospitals of the European Union 2003; Observatorium EUREGIOsocial 2005). In the academic world, quite a few publications appeared on the topics of European integration in health care and cross border patient mobility (e.g. Bertinato et al. 2005; Busse, Wismar, & Berman 2002; Mossialos & McKee 2002). In 2006 a book by the *Europe for Patients* project – funded by DG Research – was published (Rosenmöller, McKee, & Baeten 2006) which contains a collection of case studies which analyse in great detail several cases of collaboration across European borders.

Cross border arrangements promoting access to health care

In the context of this report cross border arrangements are understood as arrangements aimed at facilitating cross-border access to health services. These are predominantly, but not necessarily, based on formal agreements. [1] The following overview therefore excludes:

- individual patient mobility based on Regulation 1408/71/EEC,[2]
- cross-border mobility of health professionals and
- arrangements and regulations not aimed at *access* to health or long-term care (e.g. concentrating on teaching or research activities, health promotion)

Overall we have identified 132 cross border arrangements in relation to the 10 countries involved in this study. In order to be included in this study, the arrangement had to be in force on the 1st January 2006. Arrangements were identified by consulting the literature and experts on a national level. Table 1 presents all cross border links related to these arrangements. The number of these links exceeds 132 since some cross border arrangements involve more than two countries.

1 To be classified as a cross border arrangement related to access it is not required that patients are actually moving. For example, collaboration between hospitals to share a technology across borders will help access to such services on both sides of the border and therefore are included in this analysis.

2 However, as will be shown later, some cross border arrangements use the E112 procedure in order to manage the actual movement of the patient. Therefore these two kinds of patient mobility can go together.

Table 1: Cross-Border arrangements identified – Involved countries

	UK	PL	HU	AT	NL	IT	IE	FR	DE	BE
BE	0	0	0	0	31	0	0	16	7	
DE	0	3	4	15	14	4	0	9		
FR	0	0	1	1	0	5	0			
IE	13	0	0	0	0	0				
IT	0	0	0	6	0					
NL	0	0	0	0						
AT	0	0	6							
HU	0	0								
PL	0									
UK										
other EU	1	4	3	5	0	2	0	3	5	1

Table 1 shows that a majority of cross border arrangements concentrate on only a few countries. Cleary Belgium is the country involved in most cross border arrangements. Belgium has many cross border agreements with the Netherlands and to a lesser degree with France. Germany also has many cross border arrangements – also due to its geographical location with many bordering countries (Fig. 5).

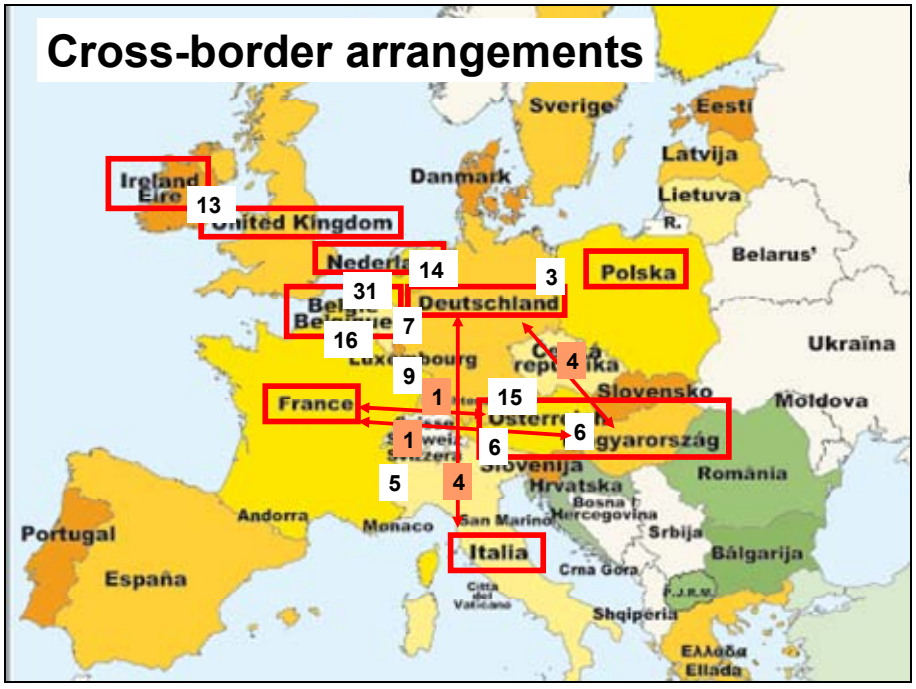

Figure 5: Identified cross-border arrangements

Most cooperations involve two actors and two countries. In contrast to this the involvement of more countries and actors in a single cooperation is quite rare.

Types of arrangement and actors involved

In order to map these arrangements further, we classified them into six categories (cooperation between insurers and providers, cooperation amongst providers, emergency services, intergovernmental co-operation, health insurance card projects, and support/advice). Figure 6 shows that the majority of cross border arrangements are either between insurers and providers or between providers. In relation to the latter, cooperation between hospitals is the most common. The large number of arrangements between insurers and providers is explained in particular by cooperation between sickness funds in the Netherlands and hospitals in Belgium (which also provide ambulatory care) and between sickness funds in Germany and providers of healthcare abroad. Whereas Dutch sickness funds purchase regular healthcare for their insurees (for example for orthopaedic treatment), German sickness funds prefer to buy services for rehabilitative/spa treatment and to arrange health care for insurees on holidays.

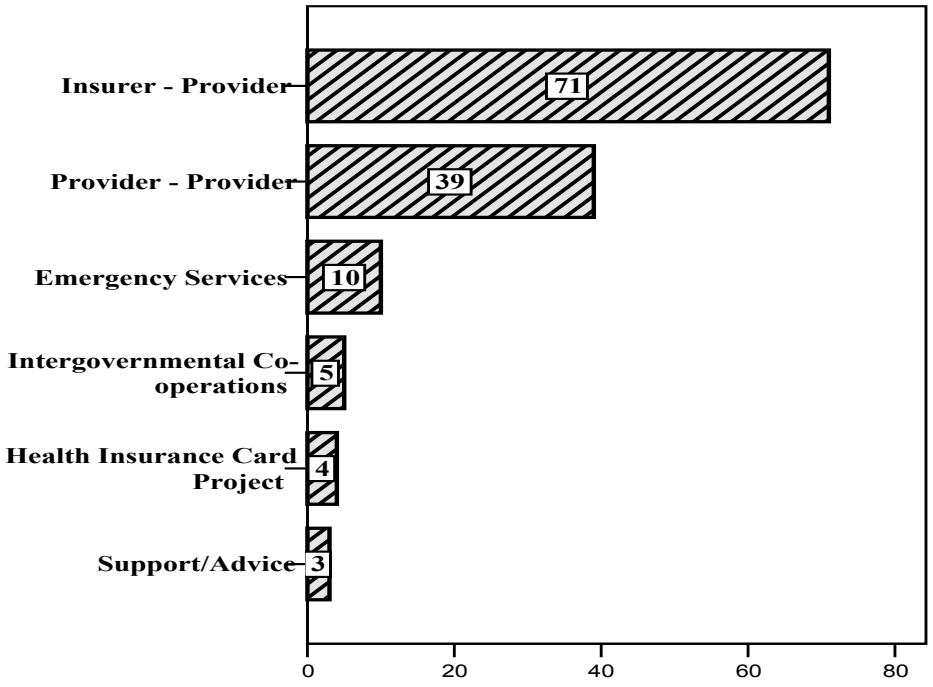

Figure 6: Forms of cooperative arrangement (in absolute numbers)

It is important to determine the duration of cross border arrangements. Are they permanent or temporary? Overall 33 of 132 arrangements were explicitly identified as temporary. 17 among these 33 are between insurers and providers and 14 between providers and providers. This demonstrates that cross border arrangements can serve transitional purposes. This is most often the case if one health system faces capacity problems. The NHS, for example, sent patients to Belgium, France and Germany to overcome the waiting list problem. These

contracts are no longer in force because the waiting list problem has been significantly addressed. In a similar vein the National Treatment Purchase Fund in Ireland contracted (and still contracts) providers abroad (in particular in the UK!). These capacity problems can also be restricted to some specialities. Italy faced severe shortages of organs in the 1990s, which, amongst other reasons, made Italy the most significant exporter of patients in Europe (Mountford 2000: 46). Even if Italy had a higher number of patients accessing healthcare services abroad than other EU countries, it is likely that this flow has considerably decreased. This change may be due to the establishment of a national transplantation network which manages both the organs and the waiting lists, as well as the establishment of an increasing number of oncological centres of excellence.

20 of the 132 cross border arrangements were co-financed by the European Union under the auspices of the Interreg programmes. Most of these programmes take place in the Euregios between the Netherlands, Germany, Belgium and France. This is also the area where cross border arrangements in relation to health care have a long tradition and are deeply institutionalized.[3]

Patient flows in cross-border arrangements

It was not always possible to obtain information about the number of patients involved in the respective cross border arrangements. The range is from a few patients to more than thousand (the latter case is, however, rather the exception than the rule). The cross border arrangement with the most significant patient transfer is between the Universitätsklinikum Aachen in Germany and the university hospital of Maastricht. Both hospitals are located only 30 kilometres away from each other and both are located near the respective border. A formal agreement between the two hospitals has existed since 2004 (however there was informal co-operation since 1995). In 2005 about 2,900 patients took advantage of the cooperation between Aachen and Maastricht. In the long run it might even be possible that both hospitals might merge into a single hospital.

Table 2 shows the patient flows of the cross border arrangements of the countries involved in the HealthAccess project and also their involvement in cross border arrangements with other EU countries. These are differentiated according to type of service, country and contractual partner and in each case to the direction of the patient flow. Overall there appear to be countries which export patients, some countries which import patients and some where there

[3] An overview and analyses of EU-funded projects in the Euregios not only related to access but to health in general can be found in Wolf & Brand (2005).

is no obvious tendency (this can also be seen in the following section about individual patient mobility). Countries which in general appear to send more patients abroad than treat patients from abroad are Italy (with a declining tendency), Ireland, the Netherlands and Austria (the latter however primarily in relation to individual patient movement to Hungary for dental treatment – see next section). Countries in this study which in general appear to treat more patients from abroad than sending them are Belgium, Germany, Hungary, and – at least after the expiry of contracts in the other direction – the UK. In the case of Belgium and Germany this is primarily caused by overcapacity in the hospital sector. Hungary, in particular, imports patients for dental treatment. There seems to be no clear tendency in France and Poland in relation to the export or import of patients.

Table 2: Patient Flows of Cross border Arrangements (which are in force on 1st January 2006)

Category	Austria *Patient Flow* to Austria	both directions	to other country	Belgium *Patient Flow* to Belgium	Both directions	to other country	France *Patient Flow* to France	both directions	to other country	Germany *Patient Flow* to Germany	both directions	to other country
by type of service												
Inpatient	12	2	4	1	5	2	1	9	3	11	1	13
Ambulatory					1						3	5
Inpatient & ambulatory				2	5							
Dental treatment											1	1
Emergency	2	1	1	1	2		1	4	1		6	
Rehabilitation								2				
Advice/support		1			2			3			4	
Intergovernmental co-operation					1			3			1	
Not specified/other					2		1	3	3			
by country												
Austria										3	3	9
Belgium							2	8	6		5	1
France				6	8	2				3	6	
Germany	9	3	3	1	5		1	2	1			
Hungary	1										1	3
Ireland												
Italy	6						2	3			1	4
Netherlands				24	7					3	9	2
Poland												3
United Kingdom												
Other EU countries	2	2	1		1				3	3	1	1
	by contractual partner in Austria			**by contractual partner in Belgium**			**by contractual partner in France**			**by contractual partner in Germany**		
Sickness fund	13	5	4	1			1	1	4	2	3	16
Hospital/provider							2	14	6	1	9	4
Sickness fund/provider				27	1							
Other partners (e.g. fire brigade for emergencies, self help groups)		2	1								8	
Gov. Organisation					1			3			1	

Table 2 continued

Category	Ireland *Patient Flow* to Ireland	Ireland *Patient Flow* both directions	Ireland *Patient Flow* to other country	Italy *Patient Flow* To Italy	Italy *Patient Flow* both directions	Italy *Patient Flow* to other country	Poland *Patient Flow* to Poland	Poland *Patient Flow* both directions	Poland *Patient Flow* to other country	Netherlands *Patient Flow* to the Netherlands	Netherlands *Patient Flow* both directions	Netherlands *Patient Flow* to other country
by type of service												
Inpatient			8	1		4	1		1	2	8	24
Ambulatory			3	4		2			1	2	1	
Inpatient & ambulatory						2						
Dental treatment							1					
Emergency		2				2		1			5	
Spa							2					
Advice/support					3						3	
Intergov. co-operation												
Not specified/other											1	
by country												
Austria						6						
Belgium											7	24
France					3	2						
Germany				4	1		3			2	9	3
Hungary												
Ireland												
Italy												
Netherlands												
Poland												
Spain												
United Kingdom			13									
Other EU countries						2	1	1	2			
by contractual partner	**by contractual partner in Ireland**			**By contractual partner in Italy**			**by contractual partner in Poland**			**by contractual partner in the Netherlands**		
Sickness fund							3				6	23
Hospital/provider				5	3	2			2	2	8	1
Sickness fund + provider												
Other partners (e.g. fire brigade for emergencies, self help groups)											7	
Governmental organisation			13		8		1	1			5	

Table 2 continued

Category	Hungary *Patient Flow* to Hungary	Hungary *Patient Flow* both directions	Hungary *Patient Flow* to other country	UK *Patient Flow* to the UK	UK *Patient Flow* both directions	UK *Patient Flow* to other country
By type of service						
Inpatient	5			13		
Ambulatory						
Inpatient & ambulatory						
Dental treatment						
Emergency						
Spa						
Advice/support						
Intergovernmental co-operation				1		
Not specified/other		1	1			
by country						
Austria	1					
Belgium						
France						
Germany	3	1				
Ireland				13		
Italy						
Netherlands						
Poland						
Spain						
United Kingdom						
Other EU countries	2	1		1		
by contractual partner	**by contractual partner in Hungary**			**by contractual partner in the UK**		
Sickness fund						
Hospital/provider	4	1		13		
Sickness fund + provider		1				
Other partners (e.g. fire brigade for emergencies, self help groups)						
Governmental organisation				1		

Access hurdles and other reasons for cross-border arrangements

One of the principal aims of the HealthAccess project was to identify reasons for the existence of the respective cross border arrangements and to relate them to the access hurdles described above. It was presumed that a cross border arrangement cannot be due to the first access hurdle, i.e. an arrangement which exists because people have no health coverage at all in one country and are therefore transferred to a different country. In contrast, other access hurdles may give cause to initiate cross border arrangements. Certain medical interventions, for example, may not be available in one country and are therefore purchased by a third party payer in a different country (related mainly to the second access hurdle – the content of the health insurance benefit package) or medical services are available in principle but because of geographical proximity or long waiting times are demanded somewhere else (and are related therefore to the fourth and fifth access hurdle respectively). In addition we distinguish between the following reasons for cross border arrangements:

- over-capacities/generation of additional income
- cost-containment/possibility of savings
- reaction to EU regulation, ECJ ruling, and
- acquisition of EU funding

Figure depicts instances of access hurdles or other named reasons for the existence of the cross border arrangement (if a contact person connected with cross border arrangement was not available to explain the reasons, the reason for the cross border arrangement was imputed by the researchers of the project). The most important reasons for the existence of cross border arrangements were the geographical and organisational access hurdles (in 65% and 45% of all cases respectively). On 46 occasions, i.e. in every third case, the EU itself was named as a reason for the cross border arrangement: 34 times in relation to the possibility of additional funding and 12 times in relation to certain EU regulations or rulings of the European Court of Justice. Cost-sharing and acceptability (e.g. culture) were mentioned nine times each, as a (co-)reason for the cross border arrangements. Acceptability was given as the reason in particular (three times) for arrangements between the Republic of Ireland and Northern Ireland.

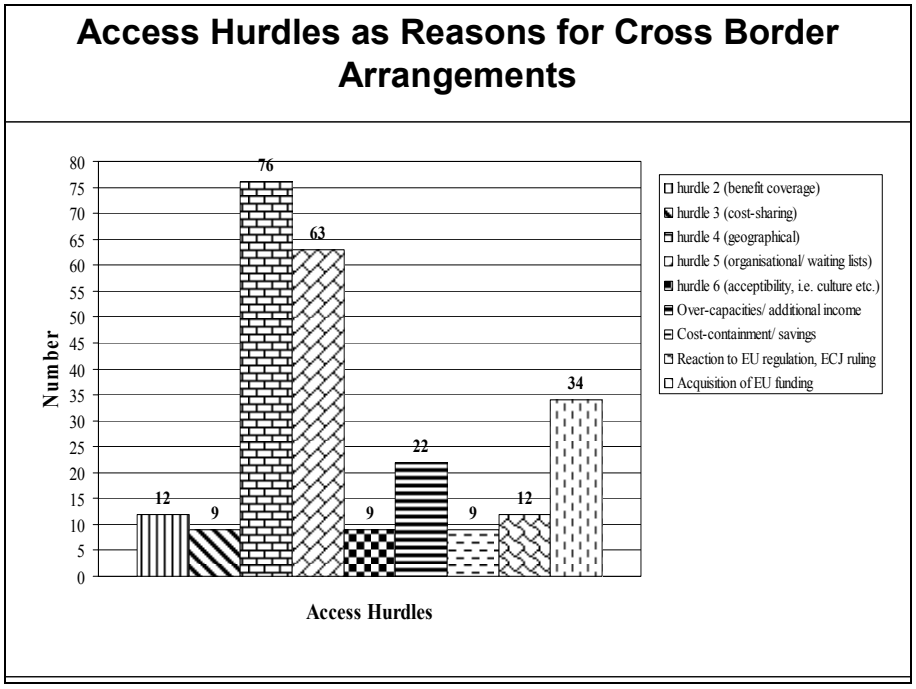

Figure 7: Absolute number of instances (multiple answers possible) of reason for cross border arrangements

Individual patient mobility

In this section we aim at providing additional information on individual patient mobility. This helps to clarify the relationship between patient mobility taking place in general and patient mobility taking place within the structures of cross border arrangements. Table 3 and Table 4 present data on patients travelling to or from the 10 countries involved in the Health ACCESS project. Without doubt, the data presented in the tables are patchy; however they represent the best available figures. They complement and update data which were presented in the commission staff working paper on the application of internal market rules to health services (Commission of the European Communities 2003) which were also used as one source of these tables. In particular the data lack standardisation in relation to patients reimbursed via the procedure based on Regulation 1408/71 or to country of residence or type of insurance for all patients. Overall, however, these data coincide well with the description of cross border arrangements. Belgium not only has most cross border arrangements, it also appears to import, relative to its size, most patients.

Table 3: Patients from other Member States of the EU treated in the 10 countries

Total of outpatient and inpatient cases

Austria	Country	**2003**		**2004**		**2005**	
		Number of bills*	EUR	Number of bills*	EUR	Number of bills*	EUR
	Belgium	1,856	890,331	1,707	769,894	3,176	1,015,198
	Germany	85,535	28,677,474	113,352	39,071,675	125,852	39,222,122
	France	2,535	805,604	4,119	1,147,143	3,956	1,213,383
	UK	3,738	1,358,512	5,660	1,858,101	7,752	3,301,836
	Ireland	0	0,00	0	0	0	0
	Italy	5,692	3,637,695	4,372	1,670,810	0	0
	Netherlands	2,242	2,789,806	166	122,673	3,712	2,214,451
	Poland	0	0	120	73,857	41	9,164
	Hungary	23	24,002	1,793	186,893	438	186,356
	EU 25 - others	6,112	2,085,724	5,506	1,523,003	6,498	3,485,427

Belgium	**E111**				
	Country	**2003**		**2004**	
		Number of bills*	EUR	Number of bills*	EUR
	Austria	238	159,679	186	97,867
	France	-	18,793,883	33,775	22,901,032
	Germany	3,493	1,743,351	2,496	1,843,297
	Hungary	-	-	31	10,204
	Ireland	-	-	-	-
	Italy	7,534	2,939,572	6,951	4,156,299
	Netherlands	3,962	4,231,295	3,098	3,784,475
	Poland	-	-	265	259,240
	UK	3,463	1,748,437	2,813	2,167,961
	EU 25 - others	9,321	5,962,321	9,651	5,956,472

Inpatient cases based on E112

Country	**1998**		**2000**		**2002**		**2004**	
	Number of bills*	EUR	Number of bills*	EUR	Number of bills*	EUR	Number of bills*	EUR
Austria	10	13,345	19	42,306	25	32,726	12	29,874
France	396	1,107,279	775	2,305,954	763	2,923,663	1,416	5,036,657
Germany	550	1,132,810	429	598,228	382	507,795	322	184,789
Hungary	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-
Italy	3,162	5,256,723	2,832	5,222,012	2,575	4,325,159	2,802	4,024,301
Netherlands	3,970	7,743,554	6,262	11,237,524	9,254	19,755,832	12,060	27,127,599
Poland	-	-	-	-	-	-	-	-
UK	18	11,882	57	62,708	49	77,521	62	58,323
EU 25 - others	2,660	5,694,129	3686	6,437,374	4,034	7,219,110	4,788	7,974,079

Continued on next page

still Table 3: Patients from other Member States of the EU treated in the 10 countries

France	2001 2005	435,856 (E111 and E112 together) 7,229 (E112 only)						
Germany[4]	Country	*Total of inpatient cases*						*Costs in EUR*[5]
		2000	2001	2002	2003	2004	2004 per mio. pop.	2005
	Austria	3,572	3,658	3,502	4,698	4,499	556	30,984,407
	Belgium	2,768	3,002	3,007	3,271	3,254	313	10,828,199
	France	4,251	4,368	4,559	4,556	4,816	80	15,388,152
	Hungary	358	433	334	372	357	35	674,338
	Ireland	113	116	98	116	113	28	135,702
	Italy	2,649	2,149	2,081	2,128	1,941	34	19,259,066
	Netherlands	5,329	5,981	6,650	7,042	6,886	424	12,306,920
	Poland	2,382	2,549	2,263	2,633	2,876	75	14,073,220
	UK	1,290	1,232	1,698	1,264	1,594	27	7,452,083
	Total EU-25	28,371	29,375	30,528	32,311	33,037	72	178,744,650
Hungary	Cost settlement in the frame of the Regulation 1408/71 EEC, number of invoices (form E125)							
	Country	Number of bills						*Costs in EUR*
	Austria	7,312						696,281
	Belgium	8						355
	France	8						2,374
	Germany	104						118,502
	Ireland	-						-
	Italy	49						6,423
	Netherlands	1						3
	Poland	1						2
	UK	-						-
	EU 25 – others	55						2,580
Ireland	"Only one patient was treated in Ireland in recent years." (Commission 2003)							
Italy	In 1999: 1,022 persons (E-111 and E112 together) In 2003: 193 invoices for E 112 (amounting to 525,671.74 €) In 2004: 23.426 invoices for E 111 (amounting to 15,113,317€)							
Poland	2004: 3,953 persons from other EU countries based on E111 2005: 9,631 persons from other EU countries based on E111+ 99 persons based on E112							
The Netherlands	3,316 persons in the year 2000							

Source: Country reports for Health Access projects, Commission of the European Communities 2003

[4] The data for Germany refer to patients who have their permanent residence in another country (i.e. they do not necessarily have the nationality of this country). Moreover these data do not refer to the E112 procedure but to all patients treated. These data are analysed in greater detail in the country report for Germany.

[5] Costs of total amounts of German claims to the respective Member States for persons authorised to receive treatment in Germany under Art. 93 and 96 of Regulation No. 574/72.

Table 4: Patients of the 10 countries exported to other countries

Austria		**Total of outpatient and inpatient cases**					
	Country	2003		2004		2005	
		Number of bills*	EUR	Number of bills*	EUR	Number of bills*	EUR
	Belgium	239	110,719	495	183,109	325	255,413
	Germany	26,323	14,087,694	40,310	21,414,260	30,937	16,247,739
	France	898	362,734	923	548,412	979	472,485
	Great Britain	n.a.	390,555	n.a.	534,277	6	146,891
	Ireland	1	27,937	0	0	0	0
	Italy	3,126	1,382,205	4,372	1,670,810	0	0
	Netherlands	336	116,248	0	0	362	180,949
	Poland	0	0	120	73,857	186	105,977
	Hungary	29	9,540	1,793	186,893	4,205	348,599
	EU 25 – others	2,494	571,738	3,486	1,011,022	8,814	1,471,933

England	**Year**	**Number of E112 issued**
	2000	1,099
	2001	1,139
	2002	1,120
	2003	1,052
	2004	353
	2005	408

France	**E112 (2005)**		
	Country	Number of bills*	EUR Million
	Belgium	1,626	4.2
	Germany	1,160	3.9
	Italy	105	0.1
	EU 25 - others	466	0.3

Germany	Country	**No. of invoices – Art. 93 Directive 574/72 (2005)**	**€**
	Austria	137,264	44,373,999
	Belgium	15,818	5,401,132
	France	135,553	69,435,586
	Hungary	104	123,139
	Ireland	0	0
	Italy	44,529	19,475,759
	Netherlands	11,709	9,499,489
	Poland	3,646	1,537,794
	Great Britain	2	22,265
	Total EU-25	483,200	203,119,611

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Still Table 4: Patients of the 10 countries exported to other countries

Hungary	Country	**Bills**	**€**
	Austria	601	549,863
	Belgium	31	9,930
	France	92	40,141
	Germany	960	693,411
	Ireland	-	-
	Italy	43	90,654
	Netherlands	69	37,582
	Poland	45	27,612
	UK	-	-
	Total EU-25	12,797	1,996,539
Ireland	**Year**	E112	total treatment abroad
	2000	ca. 600	ca. 650
	2001	ca. 600	ca. 650
	2003	ca. 230	-
	2005 (January to October)	ca. 230	-
Italy	21,300 persons were treated abroad in 1999 (E112: 16,280). No later figures are available. It is assumed that they have declined since then (estimate for 2004: 3,547).		
Poland	in 2005: 13 accepted applications for the E-112 procedure in 2005: claims delivered to the National Health Fund to for 12,846 patients from Poland treated abroad, based on E111		
The Netherlands	-		

Source: Country reports for Health Access projects, Commission of the European Communities 2003

These figures should be treated with severe caution: Several research projects as well as surveys sent by the Commission to the Member States have not produced a reliable set of figures. In some instances what is not counted does not seem to exist (e.g. the "one patient" in Ireland according to the answer provided to the European Commission for its 2003 report) .In others (e.g. Austria), figures differ by up to a factor of 100. In other instances the basis for calculations is given (e.g. number of E111s, E112s, E125s, invoices) but not comparable between countries. Clearly, such missing data, ill-defined data and conflicting data remain a major problem when evaluating cross border patient flows.

The figures in Table 3 and Table 4 are, in fact, an underestimate since not all cross-border arrangements utilize the E112 procedure. The data described for Germany (and possibly some other countries as well) may overestimate the *international* patient movement somewhat since these figures refer only to patients with permanent residence in the respective countries. For example, we find 4,816 inpatient cases in Germany with permanent residence in France in 2004 but only 1,160 "French" patients treated in Germany under E112. Presuming that the

figures do not vary much from year to year, this means that either of the majority of people living in France treated in Germany are in fact insured in Germany or do not utilize the E112 procedure for other reasons. The significant drop recorded for England is due to a change in the regulations around the issuance of E112s for maternity care.

"European Centres of Reference"

There is no common definition of what constitutes a "European Centre of Reference". Six European countries (Sweden, UK, Denmark, Belgium, France and Italy) have an official concept of Centres of Reference for rare diseases, but these definitions vary. The EU definition of rare disease is any disease with a prevalence less or equal to 1 in 2,000 in the European population (Rare Disease Task Force 2005). Another very plausible explanation for the fact that no cross border arrangements to European Centres of Reference could be identified may be that patients with rare diseases are rare and it is therefore administratively unnecessary to sign a formal agreement (rather than the utilization of the E 112 procedure for individual patients).

So a further aim of this individual description is to gather data on diagnosis in order to test the hypothesis that E112s are primarily issued for highly complex procedures for treatment in (potential, or de facto) European Centres of Reference. So far it was only possible to obtain information about diagnosis underlying treatment via E112 for the UK and Italy. In relation to the UK, these referrals relate largely, it seems, to instances where the treatment is not available in the UK. But the E112 scheme is also used to allow UK residents to return to their country of origin to receive maternity care or to otherwise receive the required treatment close to their family (see UK report for further information). In relation to Italy there are data for the province of Imperia (population approx. 200,000), which is located close to the French-border. In 2005, 52 patients were allowed to receive healthcare services abroad through E112 form, and the relating treatments are presented in Table 5.

Table 5: 52 treatments based on E112 in the province of Imperia (Italy)

Absolute number	Treatment
9	chemotherapy
1	melanoma control
29	post-transplantation controls
1	installation of a bacoflene pump in order to relax muscles
1	surgery intervention for transcleral resection
3	Deliveries
1	radiotherapy with proton linear accelerator
1	rebuilding of eye
1	brain magnetic resonance imaging
2	therapy after burns
1	therapy in hyperbaric chamber

Source: Italian report

This section has dealt predominantly with inpatient data, excluding ambulatory treatment. It is known, however, that there can be substantial numbers of patients travelling for dental treatment, particularly at the borders between Austria and Hungary: The Viennese social health insurance fund has estimated that about 16 % of claims for remuneration are for treatments in Hungary (in 2001). Others have assumed that there are between 150,000 to 200,000 cases of people travelling to Hungary for dental care (Österle & Delgado 2006). The Italian report suggests that numbers of Italians going to Hungary (also to Croatia and Slovenia) for dental treatment are increasing.

III. Analysis of cross border arrangements and cross border movement

Movement across European borders for reasons of health gain is not new. Older 'mappings' of these movements would show arrows pointing towards the spa towns of central and eastern Europe, and towards warm, dry southern Europe. The emergence of organised public health care systems during the late nineteenth and twentieth centuries did not end travel for health gain, despite the rapid development of medical technology and practice and the extension of public coverage to include ever-larger segments of the population. People continued, and continue in increasing numbers, to travel abroad for health care, both on a private basis and via their public health care system.

Private Travel

In so far as concerns private travel, there are various reasons for individuals choosing to seek care abroad. These include the wish to receive the required care in their country of origin (so as to be close to their family, or to be in a more familiar environment), to be treated in a well-known centre abroad, or to benefit from lower-cost private treatment. Patients may also wish to avoid public system waiting lists at home, or to access care that is not covered, or is only partially covered, by their public system – typically cosmetic surgery, reproductive treatments, termination of pregnancy and dental treatment – but the private alternative locally may either be not available or be too costly. Opportunities for accessing treatment abroad on a private basis have been enhanced by improved travel connections, improved information on foreign providers (partly as a result of providers actively marketing their services to potential customers abroad), individuals becoming increasingly accustomed to crossing borders, and the appearance of specialist brokers to facilitate the process.

Travel via the public system

Individuals are also able to travel to other Member States to receive treatment via their public system through the formal referral mechanism, usually administered on the basis of the E112 scheme. In such cases formal referral is not so much a matter of patient choice as of necessity. For example, a referral may be made to enable a patient to access an item of technology or a specialist treatment that is not available domestically. The receipt of treatment abroad via the home system is not limited to such cases as these, however. The E112 can equally be used to allow patients to receive care close to family abroad (maternity care being a typical example). Individuals may also choose, following the recent rulings of the European Court of Justice, to exercise a new 'right' to receive treatment in another Member State where they face 'undue delay' in access to treatment at home, or where the care received is located outside a hospital setting (in practice, it appears, Member State health care systems have yet to adapt themselves fully to the requirements of this legislation, and in some cases patients may be forced to pursue reimbursement through the courts). Finally, the legislative framework which underpins the E112 scheme also underpins the E111 (now 'European Health Insurance Card') scheme, which entitles Member State citizens to access, without charge, immediately necessary treatment whilst present in another Member State.

Formal cross-border arrangements

Movement across European borders to receive health care is therefore not new, and, although the number of patients involved may not be significant relative to all health care delivered, it is a fully institutionalised feature of European health care. What is new – or newer – is the

rapid development of what we are referring to as 'formal arrangements' (often contracted, but not necessarily so) for the delivery of health care – or related services – across borders which aim at facilitating access for groups rather than for individuals in isolation.

These groups will typically be defined by their geographical location, by membership of a particular insuring or purchasing organisation, or by their problematic place within the home health care system (for instance, their being on a long waiting list, or their being one of a group having special needs which are more readily met abroad than at home). Often, the group concerned will exhibit more than one of these features. We also note that the existence of an arrangement may allow insurance funds to offer their customers the *option* of receiving treatment at home or abroad as a way of attracting customers who value such choices; and it appears from the case of some German sickness funds that insurer organisations do indeed use this option as part of their marketing strategy.

Such cross-border arrangements have been the principal focus of this project and shall be the key focus here. The previous section has given a quantitative overview of these arrangements. In what follows, we describe and discuss the general nature of these arrangements.

Types of cross-border arrangements

As the previous section showed, cross-border "arrangements" can be roughly grouped under four headings. Broadly-speaking, these different types reflect different underlying rationales, involve different types of actor, and affect different groups of patients. They are as follows:

1. border area emergency coordination arrangements
2. arrangements among providers (typically, hospitals located in border areas)
3. arrangements between insurers/purchasers (in one country) and providers (in another)
4. administrative arrangements designed to facilitate access to care abroad, but not actually involving the purchase or provision of care

Emergency coordination

The oldest arrangements are those which relate to planning for major disasters in border areas (although these happen to be among the newer arrangements too). For instance, an agreement of this type has been in place between France and Germany since 1977. These 'planning' arrangements are not strictly of the health care type, but can include a health care component. This would relate to issues such as responsibility for response, for casualty reception, and so on.

Related to this type of arrangement, but with a clearer health care focus, are arrangements involving the shared use of emergency and ambulance services. This type of arrangement is especially prominent in the Netherlands-Germany-Belgium border regions (both bi-lateral and tri-lateral arrangements exist), but also, for example, between Austria and Germany (a shared emergency helicopter service with equal financial and organisational input from both countries), and between Eire and Northern Ireland (which has a history of informal cooperation around the use of emergency ambulance services).

Arrangements such as these are responses to the fact that for some people living in border regions, a neighbouring country ambulance would be able to respond more quickly than a home country ambulance, and that a hospital emergency department located across the border may be closer than the nearest located on the border's home side. Here, it is clear that cooperation (whether informal or formal – by way of agreement, or contract, or both) is a way of addressing access problems that arise for people living in border areas in a manner that is cost-effective. That is, the alternative (for example, investing further resources in the home ambulance service) would constitute a more expensive means of achieving the same outcome.

Provider-provider

Cross-border arrangements involving agreements between provider institutions are also a significant presence. One of the most important is that between Aachen University Hospital in Germany and Maastricht University Hospital in The Netherlands, two major hospitals located 30 km apart. These hospitals have cooperated informally since 1995, but in 2004 entered into a formal service sharing agreement. The formal agreement and the informal cooperation involve some 2,900 patients annually (2005 figure).

Two similar agreements are in place between France and Belgium. One goes beyond simple provider-provider cooperation to encourage the development of complementarity among provider facilities and patient movement across the border – that is, its overall aim is effectively to develop a local, integrated health economy that straddles the border.

Cooperation between provider institutions located on different sides of a border is not simply about enabling patients to have faster access to treatment, but to plan provision in such a way that takes into account the availability of resources close by whose duplication would be wasteful, given the absence of the border as impediment to movement. A major consideration within such arrangements must be the funding mechanism – this can be dealt with either on a provider to provider basis or, as in the case of the 'local health economy' on the Franco-Belgian border, by the use of pin and chip technology to enable payers to finance care

delivered abroad. In several arrangements of this type the E112 scheme is used to administer reimbursement.

These arrangements relate essentially to the problem of geographical access to covered health services but also to overcapacities (on one side of the border) and the desire to rationalise. People in border regions may find themselves in situations where they have readier access to care in the neighbouring country than in their own country. Also, providers located close to one another but on different sides of the border may find they are duplicating one another's activity and that it would make economic sense, given the presence of open borders, to operate in a more complementary. Local border-area economies have long been recognised as a feature of economic landscapes, and developments in cooperation among health care entities in border regions, although recent compared with other forms of economic activity, constitute a further manifestation of this phenomenon. This type of arrangement can also be used to respond to sudden, and temporary, requirements as they emerge. Thus, for instance, a Polish hospital has made use of a Czech hospital to access a CAT scanner when its own machine was out of order.

Insurer/purchaser-provider

Agreements between insurers/purchasers in one country and providers in another can reflect several rationales, although two stand out, and usually operate in conjunction with one another. The first is the presence of 'organisational' hurdles to access on the purchaser side (for example, the presence of waiting lists). The second is the ability (and the incentive) for purchasers and providers to behave in a market-like manner (most straightforwardly, where purchasers are concerned, to shop around for the best deal, and where providers are concerned, to maximise revenue). Of course, there may be a barrier in place to the development of such relationships, namely, the presence of significant price differentials between countries (this applies especially in relation to longer-term relationships, rather than to 'spot' purchases). This barrier may, in part, explain the absence, or underdevelopment, of this type of arrangement between the new EU Member States of Central and Eastern Europe, and countries such as Germany, where prices are high relative to the prices faced at home.

There are many purchaser-provider arrangements in place, but with a special concentration between providers in Belgium and purchasers in The Netherlands. There are some 21 arrangements in place which see patients from the Netherlands going to Belgium to receive treatment. All address waiting time and other access-to-service problems. The presence of such arrangements in such quantity reflects items such as problems of under-capacity, the

presence of market-type behaviour, and the desire to place downward pressure on provider prices locally (suggested by Glinos et al. 2006). The development of this type of arrangement, largely motivated by waiting list problems, is a recent one relative to cooperation-based arrangements, and may reflect two key factors: the requirement under European law that patients be given access, under certain conditions, to providers located abroad (formal arrangements allow enactment of this 'right' to be 'controlled' and to be met in an organised, cost-effective, and safe way); and the imperative for some insurer-purchasers to behave in a competitive manner – and of providers to do so where their method of remuneration is partly fee-for-service based.

Arrangements between purchasers in one country and providers in another can reflect other, quite different rationales, however. They can, in effect, have the same aims as the referral of individuals through the E112 scheme but in the form (it might be said) of a 'group booking'. Thus France sends about 300 patients per year to Belgium for scintigraphies; Belgium about 800 patients per year to France for Magnetic Resonance Imaging and 5 patients per year for mental health services; France sends patient to University Hospitals of Geneva for highly specialised treatments (this latter is an example of formal referral via the E112 scheme coming to involve a volume of patients sufficiently high as to make a formal arrangement worthwhile); Austria sends patients with highly infectious diseases to Munich for treatment; Malta sends in excess of 300 patients to the UK per year for highly specialised treatments that cannot be provided locally; Eire sends certain categories of transplant patient to the UK, and further sending of patients occurs to meet requirements to reduce waiting times; and Germany sends about 500 older patients with chronic conditions per year to Austria, Hungary, Italy, the Czech Republic and Slovakia for specialist preventive treatment.

Italy presents an interesting example of a case involving an Italian purchaser and Swiss providers which is underpinned by geographical rationalisation. The Italian municipality concerned is surrounded by Switzerland – the need to operate with Swiss providers is, therefore, as much a matter of necessity as of economic logic.

Purchaser-provider arrangements, then, may be in place in response to geographical access problems (it making more sense to contract abroad than to send patients elsewhere in the home country). But these arrangements may also reflect considerations independent of geography, in particular the need to reduce organisational hurdles to access such as waiting lists. Cross-border arrangements can reflect other factors not touched on above, however. For instance, the agreement between Bolanzo in Italy and Austria reflects a need to provide

Bolanzo residents with access to specialised services and the desire to reduce waiting times, but it also reflects an important *cultural* factor. The residents of Bolanzo are German-speaking, and prefer to receive care from German speakers rather than non-German speakers elsewhere in Italy. Austria, to give an example of another not-readily classifiable cross-border arrangement, has agreements with several neighbouring countries for the exchange of surplus organs. Another interesting development, which takes this type of arrangement to its logical conclusion, concerns the construction of a hospital on the Franco-Spanish border which will be planned, financed and operated by the two countries, and which will serve Spanish and French patients equally (due for completion in 2009).

Access facilitators

The final heading we give above – schemes aimed at facilitating access to care abroad – is in a sense secondary to these other groups. These schemes exist to enable the formal arrangements already mentioned to function more effectively, but we include them here as the fourth group because they involve different countries entering into agreements and acting together to develop and operate the necessary technologies.

There are several such arrangements in place, one of the major ones being 'Health Card International'. This is a 'smart card' arrangement between German and Dutch sickness funds and providers in the Mass-Rhine region which allows members to access specialist, hospital and pharmaceutical care across the border without having to seek prior authorisation. Thus far, 4000 Dutch insurees have used the technology to access care in Germany, and 800 Germans have used it to access care in The Netherlands. Another arrangement which is purely information based is 'Europe Health Portal', operating in the Belgium-Germany-Netherlands border area. This uses the internet to provide people in this area with information regarding how to access treatment abroad, should they wish to do so.

Localism/ local agency

Cross-border arrangements are flexible mechanisms which can be more or less permanent, or temporary, which emerge in response to local needs (including needs relating to local cultural factors, such as language), and which can be altered in response to changes in those needs. Thus, for instance, there are several instances of arrangements which have become more complex over time, adding new services or increasing the number of patients involved, as the need for this type of change has emerged. That these arrangements are responsive to local needs is reflected in the fact that they are by and large local initiatives, with little direct involvement from the political-administrative centre. Even in a non-devolved health care

system, such as that of England, the Department of Health has made it clear that decisions around contracting with providers abroad is a purely local matter. In countries with significant levels of devolution such as Italy, this 'local agency' is, predictably, ingrained.

Local agency is clearly an important dimension of the cross-border arrangement form – it is precisely what enables responsiveness and timeliness in the design and implementation of arrangements. However, it is also the case that local responsibility can *limit* the potential of cross-border arrangements to successfully address the problems they are designed to address (problems relating to access at home and to economic rationalisation of services generally).

Limitations of local agency (1): Central involvement helps

First, cross-border arrangements are at risk of failing in the absence of central support (there are several instances of this occurring; some arrangements would never have emerged in the absence of that support). Central support for local initiatives can take a variety of forms – most obviously, financial. Central or regional governments have been involved in partial financing of various arrangements: between Eire and Northern Ireland, for example, UK Government support here reflecting a political motivation (the Peace Process), but without which the major arrangement in question would not have emerged. Support from the European Union has also been crucial to many of the border area arrangements currently in place. This financial support has been made available through the EU's Interreg programme, which looks to foster cross-border cooperation in a variety of areas (the 'Europe Health Portal' and the arrangement between Aachen and Maastricht Hospitals are examples of arrangements with Interreg support, as are the hospital being developed on the border between France and Spain and the 'Cooperation and Working Together' arrangement between Eire and Northern Ireland).

Financial support is only one form that central support can take, and may not be the most important in terms of its potential impact on the development of cross-border arrangements (or the *opportunity* to develop cross-border arrangements) that are responsive to local needs. For example, the relatively short-lived English schemes sending patients abroad to Belgium and France for treatment on an organised basis were not only reliant upon central government financial support, but were also organised centrally by the Department of Health. To give one more (negative) example, one factor which could help to explain the absence of any arrangements in Hungary to send patients abroad for treatment in an organised manner is, not only the absence of a legal framework enabling this type of patient movement, but the presence of a legal framework which actively prohibits it. This appears to be a unique case,

but it does highlight the importance of governments playing a facilitatory role that need not merely be financial in nature.

Limitations of local agency (2): Constraints on learning

Second, purely local responsibility is limiting in the sense that the opportunities to learn from and to benefit from the experience of other existing and past arrangements is severely constrained. Local responsibility means, in practice, that information (even simple data on the existence of an arrangement) is usually not collected centrally: a central health ministry may simply have no idea as to whether there are cross-border arrangements in place or not. As far as we have been able to ascertain, formal evaluations of cross-border arrangements are few relative to the number of such arrangements, are often internal, and often respond to questions that are of only local significance. If cross-border arrangements are to play a more significant role in future, and if they are to be developed and operated efficiently, better information gathering, analysis, and dissemination would enhance the potential of these arrangements to achieve their aims.

'Localism' is certainly a strength. It means that arrangements can meet local needs and can avoid any cumbersome central bureaucracy. However, the involvement of central government can be enabling and, crucially, may make the difference between a successful arrangement and a failed one. Central gathering of information can also help future arrangements fulfil their potential.

Why are cross-border numbers so different? The relative importance of factors

Looking at the reasons and factors for cross-border arrangements, and cross-border patient care more generally, a variety of explanatory factors emerge to explain the greatly varying numbers for both the "organized" as well as the individually motivated cross-border care. If the numbers of patients receiving care in another country (with the caveat of their unreliability – see above) are used not as absolute numbers but as relative numbers (in this case, per million population), certain patterns begin to emerge: Looking for example on inpatients treated with an E111 in Belgium – i.e. presumably those who happen to be in the country due to other reasons –, it becomes clear that persons from countries speaking the same language (i.e. primarily France and the Netherlands) have the highest "density" of patients. This may be either due to the fact that more of them travel to Belgium, or that more of them feel comfortable to remain in Belgium once they need hospital care (or both). These countries are followed by Italy and only then by other neighbouring countries such as the United Kingdom

and Germany, i.e. proximity appears to be a somewhat secondary but still important reason (Fig. 8).

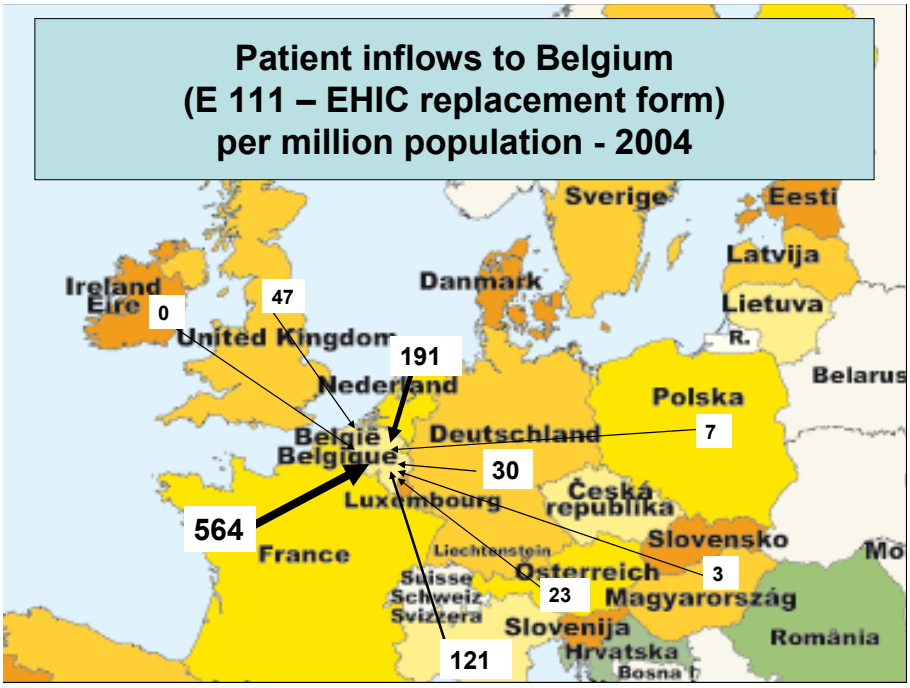

Figure 8: Culture, capacity problems and proximity may all matter – E 111 inpatients treated in Belgium

If, however, inpatients treated under E112 rules – i.e. preauthorised within or outside formal cross-border arrangements – the Netherlands send by far the most patients (relative to their population; Fig. 9). In this figure, the capacity-driven arrangements between Dutch sickness funds clearly show. However, that Dutch sickness funds contract Belgian hospitals will (besides the capacity problems inside the country and the spare capacities in Belgium) also be related to proximity and, probably more important, a common culture and language which not only facilitates the contracting procedure but also makes it acceptable to patients to actually utilize the arrangements.

Finally, Fig. 10 provides another example that proximity and common language are important for cross border flows (in this case, to Austria; Fig. 10).

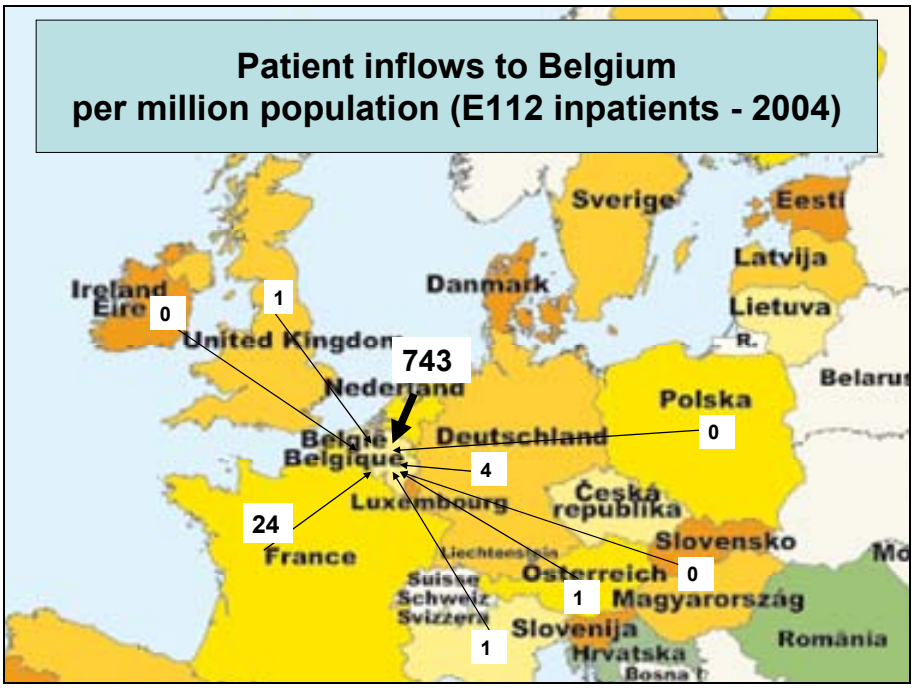

Figure 9: Culture, capacity problems and proximity may all matter – E 112 inpatients treated in Belgium

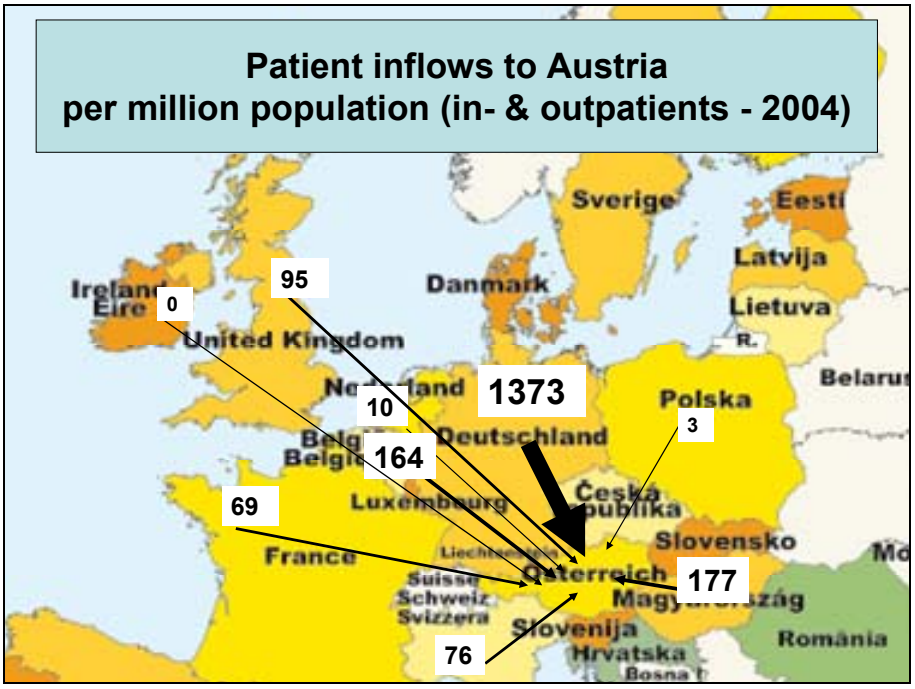

Figure 10: Culture, capacity problems and proximity may all matter – E 111 and E 112 cases treated in Austria

Other features of cross-border arrangements

Despite their variety, and despite the absence of central data gathering, this project has made it possible for us to make observations about cross-border arrangements that apply generally. We have already noted their 'localism' and their flexibility (or capacity to be responsive to local needs). There are, however, several other dimensions that are of equal import. These include (a) the importance of incentive alignment, (b) the importance of stakeholder support, (c) the issue of the distribution of benefit and risk (including in relation to the country's wider health care system), and (d) the potentially determining role of the purely logistical dimension.

Incentive alignment

Incentive alignment is a crucial precondition for a cross-border arrangement to emerge and to be sustained. Both (or all) parties to an arrangement must benefit from the arrangement, even where their core interests diverge. The clearest example of this is to be found in arrangements which involve the purchase of services from a provider located abroad with the aim of dealing with waiting list problems at home. The provider to be contracted with will have to have an incentive to receive patients from the foreign purchaser, and if the provider has its own under-capacity problems, this incentive will be absent. It may not even be a sufficient condition for the provider to have spare or over-capacity. The crucial element here may be the mode of reimbursement. Fee for service payment, for instance, gives providers an incentive to produce more services – thereby increasing their income. The combination of fee-for-service payment and over-capacity explains the dominance of Belgium as a primarily provider country within the cross-border arrangements into which it has entered (although geographical proximity to countries with waiting list problems constitutes another important explanatory factor). This need for incentives to be aligned applies in all other types of arrangement where all parties to the arrangement expect to benefit.

The requirement of incentive alignment also presents a threat to the sustainability of an arrangement, however. Cross-border arrangements are marginal within the wider health care system, and will be subject to, rather than determinate of, wider health care policy. Thus the decision to increase capacity in the sending country will place receiving providers at risk (much effort may have been invested in developing contracts which will show no return should the contract be scrapped). Likewise, to decrease capacity in a country with excess capacity or to alter the reimbursement system for providers may mean that the sending country finds itself having to look for another provider elsewhere. This can have serious

repercussions if the sending country has allowed the existence of a cross-border arrangement to influence domestic health care policy more generally, for instance choosing to actively reduce capacity (or to fail to sustain capacity) in light of the existence of an efficient alternative abroad.

Stakeholder support

The issue of stakeholder support is likewise crucial (and we include here patient willingness to travel). It may be sufficient for just one of the key stakeholders (who need not necessarily be one of the primary 'actors' involved in the formal arrangement) to resist the arrangement for the arrangement to fail, at worst, or to fail to achieve its potential, at best. This is a real risk, as stakeholders face various incentives, some of which may conflict with those at play within the arrangement.

For instance, in the English schemes to send patients abroad, medical professionals were, in general, either lukewarm or actively hostile to participation. Various reasons have been suggested for this, including 'national pride' and shame at having to send patients abroad. This may have been the case. But a more plausible explanation is the fact that doctors in England often practice in both the public system and the private system, and their private clients are often patients who are unhappy with having to wait for treatment in the public system. To begin to send such patient abroad for rapid treatment would present a real threat to physician and surgeon income, and medical profession resistance would constitute a rational response to this threat. The planning of the cross-border arrangements does not appear to have allowed for this type of extraneous incentive structure. Other factors too could have accounted for the failure to renew these cross-border arrangements so soon after their inception – for instance, the decision to allow the public system to contract for services with private health care providers in England. Crucially, the very physicians and surgeons who would lose out by sending patients abroad for treatment would gain by sending them to private hospitals domestically.

The distribution of benefit and risk

In so far as concerns the distribution of benefit and risk, we have already touched on this. In a cross-border arrangement, both sides should benefit, yet both may also be subject to a risk in relation to the possibility of changes taking place in the environment. But the issue of benefit and risk goes beyond this. Given the localism of cross-border arrangements, it is likely that any benefit to emerge will be concentrated. However, risk may not be – it is possible that there will be negative outcomes that are spread more widely.

This risk was recognised by the Belgian Government when the Department of Health of England chose to contract Belgian providers for a high volume of surgical procedures (as it happens, the actual level of patient flow was far below initial expectations, another example of a risk that may be faced by the provider involved in the arrangement). The Belgian Government was concerned that this new arrangement with England would have two negative health system consequences. First, that it would lead to capacity problems in Belgium and, in consequence, Belgian patients having to face longer waiting time or even introducing waiting lists. Second, that it would lead to price inflation across the provider sector. The risk of these events was addressed through a bi-lateral agreement with the UK Government to ensure that the Department of Health would pay only the standard Belgian tariff and that Belgian provider capacity would not be placed at risk.

This example shows that, as with the issues of stakeholder support, some foresight is necessary in the planning of cross-border arrangements, as there may be an impact beyond the closed space of the arrangement itself, depending on the wider incentive structure that players in the health care system face.

We would also note that there may be less tangible benefits and risks to emerge from cross-border arrangements which may be difficult to predict, but whose presence should be monitored. An example might be that patients with low willingness to travel but who would otherwise be eligible to be involved in a cross-border arrangement may suffer a lower standard of care than that they would have received had the arrangement never come into force. Another, similar risk is that resources might be diverted from other, unaffected areas of health care to support the arrangement, leaving those not involved in the arrangement at a disadvantage. This is a concern that has been expressed on several occasions in relation to the obligation under EU law for authorisation for treatment abroad to be granted in cases where there is 'undue delay' in access to treatment at home. There is the risk that this would require significantly greater resources for that area of care (primarily elective surgery), and that these may be transferred from other (less 'protected') areas of care such as mental health. Up until now, evaluations of cross-border arrangements – the few available – do not appear to have paid sufficient attention to wider health system impacts (either positive or negative), and our comments here can therefore only be speculative.

The logistical dimension

Finally, and briefly, the logistical dimension refers to a host of factors relating to the actual operation of the arrangement. A failure of logistics, like a failure of stakeholder support, may

in the extreme be sufficient to scupper an arrangement despite all good intentions. Key among these factors are the travel coordination which takes into account the fact that the patient will likely have travel difficulties on the way to the provider (relating to their condition) and on the way back home (relating to the treatment undergone); the efficient transfer of medical records; the adequate provision of information to the patient; and, crucially, the reintegration of the patient into the home health care system.

Conclusion

The project has analysed to which extent six hurdles impede the access to health care within countries and whether they are related to cross-border arrangements, especially whether these can alleviate intra-country access barriers. As the project has shown, the *first hurdle* (i.e. problems arising from an incomplete coverage of the whole population) cannot be solved through cross-border arrangement, as purchasers buy services abroad only for those which are covered. It therefore remains the task of the Member States to ensure that population coverage is both legally and de facto universal. A similar conclusion can be drawn for the *second hurdle* relating to benefits covered. As the benefit packages are currently decided nationally, arrangements for patients to receive explicitly excluded services under public funding elsewhere basically do not exist. Cost-sharing, the *third hurdle* may be an important consideration for patients who potentially benefit from lower prices abroad – but not so for purchasers thinking of cross-border arrangements. Of the various geographical reasons as the *fourth hurdle* within countries – i.e. rural or remote areas, insufficient density of providers and closeness to borders where providers across the border may be closer to patients than national providers – only the latter can be addressed through cross-border contracts. Such a situation is the reason stated most often for cross-border contracts. Countries experiencing domestic waiting list problems – as a visible sign that a *fifth hurdle* impedes access – are sending (or have sent) patients abroad to take advantage of spare capacity there. If such problems are the rationale for patient mobility, the arrangements are often time-limited. Cross-border arrangements aiming at the *sixth hurdle* (acceptability and actual utilization of services) usually increase choice for patients, often without addressing real access problems. Such arrangements are typically offered by sickness funds operating in competitive environments. Taken together, the following picture emerges (cf. Fig. 11).

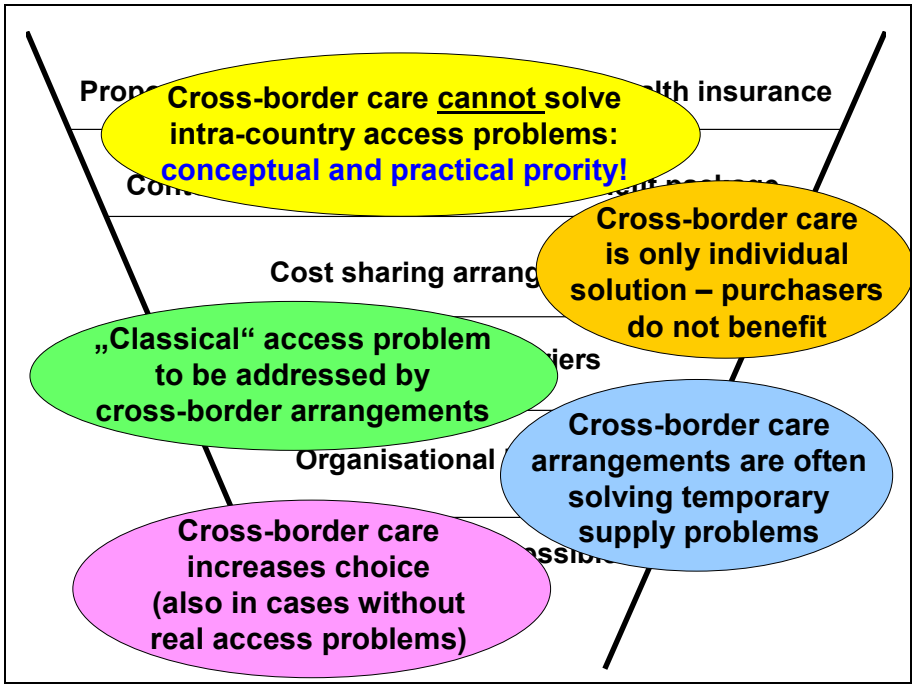

Figure 11: The contribution of cross-border arrangements to solving intra-country access problems

In many respects, cross-border arrangements demonstrate a basic economic logic: they constitute responses to the 'make or buy' decision – or, more specifically, to the 'make-or-buy at home' versus 'buy abroad' decision. Cross-border arrangements have as their secondary objective efficiency and cost effectiveness (their primary objective being to enhance access or to reduce hurdles to access, by and large), and the decision to buy abroad – or to cooperate across some other dimension – tends to reflect this.

However, wider incentive structures in which the various actors are bound up also play a role in determining the success or failure of a cross-border arrangement in terms of its achieving its primary objectives. The flexibility of this mechanism means that there is potential for designers of cross-border arrangements to tailor an arrangement not only to immediate local needs but to factors that are in play as a result of incentives that emanate from elsewhere. Likewise, they can use the same flexibility to seek to ensure that benefits are spread beyond the scope of the arrangement itself and to limit any negative impact on the wider health care system.

The following fundamental questions should guide the analysis of cross-border arrangements and should be borne in mind in the initial design and review of cross-border arrangements:

- Do cross-border arrangements increase efficiency of provision?

- Do cross-border arrangements increase quality of provision?
- Do cross-border arrangements improve access, or succeed in addressing access problems?
- How are the benefits and risks of cross-border arrangements distributed?

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