POLICY SUMMARY 14

Cross-border health care in Europe

Katharine Footman, Cécile Knai, Rita Baeten, Ketevan Glonti, Martin McKee







Evaluating care across borders



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Katharine Footman, Cécile Knai, Rita Baeten, Ketevan Glonti, Martin McKee

On behalf of the ECAB Partners¹

¹ LSE Health; European Observatory on Health Systems and Policies; London School of Hygiene & Tropical Medicine; OSE, European Social Observatory; Universiteit Maastricht; Technische Universitat Berlin; European Centre for Social Welfare Policy and Research; University of Barcelona (Universitat de Barcelona); Institute of Public Health of the Republic of Slovenia; PRAXIS Center for Policy Studies; National Research and Development Centre for Welfare and Health; Semmelweis Egyetem; Regione del Veneto

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Cross-border health care in Europe

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Authors

Katharine Footman, at the time of writing, Research Assistant at the European Centre on Health of Societies in Transition, London School of Hygiene & Tropical Medicine, now a Monitoring and Evaluation Analyst at Marie Stopes International, United Kingdom

Cécile Knai, Lecturer in Public Health Policy, London School of Hygiene & Tropical Medicine, United Kingdom

Rita Baeten, Senior Policy Analyst, European Social Observatory (OSE), Belgium

Ketevan Glonti, Research Fellow at the European Centre on Health of Societies in Transition, London School of Hygiene & Tropical Medicine, United Kingdom

Martin McKee, Professor of European Public Health at the London School of Hygiene & Tropical Medicine and Research Director at the European Observatory on Health Systems and Policies, United Kingdom

On behalf of the ECAB Partners

Editors

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Summary

- Cross-border patient mobility is high on the agenda in the EU. Although there are low absolute levels of patient mobility, the most accessible or appropriate care for certain groups, such as temporary visitors abroad and people living in border regions, may be in another EU Member State.
- Mobility of health professionals in Europe is also an important policy issue, as many EU countries are reliant on migration of health professionals from other Member States, and variations in education and professional standards between countries may impact quality of care.
- Recent legislative changes which clarify patient entitlements to crossborder care are likely to have important impacts on national and EU-wide policies.
- Although the number of patients seeking care in other EU Member States is low, there are challenges for continuity of care and communication between health professionals for those patients who do receive care abroad.
- Case studies of arrangements that are explicitly designed to provide care across borders are examined; common factors contributing to the success of these arrangements include adequate funding and measures to ensure continuity of care such as discharge summaries, care plans and assigned contact persons. However, cross-border collaborations can face multiple logistical barriers, and can have unintended negative consequences, particularly when promoting competition across borders.
- Quality of care issues are likely to arise when cross-border care falls outside of such arrangements. Measures to ensure quality of care for all patients receiving care across borders include strengthening implementation of clinical guidelines, standardization of discharge summary content, appropriate regulation of professional standards, optimal use of technologies such as telemedicine and eHealth records, and management of language barriers through interpreters and language training for health professionals. Such measures are likely to have positive impacts on quality of care for patients receiving care in their home country as well as those who travel abroad.

1 Introduction

The number of people crossing European borders has increased exponentially over the past two decades, and patient mobility is high on the agenda at national and EU level. Yet the absolute volumes of patient mobility within the European Union remain relatively small and the vast majority of health care is obtained from providers within the same country as the patient, as people are usually unwilling to travel significant distances for care. However, in some situations in the EU the most accessible or appropriate care happens to be in another Member State (Bertinato et al., 2005), and where movement does take place it raises complex questions about its impact for patients, health systems and health professionals. The free movement of people within Europe has also resulted in substantial mobility of health professionals, an issue which has received less attention (Glinos, 2012), but has important implications for access and quality of health services.

The movement of patients and health professionals has provoked calls for better coordination of health systems and policies across the EU. Developments at EU level in cross-border health policy have been complex and time-consuming, including more than a decade of rulings by the Court of Justice of the European Union and years of negotiations between Member States, the Commission and the European Parliament, indicating the extent of the conflict and uncertainty facing policy-making in this area (Palm et al., 2011).

This policy brief provides a review of the current state of issues relating to crossborder health care in Europe. Although cross-border health care encompasses the mobility of patients, professionals and services, such as a blood sample or an image taken from a patient in one country but analysed in another country (Glinos et al., 2010), this policy summary focuses on mobile patients and professionals and related issues for quality of care. It does not assess the potential impact of changing legal frameworks on domestic health systems in depth. It first describes the different types of moving patients and professionals, and then looks in turn at the changing legal framework for cross-border care, the scale of patient and professional mobility in the EU, the organization and the quality of cross-border care. It combines a literature search of Medline using a combination of key terms, including "cross-border care", "patient mobility", "professional mobility" and "European Union", with evidence gathered by the Evaluating Care Across Borders (European Union Cross Border Care Collaboration) Project to provide an update on the 2005 Policy Brief on Cross-Border Health Care in the European Union (Bertinato et al., 2005).

2 Who is moving?

2.1 Patients treated across the border

"Cross-border patient mobility" is the most commonly used expression within the EU to describe a social phenomenon that involves people crossing a border to receive health care (Legido-Quigley et al., 2012a). In principle, it thus refers to patients seeking planned treatment outside their country of residence (Glinos et al., 2010). Although most patients prefer to be treated near their own homes and families, in a language they understand and with familiar procedures (Legido-Quigley et al., 2012a), certain groups of patients may be willing to be treated abroad if it offers some advantage. There are a number of reasons why patients might seek care in another European country, including availability, affordability, familiarity and perceived quality of health care (Glinos et al., 2010). Availability of services involves both the quantity of services available, as when delays encourage people to travel, and the type of services available, which may be limited for geographical, financial or legal reasons. For example, patients may have to travel for highly specialized care which is not financially sustainable in very small countries or in sparsely populated areas, or patients may travel for services that are outlawed in the country of residence, such as reproductive health services or end of life assistance.

In EU policy debates, cross-border care also often refers to short- and longterm visitors to another EU country who find that they have to seek health care when they are abroad. In a pragmatic approach we discuss in this section both categories of cross-border patients: those who fall ill when abroad and those who go abroad for planned treatment.

2.1.1 Temporary visitors abroad

Temporary visitors abroad include individuals travelling for work and for leisure. There has been a considerable increase in the volume of tourism in Europe, with especially large numbers travelling from northern to southern Europe in summer. Increasingly, many of these tourists are in older age groups, taking advantage of their greater disposable incomes and the falling cost of travel, driven especially by low-cost airlines (Patterson, 2006). Although healthier than those of the same age in previous generations, they include a high proportion with chronic illnesses, including some that might once have been perceived as a barrier to foreign travel. Their travel within Europe is facilitated by initiatives such as the European Health Insurance Card (EHIC), which entitles tourists to care in local facilities in emergencies and for pre-existing conditions, reimbursed by their health care funder. Although most tourists will not require health care, the sheer scale of tourism in some regions can cause seasonal difficulties for service provision. As a result, some providers have been unwilling to accept the EHIC; in May 2013 the European Commission launched legal action against Spanish hospitals that had rejected tourists' EHIC cards and told patients to reclaim the cost of treatment via their travel insurance, due to severe financial pressures.

2.1.2 People retiring to other countries

The growing numbers of people who retire to another country are also likely to require health care. Again, the pattern tends to be from northern to southern Europe. The Council Regulations on the coordination of social security schemes facilitates this movement by allowing these people to maintain their pension rights and by ensuring access to care in the new country (Legido-Quigley & La Parra Casado, 2007). The elderly nature of this population gives rise to several issues for health systems, as they are likely to need long-term care or health care, and often experience multiple chronic diseases. Social care for elderly people in southern Europe has traditionally been based on family support, but those who retire to the South may not be able to rely on family networks (although among them are some who were born in the country they retire to, having spent their working lives in another country, and thus may have family nearby). Additionally, those who return to seek care in their country of origin will require authorization for care abroad, as often their health care entitlement will have been transferred to their new country of residence.

2.1.3 People in border regions

Patients are often unwilling to travel significant distances for care, but in some border regions in the EU the most accessible care happens to be in another Member State (Glinos et al., 2010). Cross-border contracting is used in several European border regions to give patients access to certain services instead of travelling long distances within the country of residence. As well as sharing existing infrastructure, cooperation between providers in border regions can avoid duplication and waste (Legido-Quigley et al., 2012a). This trend is being encouraged by several developments, such as the increasing concentration of health care in larger facilities (Kiasuwa & Baeten, 2013). Examples include shared health facilities in the sparsely populated French–Spanish border area in the Pyrenees (Sanjuán & Gil, 2013), Dutch insurers contracting with Belgian hospitals for specialized services (Glinos, Baeten & Boffin, 2006), and French women choosing to give birth in Belgium due to geographic proximity and perceived better guality of care (Kiasuwa et al., 2014). However, practical difficulties remain, such as the nationality of children born in local facilities on the opposite side of the border from where their parents live (Bertinato et al., 2005).

2.1.4 People going abroad on their own initiative

Affordability can cause patients to seek care in other Member States for services such as cosmetic dentistry and surgery, which most health systems do not include in their benefit package. As patients pay out of pocket, there have been growing patient flows to countries with less expensive dental care, such as Hungary (Kovacs et al., 2013; Winkelmann et al., 2013), and also to countries outside the EU, in some cases encouraged by packages that include surgery and tourism. Familiarity of migrant workers with health services in their home country can also be a motivation for patients to return there for treatment; for example German students studying in the Netherlands have been found to prefer to travel home for treatment due to the perceived difficulty of accessing services in their new country of residence (Glinos, Doering & Maarse, 2012). Finally, in some countries the perceived low quality of the health system encourages patient mobility (Glinos et al., 2010).

2.1.5 People sent abroad by their home systems

In some countries there exist explicit policies to send patients abroad for treatment within an organized programme. This care tends to be highly specialized or for rare diseases, and is part of a long-standing tradition in small countries such as Malta. In other countries, sending patients abroad for treatment has been a short-term political measure intended to challenge domestic monopolies as a means of bringing about change in the home health care system (Rosenmöller, McKee & Baeten, 2006).

2.2 Professional mobility

The cross-border care agenda has largely been dominated by concerns about patient mobility, while professional mobility is often overlooked (Glinos, 2012). Yet mobility of health care professionals may lead to much larger problems with access to health services than is ever envisaged in patient mobility debates (Glinos, 2012). Many countries are reliant on foreign health care professionals to replenish their workforce; in the UK and Ireland about 35% of doctors were trained in another country (Wismar et al., 2011b). Increases in migration of health professionals to the UK have been fuelled by international recruitment campaigns initiated by the National Health Service and private providers in the 1990s and early 2000s, as well as by successive EU enlargements (Young, 2011; Young et al., 2010). With great differences in salary among EU Member States, and unrestricted migration within the EU, competition for trained health professionals is tough for countries such as Romania, Hungary, Estonia and Greece, which have seen increases in the number of doctors and nurses leaving since 2009 (Glinos, 2012). The stock of medical doctors from the EU-12 in the EU-15 countries more than doubled between 2003 and 2007, following EU

accession (Ognyanova et al., 2012). However, the estimated annual outflows from the EU-12 countries have rarely exceeded 3% of the domestic workforce, due to labour market restrictions in destination countries and improved salaries and working conditions in some source countries. Yet it is important to recognize that, for some countries, losing even small numbers of health professionals can impact underserved regions (Ognyanova et al., 2012; Wismar et al., 2011b).

3 The EU Legal Framework

3.1 Patient Mobility

Care provided in a Member State other than that where the patient is socially insured can be covered in different ways. First, patients can pay for their care out of pocket. Second, it can be paid through private insurance, including travel insurance. Third, care can be covered by insurers that contract with providers in another Member State (Legido-Quigley et al., 2012a). Fourth, the EU provides a legal framework ensuring socially insured patients public cover for treatment abroad under certain circumstances. This legal framework has undergone substantial changes over the last two decades, mainly instigated by case law in the Court of Justice of the European Union. This has resulted in two parallel procedures that patients can use to receive funding for treatment received in another EU Member State (Figure 1).

In the mid-1970s what was then the European Economic Community recognized that the principle of free movement of people was meaningless if it applied only to those in full health. A series of mechanisms was established by which individuals could obtain health care in another Member State. These mechanisms provided for the possibility to receive planned treatment abroad under certain circumstances, and required prior authorization from the institution where the patient was covered for statutory health insurance. Pre-authorization policies were contested by citizens, who successfully challenged the refusal of national social insurance systems to reimburse the costs of planned unauthorized treatment undertaken in another Member State in the Court of Justice of the European Union (CJEU) (McHale, 2011). The legal basis of cross-border care, which had initially drawn only on the Treaty provisions for free movement of people, was progressively complemented by one based on the free movement of goods and services, on the reasoning that health care is an economic activity, irrespective of the type of care or health system, with prior authorization acting as a hindrance to the principle of free movement. However, the Court accepted that health services are different from ordinarily traded goods and services, and that access to hospital services abroad could indeed be subject to prior authorization (unless effective treatment could

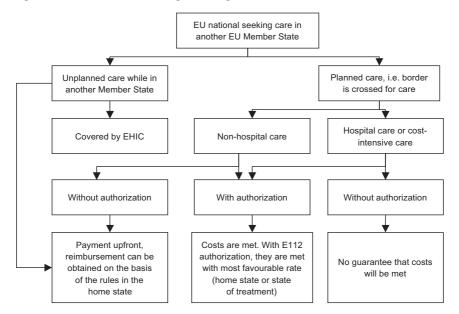


Figure 1: Flow chart summarizing financing of cross-border care

Source: Adapted from Wismar et al. (2011a).

not be obtained without undue delay), because otherwise Member States may be unable to ensure a sustainable hospital service on their territory by means of their existing systems of planning and contracting.

The inability of Member State governments to agree on legislating this issue meant that the law developed in a piecemeal fashion, based on precedents derived from individual and often quite atypical cases, with little clarity about what those precedents might mean in practice (McKee & Belcher, 2008). The result was a legal framework that was full of holes, generating extensive speculation but little consensus. In 2004 the European Commission proposed to codify this case law by including health in a proposed "services directive", which would incorporate health into the general EU regime for the regulation of services. The services directive was criticized for its country of origin principle, which could lead to creeping deregulation in many sectors, and for its indistinct application to services are different from commercial services (Baeten, 2005), and the directive only received approval in the European Parliament in 2006 after health care was removed from its scope of application (Palm & Glinos, 2009).

In 2011, after several years of deliberations, the European Parliament and Council adopted the Directive on Patients' Rights in Cross-border Healthcare. which sought to provide a clear legal framework and resolve ambiguities about the mechanisms involved in providing cross-border care (European Council, 2011). Unlike the Services Directive, the Patients' Rights Directive moves away from promoting trade in services to promoting citizens' rights. Although the new Directive does not create any new patient entitlements, it clarifies existing ones (Baeten & Palm, 2012): EU citizens are able to receive reimbursable health care in another EU country as long as the type of treatment and costs involved would normally be covered in their own national health jurisdiction. Any care not requiring a hospital stay can be sought without advance authorization, but where inpatient care or certain specialized investigations are involved, Member States may create a system of prior authorization to enable them to manage patient flows and avoid threats to the financial and operational sustainability of their health systems. The Directive also provides the possibility, in exceptional cases, for Member States to take measures aimed at ensuring sufficient access to health care within their territory, if inflows exceed existing capacity. The Directive includes provisions for improving the availability of information on the applicable national standards and guidelines with regard to guality and safety, and the establishment of national contact points to provide such information (European Council, 2011; Palm & Baeten, 2011). The Directive also makes provision for mutual recognition of prescriptions written abroad and establishes a system of European Reference Networks for highly specialized care, as well as enhanced cooperation on eHealth and on health technology assessment (Legido-Quigley et al., 2011b).

Commentators have noted that the Directive may eventually have more impact on national policies than on cross-border consumption of care. For example, the requirements for national governments to provide adequate information for border-crossing patients might lead to increased measurement and publication of quality of care indicators (Baeten & Jelfs, 2012). The requirement to establish cost calculation mechanisms and the need to clarify invoices might lead to changes in funding systems, and more transparency domestically (Baeten & Jelfs, 2012). Finally, due to the obligation to reimburse care from non-contracted providers abroad under the Directive (and the preceding case law), it is feared that Member States might come under pressure to reimburse care from non-contracted providers at home (Baeten, 2012).

Box 1: Legislative Timeline

1971	Council Regulation (EC) No. 1408/71 of 14 June 1971 on the application of social security schemes to employed persons, to self-employed persons and to members of their families moving within the Community	
1998	Two linked rulings by the CJEU in the cases of Kohll and Decker that patients could use internal market provisions to gain access to health care in other Member States	
1998	Process launched to modernize the coordination of social security systems	
1998– ongoing	Continuing CJEU on patient mobility	
2002	European Health Insurance Card (EHIC) established at the Barcelona European Council to replace paper forms required for occasional health treatment when in another Member State	
2003	European Commission convened a High Level Process of Reflection explicitly to address the issue of patient mobility, leading to a series of recommendations that sought to maximize the potential benefits of patient mobility	
2004	Adoption of Regulation (EC) No. 883/2004 on the coordination of social security systems, replacing Council Regulation (EC) No. 1408/71	
2004	European Commission Draft Directive on Services in the Internal Market attempts to codify CJEU case law	
2005	Directive on the Recognition of Professional Qualifications adopted	
2006	Adoption of the Directive on Services in the Internal Market; health care excluded	
2008	European Commission proposes a directive on the application of patients' rights in cross-border health care	
2009	Adoption of the regulation (EC) No. 987/2009 laying down the procedure for implementing Regulation (EC) No. 883/2004 on the coordination of social security systems	
2010	Regulation (EC) No. 883/2004 on the coordination of social security systems to be transposed into national law	
2011	Directive on the Application of Patients' Rights in Cross-Border Healthcare adopted	
2011	European Commission puts forward a proposal for amending the Professional Qualifications Directive	
2013	Directive on the Application of Patients' Rights in Cross-Border Healthcare to be transposed into national law	
2013	Agreement reached between Irish Presidency of the Council and the European Parliament representatives to modernize the current Professional Qualifications Directive	
2013	Council plans formally to adopt the updated Professional Qualifications Directive by the end of 2013. Member States will then have two years to transpose the Directive into national law	
Sources: A	uthors' own adaptation, based on Bertinato et al. (2005) and Legido-Quigley et al. (2011b).	

3.2 Professional Mobility

The free movement of persons and services also implies that health professionals can move and practise across borders. Since the 1970s a number of directives have been adopted to regulate the mutual recognition of various qualifications for medical professionals, including physicians, dentists, pharmacists, nurses and midwives (Gerlinger & Schmucker, 2007). However, the high legislative workload associated with developing separate directives for each sector resulted in a policy shift towards a more general Recognition of Professional Qualifications Directive for all professionals in 2005, and requirements for harmonization of training content were abandoned (Gerlinger & Schmucker, 2007).

EU law on professional mobility is based on the mutual recognition of qualifications obtained in each Member State. A minimum standard is specified for the number of hours and years of training a doctor must have, and qualifications meeting this specification are then considered equivalent. However, existing legislation fails to address recent changes in the approach to professional regulation in some Member States, whereby professionals are expected to demonstrate continuous fitness to practise, and an initial qualification is no longer seen as conferring lifelong competence (Peeters, McKee and Merkur, 2010).

In 2011 the European Commission proposed a legislative review of the Recognition of Professional Qualifications Directive, and plans for its modernization were agreed by the Irish Presidency of the Council and the European Parliament in June 2013. At the time of writing, the Council planned formally to adopt the updated Directive within the coming weeks, at which time the Member States would have two years to transpose the Directive into national law. The aim of the updated Directive is not to change policy on the recognition of gualifications, but to adapt the Directive to an evolving labour market, with emphasis on the use of modern technologies. A European Professional Card allowing immediate entry for professionals wishing to practise in another Member State will make use of the existing Internal Market Information System, taking the form of an electronic certificate, and it is hoped it will simplify recognition procedures for applicants and authorities. However, there have been concerns that the card would create an additional bureaucratic and financial barrier for migrating professionals, and provide false assurance of the professional's fitness to practise (Dickson, 2011). The updated Directive also includes provisions to modernize harmonized minimum training requirements, to set up common training principles, to extend the scope of the Directive to professionals who are not fully gualified, and to include recommendations for continuous professional development. Additionally, it includes the introduction of an alert mechanism allowing countries to exchange information on physicians who have faced sanctions.

4 EU Mechanism to Fund Cross-Border Care

Based on the two EU legal frameworks described above, EU citizens are able to receive reimbursable health care in another EU country, as long as the type of treatment and costs involved would normally be covered in their own national health jurisdiction. According to Regulation No. 883/2004, patients should in principle receive prior authorization for planned treatment abroad, whereas the Directive on the Application of Patients' Rights in Cross-Border Healthcare states that any care not requiring a hospital stay can be sought without advance authorization, although for inpatient care or certain highly specialized investigations, involving complex and expensive technology, Member States may create a system of prior authorization.

Although the vast majority of EU citizens are eligible for near-universal coverage for health care under tax-financed or social health insurance systems, benefit packages vary so certain treatments are not covered or available in all Member States: a common example is the erosion of public systems of coverage for ophthalmic and dental care. Where statutory coverage is incomplete or there are gaps in the benefits package in the country of origin, uncovered individuals will not be reimbursed by their home system if they seek care abroad for uncovered services. However, there are cases of patients making inappropriate use of the EHIC to seek care abroad that is not covered at home, such as Scandinavian tourists travelling through Germany who experience "sudden" toothache, and are then able to use the EHIC to access a broader range of benefits. Harmonization of the benefits package between Member States is unlikely in the short term, as definitions of the benefits package vary so widely. even within countries where decision making over the benefits package has been decentralized, such as Italy, Spain and the UK. However, there is potential for universal coverage of a standardized minimum basket of health benefits to be defined by all countries at the national level, which could then be harmonized at the EU level (Bertinato et al., 2005).

Although patients are not reimbursed for services that their own Member State does not cover, they may benefit from different cost-sharing arrangements when receiving care abroad. For patients seeking care abroad under Regulation No. 883/2004, reimbursement levels apply as if the patients were socially insured in the country of treatment, whereas patients who go abroad under the Directive will be reimbursed for treatment in another country only up to the cost that would be covered for the equivalent treatment in their domestic health system. Treatment in another country is provided under the quality and safety standards and tariffs applicable in the country of treatment. This could allow patients from countries with cost-sharing arrangements to avoid these costs, when the tariffs in the country of treatment are lower. Conversely, mobile patients could also end up paying a higher out-of-pocket payment

when the tariffs abroad are higher than the funding levels applicable in their home system. Centrally set pricing levels using remuneration schemes, such as Diagnosis-Related Groups, vary considerably between countries, with differences in the underlying taxonomies used to classify services and the applied procedures and technologies used (Busse et al., 2011). For example, whether rehabilitation after hip replacement is included and costed as part of hospital treatment varies between countries, as does the technology used, such as cemented versus uncemented hip replacement, and the inclusion of the costs of associated services such as anaesthesia. As a result, funding levels vary between countries; for example, a hip replacement is reimbursed at an (average) level of €8963 in Italy, compared with €1795 in Hungary (Stargardt, 2008). Such variation could impede access to cross-border services for patients socially insured in a country where the tariffs and reimbursement levels for the treatment are lower than the tariffs in the country of treatment. Harmonization of costing methodologies and accounting systems would improve comparability for cross-border transactions, but imposition of a standardized "European" accounting methodology would conflict with the EU principle of subsidiarity (Busse et al., 2011).

4.1 Available data on cross-border care

4.1.1 Patient mobility

Data on the scale of patient mobility, and the types of services and goods that patients receive, are fairly limited. In most European countries health information systems do not identify people by migration status (Rechel et al., 2013), and there are huge national differences in what cross-border care data are collected and who collects such data. Additionally, the different frameworks within which patient mobility occurs makes it difficult to assess its volume, for example where waiver agreements exist between countries, where utilization is underreported, where treatments obtained abroad are not covered by the home national health insurance and thus not recorded (Winkelmann et al., 2013), and where non-acceptance of forms such as the EHIC results in an upfront payment being made by the patient so their mobility is not accounted for in statistics on cross-border care (Bertinato et al., 2005).

It is generally believed that very little patient mobility is actually taking place as a share of all care (Rosenmöller, McKee & Baeten, 2006), although the proportion of European citizens showing interest in travelling abroad to seek treatment is growing, as is the number of patients obtaining care in another EU country (Legido-Quigley et al., 2011b). The Techniker Krankenkasse (TK) sickness fund in Germany insures approximately 9 million people, and carries out yearly surveys to assess utilization of cross-border services among its insurants; only 7% of insurants who received care in another EU country in 2003 travelled for non-urgent treatment, increasing to 40% of those who travelled for care in 2008 (Techniker Krankenkasse, 2009). However, it has previously been estimated that only 1% of all TK members utilize services in other EU countries and apply for cost reimbursement for care (Techniker Krankenkasse, 2007).

The ECAB project further explored Techniker Krankenkasse data by surveying 45,000 insurants who had received services abroad in 2010; the survey found that 37% of insurants reported requiring follow-up treatment after receiving care abroad, which was mostly provided by a German physician at home (92%) but communication between the physician abroad and the patient's physician at home was rare (15%). Although use of cross-border services by patients does not seem to be a common occurrence, the quality and continuity of cross-border care is therefore a concern that needs to be addressed. Anecdotal evidence suggests that cross-border care sometimes falls outside of the mechanisms designed to ensure the quality of care provided, particularly when the mobile patient does not speak the language of the health system or understand how the foreign health system works (Rosenmöller, McKee & Baeten, 2006).

A first step towards ensuring the quality of cross-border care is to better understand the nature and scale of the phenomenon. A clear agreement is required to decide who collects data on cross-border care and how such data are collected, with uniform definitions of the different aspects of crossborder mobility and processes to collate the data to ensure the reliability and comparability of information (Van Ginneken & Busse, 2011).

4.1.2 Professional mobility

As with patient flows, there has been a similar trend towards increased professional mobility since the mid-1990s, but again there is an absence of comparable data. Surveys that map professional migration, such as the DG-Market surveys and Labour Force Survey, lack data for many countries, and there are significant gaps in statistics over time (Van Ginneken & Busse, 2011). Additionally, national statistics on registration do not necessarily reflect employment and are collected using different types of data collection system, which results in patchy and often incomparable data across Europe. However, it is clear from available data that health professional mobility is common; 35% of doctors in the UK and Ireland are foreign-trained, with the UK (42%) and Belgium (25%) experiencing the highest inflows of foreign health professionals in 2008 (Wismar et al., 2011b). In Spain in 2007 one in five nurses entering the nursing workforce was foreign-trained or foreign-national, and this figure reached one in three in Italy in 2008 (Wismar et al., 2011b).

5 Organization of Cross-Border Care

Many specific cross-border arrangements exist to facilitate patient mobility, arranged by health care providers and third-party payers. These services can be long-standing bilateral agreements or more recent developments. A series of case studies, examined using interviews with patients, health professionals and key informants for the ECAB project, provides insight into the organization of such services, their strengths, and the challenges they face (Kiasuwa & Baeten, 2013; Kiasuwa et al., 2014; Footman et al., In Press; Saliba et al., 2014; Kovacs & Szocska, 2013).

5.1 A collaboration allowing French women to give birth in Belgium

Reproductive care is one of the most common reasons why people cross borders for health care (Hudson et al., 2011). The Ardennes cross-border collaboration is an established arrangement at the French–Belgian border which allows French patients to cross the border, in particular for obstetrical care, and to give birth in a Belgian hospital, as it is their closest health facility (Figure 2).





Source: Glinos & Wismar (2013).

5.1.1 Organization and financing

Collaboration in this region began in the 1990s at the initiative of sickness funds from both sides of the border, and intensified in 2004 when the only local clinic in the French town of Givet closed. Patients were permitted to use the Belgian Dinant Hospital (15km away) rather than travelling to the closest French hospital (70km away), and for this purpose Dinant hospital was considered as a branch of the French hospital Charleville-Mezieres, allowing for direct payment by the patients' health insurance fund as if the patient had been treated in France.

Although the initial agreement in 2002 had no legal foundation, a bilateral framework agreement between Belgium and France signed in 2005 laid the foundation to establish a "zone of access to cross-border care", which allowed insured individuals from delineated geographical areas to be treated in specific health care facilities on either side of the border. Based on this, the *Convention ZOAST Ardennes* was signed, in which eight Belgian providers and seven French providers are involved. The flow of patients in this zone is almost entirely uni-directional, with a negligible flow of Belgian patients to France. An unexpected consequence of the convention was that it damaged collaboration and communication between the French and Belgian hospitals, as they became competitors.

For patients crossing this border, administrative and financial arrangements are eased as much as possible by allowing them to receive care simply by presenting their domestic health insurance card. However, there are differences in the payment mechanism between the two countries; in France 75% of expenditure is covered by social health insurance and the remainder is covered in full or in part by complementary voluntary health insurance, while in Belgium a higher proportion of expenditure is covered by social health insurance, and flat rate co-payments are paid by the patient. For French patients this created an obstacle to receiving care in Belgium, and to reconcile this Belgian hospitals began to send additional invoices to French patients' voluntary health insurance funds. Since 2009 the process has been further streamlined by sending all invoices to one French insurer (MGEN), which centralizes all bills and forwards them to the relevant French social health insurance or voluntary health insurance fund.

An additional challenge to financing the cross-border service was that French patients were not familiar with making direct payments for ambulatory care in hospitals, so it was tacitly agreed by French and Belgian insurers and Belgian hospitals to apply the third party payment system to ambulatory care for French patients, although this is formally forbidden by Belgian legislation. Additionally, French voluntary health insurance funds are not able to pay foreign hospitals, meaning French patients had to pay up front and claim reimbursement on their return, so two pilot Belgian hospitals have received authorization numbers giving them the status of French official hospitals, allowing Belgian hospitals to open French bank accounts which French voluntary health insurers can invoice directly.

5.1.2 Stakeholder perspectives

For French mothers the main motivations for crossing the border to deliver their babies are geographical proximity, perceived better quality of care, reduced waiting time and more efficient obstetrical services. GPs in France have played an important role in encouraging the cross-border collaboration, preferring to refer their patients to the Belgian Dinant hospital because they are satisfied with the quality of care provided, shorter waiting times, and electronic access to their patients' records at the Dinant hospital, which allows them to consult examination results immediately.

Insurers on both sides of the border have been supportive of the collaboration as they try to position themselves strategically in a health care market that they expect to become increasingly international. Belgian sickness funds seem to be the main instigators of the collaboration, with representatives stating that the funds anticipate the opening-up of the EU health care market, where they would have a competitive advantage. French sickness funds have long been the allies of the Belgian sickness funds, and have contributed substantially to the centralization of invoices for cross-border patients and the implementation of new informatics devices and programs for managing bills. Two of the funds may become the central unit for cross-border invoices on the French side, which would result in them receiving substantial funds from the National Health Insurance Fund for employees.

Belgian hospitals also greatly benefit from the collaboration, as their funding is dependent on occupation rates, while regional health facilities in France are concerned about the outflow of patients. However, both Belgian and French authorities raised concerns about the unexpectedly high, and increasing, flow of patients, particularly as it is only from France to Belgium. At other places on the border French–Belgian collaborations have a more balanced patient flow in both directions. Consequently, the authorities in this area fear for the future of French health services and access to care for local Belgian citizens. At the time of the study, the gynaecology service of the Dinant hospital was fully occupied, and new Belgian patients were forced to travel to the next hospital for services, which was 20–30km away.

5.1.3 Quality of care

French mothers using the cross-border service were generally satisfied with the care they received in Belgium, and felt that both the care provided and their relationships with the health professionals were better in Belgium than in France. Most French women return to Belgian providers for gynaecological care after giving birth despite the existence of local providers. French women also reported feeling comforted by the more specialist care they received, although evidence suggests that midwife-led care provides higher quality care than that provided by physicians in uncomplicated deliveries (Sutcliffe et al., 2012).

However, there are some problems relating to the quality of follow-up care due to the absence of a contact person in France, differences in methods of prescribing medications (medicines in Belgium versus molecules in France), poor communication and mistrust between providers, different systems of hospital discharge summary and the absence of shared guidelines between Belgian and French health care providers.

5.1.4 Lessons learned

- Creation of competition across borders can have unintended negative consequences for both communication between providers and access to care.
- Cross-border collaborations can face multiple logistical barriers, and developing solutions requires the commitment of many actors.
- Attention to communication between providers in the form of discharge summaries and assigned contact persons are important for ensuring continuity of care.

5.2 Dialysis services for tourists in the Veneto Region

In the Veneto Region of Italy significant investment has been made in crossborder health services in response to the high volume of tourists received. The Veneto Orientale, lying on the coastal strip and with some of Veneto's main beaches, is especially affected by the inflow of tourists, with its resident population of 220,000 accommodating more than 2.5 million tourists during the summer months. The Local Health Authority has made an explicit decision to support the tourist economy by providing a wide range of health services for tourists, with a particular focus on services for chronic conditions such as chronic kidney disease.

5.2.1 Organization and financing

Tourist dialysis services have been installed in the main hospital in Jèsolo, and in an outpatient centre in Bibione. The tourist services run from May to September; in Jèsolo the centre is open throughout the year for local residents and capacity is increased for tourists during the summer months, while in Bibione the six-bed centre is open specifically for tourists only during the summer months. During the tourist season an external company is subcontracted to provide the package of services for the two centres.

Patients showing an EHIC card receive the service free of charge and the Local Health Authority invoices the national health insurer of the patient directly to claim reimbursement for the service. Patients with private insurance pay directly at the end of the sessions or receive an invoice on returning home. Services are reimbursed according to official Italian Diagnosis-Related Group costs, which are described as being very low and outdated, so payments received do not cover the full costs. The Local Health Authority's seasonal services for tourists also receive a separate annual funding allocation from the Veneto Region, which is used to cover the cost of the additional dialysis services. However, as the allocated funding does not always correspond to the amount requested to cover the cost of the service, there is some concern among service directors about its financial sustainability.

5.2.2 Patient experience

There were overwhelmingly high levels of satisfaction with the service provided at centres in Veneto, with a positive impact on quality of life. However, patients often mentioned that access to such facilities was limited by the lack of advertising and poor visibility. Tourist dialysis services are greatly valued by patients suffering from chronic kidney disease, and dialysis centres should be encouraged to provide more information about holiday dialysis to ensure a higher quality of life for patients.

5.2.3 Continuity of care

Most patients' home centres send their care plan to the centre in Veneto two weeks before the holiday, allowing holiday dialysis to be synchronized with the patients' pre-existing care plan, and this process was found to work quite well. However, there is little contact between centres from this point on. Additionally, the use of discharge summaries varies; in one of the tourist centres discharge summaries are rarely provided to patients or sent to home centres, whereas the other tourist centre always ensures that discharge summaries are provided. At both centres most staff feel that a standardized European discharge summary would be useful as it would be more easily understandable for everyone.

5.2.4 Communication

Language barriers are a common problem for staff, although the use of interpreters is helpful for overcoming them. Although the patients interviewed rarely reported any negative experiences, a few mentioned the fear and discomfort that can arise from the existence of language barriers in health care. Previous research has found access to information and communication to be the main priorities of cross-border patients, from admission through to discharge, and strategies used by some hospitals to address this issue include multilingual reception staff, written information in various languages, and professionals, including interpreters, speaking various languages (Groene et al., 2009). The idea of a standardized European template document to facilitate communication with patients also received some support from staff at the dialysis centres.

5.2.5 Lessons learned

- Adequate funding is required to ensure the quality and safety of crossborder care, particularly through the provision of interpreters.
- Awareness and accessibility of tourist chronic health care services should be maximized to allow more people to benefit from the improvements to their quality of life.
- Timely and accurate communication through care plans and standardized discharge summaries is important for continuity of care.

5.3 Cross-border paediatric care pathways between Malta and the UK

The Malta–UK cross-border health care collaboration is one of the longest standing in Europe, drawn up in 1975, so long pre-dating Malta's accession to the EU. The reciprocal agreement gives Maltese patients access to highly specialized care for rare diseases that is not available locally. In return, UK citizens temporarily resident in Malta and UK pensioners and workers permanently residing in Malta are entitled to free health care, separate from existing EU legislation.

5.3.1 Organization and financing

The agreement permits the referral of a quota of Maltese patients, including adults and children, for treatment every year in the UK National Health Service. This enables patients to access highly specialized care that cannot be delivered locally in a very small country like Malta because the demand is too low and the costs are too high. The services offered through this programme are considered an extension of local services and are free of charge. The number of patients requiring treatment in the UK varies, but always exceeds the agreed quota of 180 patients, so costs for additional patients are charged to the Maltese government. Currently, around 300 patients are referred each year and a third of these patients are children.

Potential cases that may benefit from referral to the UK are discussed by Maltese clinicians and the relevant UK expert and, if it is agreed that the patient needs specialist investigations or treatment, a formal application is submitted to the Treatment Abroad Advisory Committee in Malta for approval. In the case of urgent referrals, approval is made verbally in the first instance so that the patient's transfer is not delayed. Transfers that involve intensive care support are organized with Air Malta via Heathrow Airport, and a health care professional team is required to travel with the patient. Protocols, procedures, equipment and training are in place to support health care professionals accompanying the patient and total transfer time has been reduced to an average of 8 hours from 'door to door'.

The collaboration includes both patient and health professional mobility. British physicians in 12 sub-specialties regularly visit Malta to conduct outpatient clinics for follow-up patients who received treatment abroad, and to identify new patients who may benefit from an overseas referral. In addition, Mater Dei Hospital in Malta functions as a tertiary centre twice a year, with cardiac catheter interventions conducted by a visiting paediatric cardiologist on about 20 to 30 patients who are thus spared a trip abroad.

5.3.2 Factors supporting the cross-border collaboration

The Malta–UK collaboration is grounded in long-standing historical links between the two countries; many of the Maltese doctors involved have previously studied in the UK so are familiar with the British health system and have developed enduring professional relationships with colleagues in the UK, which aids communication and trust. Communication is further aided by the existence of a single point of contact in Malta and the sharing of relevant medical information through electronic or physical exchange of detailed patient summaries. Health professionals communicate by phone or email and maintain an open dialogue about patients, keeping each other updated with developments. The parents of paediatric patients using the service reported that the consent process was clear and explicit in the UK and they perceived a meaningful involvement in decision-making.

A shared care approach is used to ensure continuity of care for patients, meaning a model of integrated care delivery based on collaboration between Maltese and UK health professionals. Every investigation and intervention possible in Malta is carried out, but when patients arrive in the UK they follow the same care pathways as NHS patients and are managed using the same protocols and procedures. The specialist tertiary referral centres in the NHS adopt the same principles of shared care that they would with District General Hospitals or primary care providers in the UK, with an emphasis on good communication and accurate and timely transfer of information. When patients return to Malta, continuity of care is then ensured by the local clinicians who implement the agreed care plan and follow up patients as appropriate in outpatient clinics in Malta, visiting consultant clinics or planned reviews in the UK.

5.3.3 Challenges for the cross-border collaboration

The collaboration poses certain logistical challenges, as patients travelling to the UK are very vulnerable and there is uncertainty over their diagnosis, prognosis and expected duration of stay, making planning difficult. There are also financial challenges to the system, as living costs in London are very high and some patients stay for a prolonged period of time, while families can also face loss of income due to prolonged absence from work. However, the Maltese government offers accommodation and allowance for meals for patients when they are under review as an outpatient and a number of charities also support families by picking up some of the costs not covered under the agreement.

Cultural and communication challenges also exist; although the English health system was perceived to be very good at responding to patients' and relatives' cultural needs, Maltese culture has the family at its core and when patients are unwell the extended family comes together to provide support. This was reported as sometimes being challenging for UK staff to manage, especially when visitor policies are not respected. Another key challenge is around communicating the kind of NHS care that specialist tertiary centres provide. Patients and relatives are often unaware that these centres do not offer a full spectrum of health care services and that if their child needs emergency care during their stay then they may be referred to a different hospital, which is reported as causing undue stress and anxiety.

Parents of children referred to the UK for emergency care also reported uncertainty and anxiety, particularly when the diagnosis was made immediately after the birth of the child. All the parents interviewed took the prospect of their child's referral to the UK in their stride, being aware of the provisions in case of rare illnesses and having full confidence that this was the best option for their child. However, the stress of caring for the child through diagnosis and treatment was reported by some to be overwhelming when combined with being in an unfamiliar place. However, parents also reported being very grateful for the existence of the service.

5.3.4 Lessons learned

- A single point of contact at hospitals and sharing of detailed patient summaries facilitates communication between health professionals.
- A shared care approach can benefit continuity of care.
- Patients need to be involved in the decision-making process, and informed about variations in health systems to help build trust in the system.

5.4 Crossing borders for orthopaedic care in Hungary

An increasing volume of patients arrive in Hungary for orthopaedic care each year, mostly from neighbouring countries. Foreign patients tend to travel to regions of Hungary close to their national border, with Ukrainian and Romanian patients seeking care in the Northern Great Plain, Romanian and Serbian patients in the Southern Great Plain, and Croatian and Austrian patients in Southern Transdanubia. Additionally, a considerable volume of patients from Germany, Spain and the UK visit the capital, Budapest, for orthopaedic care.

Three orthopaedic clinics in Debrecen, Northern Great Plain, and Szeged, Southern Great Plain, were studied, and it was found that foreign patients make up 4–10% of patient volume annually, with the majority of patients arriving for elective orthopaedic surgery, such as knee and hip replacements.

5.4.1 Organization and financing

Numerous motivations exist for patients travelling to Hungary for orthopaedic care, including availability, accessibility and the quality of care. Patient mobility is sometimes an organized process involving medical tourism or travel agencies, but patients also rely on word-of-mouth and informal communication. No specific cross-border arrangements exist between providers or clinics, but doctors frequently collaborate and communicate between countries about the treatment and follow-up of patients. Follow-up care is also provided in Hungary for some patients, requiring continuing communication between medical professionals in each country.

Care is generally financed through out-of-pocket payments, and patients then apply for reimbursement from their health insurance fund in Romania. In Romania the Directive on Patients' Rights in Cross-border Health Care entered national legislation and became effective in October 2013. Prospective patients are able to access information about prices of different services and clinics in Hungary in multiple currencies using the internet.

5.4.2 Stakeholder perspectives

Health professionals in Hungary did not report experiencing difficulties when treating foreign patients. Mostly, European level protocols and clinical guidelines are in use, so provision does not differ when treating domestic or foreign patients, and the same level of quality and patient safety is ensured. Discharge summaries are governed by strict national legislation in Hungary, and patients always receive a document in Hungarian, although they can have discharge summaries translated for an extra charge. English language summaries are also common when treating foreign patients, although Hungarian national legislation requires documentation to be in Hungarian. Discharge summaries in this setting consist of the following information: personal data, nationality, diagnoses, treatment, epicrisis, suggestions, control, list of examinations, and signatures of the hospital leader, unit leader and the medical specialist who provided the care.

Although there are sometimes difficulties with language barriers, most patients arrive from neighbouring regions and speak Hungarian, and many professionals reported also speaking Romanian. Health professionals have adapted to the situation and some patients contact medical tourism agencies for interpreters if required. Patients receiving orthopaedic care in Hungary were highly satisfied with the treatment process, the information provided, the accessibility of care, the quality of communication with health care staff and patient documentation, and patients reported that they recommend Hungarian health care to others.

5.4.3 Lessons learned

- Patients may be willing to travel to neighbouring countries to receive higher quality treatments that are not available in their country of residence.
- Legislation requiring that mechanisms for continuity of care exist, such as discharge summaries, can help to ensure they are used.

6 Quality of Cross-Border Care

The case studies outlined in Section 5 have provided examples of cross-border collaborations that are intensively managed. However, there is anecdotal evidence that cross-border care often falls outside mechanisms designed to ensure that the care provided is of high quality and responsive to the needs of the patient. This can pose problems for the quality of cross-border care, especially when patients do not speak the language of the country in which they are being treated or do not understand the health system. Communication between professionals can be poor, there may be a duplication of medical

procedures, and surveys of experiences of cross-border patients indicate financial and logistical problems with travelling, emotional issues associated with distance from home, unfamiliarity with access procedures and problems with continuity of care (Legido-Quigley et al., 2011a).

All citizens should be assured that a high-quality health system is in place, and policies at the national level are the first step to assessing quality. However, there is considerable variation between and within Member States in the approaches they have taken and the extent to which they have implemented programmes to ensure quality of care (Bertinato et al., 2005; Rodrigues et al., 2013). Moreover, the added vulnerability of patients who receive care outside their country of residence, where they are unfamiliar with the system and less likely to receive follow-up care, requires that particular attention is paid to the quality of care for cross-border patients (Legido-Quigley et al., 2011b). A survey of hospitals in four EU countries in 2006 found that although certain quality and safety requirements are usually met for cross-border patients, such as informed consent, others are often lacking, such as contact with patients' general practitioners (Groene & Suñol, 2010). Additional weaknesses identified included difficulties in communication with patients, discharge summaries and transfer of patients.

Many of the issues relating to high-quality cross-border care were examined as part of the ECAB project, and the findings of this research are now used to explore quality issues in cross-border care in further detail.

6.1 Disease management

The compatibility of approaches to disease management between countries is vital for reducing the fragmentation of care of mobile patients. Although health professionals in different countries read the same medical literature, disease management varies considerably, and this may undermine continuity of care and cause confusion for an insurer who is asked to reimburse a package of care for a condition that differs considerably from that provided in their own country (Legido-Quigley et al., 2011b).

6.1.1 Clinical Guidelines

A mapping exercise illustrated the varied status of guideline production in European Union countries (Legido-Quigley et al., 2012b). Although most Member States have an established national, regional or local clinical guideline programme, the majority of countries have no legal basis for the development of guidelines and those that have well established systems mostly implement them on a voluntary basis. The process of guideline development varies in the extent to which it is decentralized within countries, with many different types of organization taking on this responsibility. In the case study of French women crossing the border to give birth in Belgium, it was reported that procedures tended to be decided within each individual hospital service, and clinical guidelines were not shared by Belgian and French gynaecologists, although practices were largely comparable because they read the same academic literature. Additionally, although some countries have made explicit efforts to appraise the quality of guidelines, many are still relying on ad hoc and opaque methods and there is considerable scope for improvement (Knai et al., 2012).

The diverse practices in developing and implementing clinical guidelines across EU countries reflect the different stages that countries are at in developing quality assurance mechanisms for health systems. More appropriate and easily implementable evaluation mechanisms need to be developed both to encourage utilization of guidelines, and to ensure the appropriateness of guidelines in place. There is already considerable experience at the European level in assessing best practice through collaborating platforms: the European Network for Health Technology Assessment has been successful in promoting Health Technology Assessment methodology, and a similar initiative for clinical guideline development would support quality assurance practices and benefit countries where such guideline development and quality assurance are still in their infancy (Knai et al., 2012).

6.1.2 Care pathways

Information needs of patients crossing borders are not limited to clinical issues, but extend to the whole health care process and how it is organized (Groene et al., 2009). Care pathways are "a complex intervention for the mutual decision-making and organization of care for a well-defined group of patients during a well-defined period" (Vanhaecht et al., 2010), which can improve the quality, organization and consistency of care (Deneckere et al., 2013). A survey on care pathways among health professionals from 39 countries uncovered variability in the use of evidence-based guidelines and challenges in evaluating the effectiveness of care pathways. There was support for greater use of care pathways, with many agreeing that they are important for standardizing care. improving communication between professionals and improving guality and safety of care. However, there was little reliable knowledge about the extent to which care pathways are implemented within countries. More work is needed to understand how care pathways in place in different countries compare with one another, and what would need to be done to make them mutually compatible. The same survey identified that almost none of the respondents had previously been provided with information on cross- border health care, but there was agreement that standardized hospital discharge summaries and compatible IT systems were steps that could be taken to improve cross-border care (Glonti et al., In press).

6.2 Continuity of care

Discharge from hospital and follow-up care have been found to be the weakest points of cross-border care (Groene et al., 2009). Even within countries the need to improve discharge planning and practices has been noted as a result of the deficits identified in transferring information between hospitals and primary care providers (Helleso, Lorensen & Sorensen, 2004; Hesselink et al., 2012a; 2012b; 2013; Johnson et al., 2012; Kripalani et al., 2007). The amount and quality of information provided to patients has often been insufficient, attributed to an inward focus of hospital care providers, an unwillingness to collaborate, and a low priority placed on the provision of complete discharge summaries (Hesselink et al., 2012a; 2013). When a patient is discharged from hospital in a foreign country and then returns to their home country, the importance of the discharge summary is even greater.

6.2.1 Discharge summaries

A discharge summary is a key document for the primary care physician or specialist that details hospital care received abroad. Even where formal mechanisms for cross-border care exist, as in the case study of the dialysis centres in the Veneto Region, use of discharge summaries can depend on the judgement of individual health professionals or on the request of the patient, meaning provision is inconsistent. Earlier EU-funded studies, such as the MARQUIS project (2004–2007), have called for a standardized European discharge summary (Groene et al., 2009), as more standardized documentation may benefit continuity of care. At present, there is variation in the use of discharge summaries not only between countries, but also between regions and even within hospitals. As part of the France–Belgium case study, 40 anonymized hospital discharge summaries relating to deliveries by French women at Dinant hospital in Belgium were analysed and the content was found to vary widely (Glonti et al., 2014). There was no standard discharge summary template and no pre-established categories to include in the document (Kiasuwa et al., 2014).

No official guidance on standardized discharge summaries exists within the EU, and an exploratory mapping exercise identified wide variations in the national management of hospital discharge summaries. Some countries have proposed methods to standardize national discharge summaries (Poland and Lithuania), either through minimum data requirements (Spain and Scotland), standard electronic discharge summaries (Denmark), standard structures and content headings (England), or standards issued by hospital accreditation bodies (France and Finland) (Glonti et al., 2014). The discharge summary guidance available in seven EU Member States was compared, and there was agreement on a core set of categories that should be included, but when comparing actual discharge

summary templates from 15 countries, wide variations existed in the categories of information included and the categories relevant to the continuity of care were not well represented. These findings were also reflected in a systematic review of the content of discharge summaries, which resulted in the suggested minimal data requirements for a harmonized discharge summary across Europe, found in Box 2 (Glonti et al., 2014).

Box 2: Minimum data requirements for a harmonized European discharge summary

- Patient details (name, date of birth);
- Hospital details (including ward and department);
- Specialist details (name, contact details, preferably phone/e-mail);
- Primary health care professional details (name, practice);
- Admission details (date, mode, presenting complaint);
- Clinical information;
- Diagnoses (using ICD codes);
- Operations, treatments, procedures;
- Medication information (using international non-proprietary names);
- Discharge information (date, reason, discharge diagnosis, person signing the discharge summary);
- Follow-up/future management.

Additional categories relevant for a cross-border care scenario:

- Social and psychosocial support for the patient, support for the carer;
- Contact details for close relatives;
- Patient and carer concerns/information given to the patient.

This review also highlighted the challenges and opportunities involved in transmitting discharge information electronically (Bludau, Wolff & Hochlehnert, 2003; Jansen & Grant, 2003; Knaup et al., 2006; Medlock et al., 2011; Pillai, Thomas & Garg, 2004; Reng et al., 2004; Schabetsberger et al., 2006; Woolman et al., 2000). Electronic discharge summaries can increase the speed of communication and facilitate continuity of care, reduce discrepancies between administrative and clinical documentation, and reduce administrative burden (Pillai, Thomas & Garg, 2004; Rao & Fogarty, 2007; Reng et al., 2004; Schabetsberger et al., 2006), although there can be concerns over

patient confidentiality, the legal validity of electronic patient records, and the quality of the document (Pillai, Thomas & Garg, 2004) as computerization does not resolve problems of data completeness and accuracy (Jansen & Grant, 2003). Additionally, systems are often incompatible due to a lack of technical interoperability.

6.2.2 eHealth

The electronic transmission of medical information offers opportunities for improving continuity of care in a cross-border setting. A review of EU policy documents and EU-funded research and development on electronic health records confirms the strong political priority to advance eHealth (Doering et al., 2013a). The 2004–2012 eHealth Action Plan for the European Union (European Commission, 2004) was the first formal commitment to cooperate more closely in the area of eHealth, which has been reinforced by the 2012–2020 eHealth Action Plan that seeks to use technologies such as smartphones to monitor people's health and well-being, while calling on Member States to integrate eHealth solutions into their health care systems. The European Commission has invested heavily in work to develop electronic health records that would facilitate interoperability of health systems across Europe (Knaup et al., 2007). However, electronic data sharing remains a challenge even within countries due to a lack of technical interoperability and concerns about confidentiality and legal issues. A successful example of the use of eHealth in Europe is the MedCom network in Denmark, which engaged clinicians to develop national standards for electronic data interchange communication and ensured their widespread adoption in primary care (Edwards, 2006). It adopted a gradual approach and encouraged participation with financial incentives. MedCom also succeeded in developing an approach to privacy and security that satisfied the demands of both clinicians and patients.

Previous research has identified electronic health records as tools to enable improved access to health information for medical professionals, thereby improving the quality of health care services (Kierkegaard, 2011). However, as individual health data is sensitive, and needs to be protected from misuse and violation of privacy, technological advances also require new approaches to counter these challenges. Notwithstanding the existence of a directive on data protection, currently being revised, residents of different EU countries have different rights and expectations of privacy and personal data protection, which will impact the transmission of data across borders. The diversity of health systems' quality and safety policies and the interoperability of databases also pose challenges for implementing electronic health records (Kierkegaard, 2011). An appropriate regulatory framework is required to ensure the promotion of electronic health records in the EU and to harmonize the conditions for sharing and processing sensitive data (Callens, 2010; Callens & Cierkens, 2008).

6.2.3 Prescriptions

The issue of prescribing across borders is also an area that can impact continuity of care and that calls for greater standardization of documentation. The Directive on Patients' Rights requires that a patient issued a prescription in one Member State should be able to present it in another, and it has been estimated that 17% of pharmacists in the EU are presented with a prescription from another country at least five times a month (Matrix Insight, 2012). However, a study of pharmacists' recognition of cross-border prescriptions reveals that almost half of pharmacists presented with a foreign prescription would not dispense the medicine (San Miguel et al., 2013).

Additionally, the type of prescription presented influences pharmacists' willingness to dispense foreign prescriptions, with more pharmacists willing to dispense prescriptions when written in English and by molecule. Pharmacists in the UK and Finland were least likely to dispense foreign prescriptions, due to the perception that it was illegal in the UK, and non-Nordic prescription constraints in Finland. Although legal differences should no longer be relevant with the introduction of the Directive on Patients' Rights, clear guidelines for pharmacists on EU prescriptions should be made available. More standardized prescribing using International Non-proprietary Names (INNs) is now mandatory in the EU for cross-border prescriptions, and this should improve product recognition by pharmacists, and hence continuity of care. Clear guidelines on the format of EU prescriptions, their validity period, who to contact when presented with a foreign prescription, and what sources to consult for information on product composition and prescriber credentials may also improve the availability of medication for citizens travelling to other Member States (San Miguel et al., 2013).

6.3 Telemedicine across borders

Telemedicine across borders is the delivery of health care services at a distance using information and communication technologies. It may be used to link a patient with a health professional in a different country, or two health professionals in different countries. The ability to send high-definition digital images across the world has enabled, for example, British hospitals to outsource parts of their radiology services to other areas of the European Union, where medical salaries are lower. But implementation of such services faces challenges across borders, due to the lack of interoperability between IT systems, different regulatory, financial and legislative policies across health systems, and cultural and language barriers. The consequences for quality of care are unclear.

Box 3: Case study: A success story in cross-border telemedicine (Doering et al., 2013b)

A collaboration between Maastricht University Medical Centre+, three centres in Germany and one in Switzerland provides a good example of a successful cross-border collaboration in telemedicine. The collaboration is based on teleneuromonitoring during aortic surgery. When open surgical repair of an aneurysm of the thoracoabdominal aorta is performed in Aachen, Hamburg or Bern, simultaneously a neurophysiologist in Maastricht monitors the spinal functions of the patient, reducing the risk of paraplegia and paraparesis. Only a very few patients need this type of surgery but it requires a high level of medical expertise, and having a highly specialized neurophysiologist in every theatre performing this surgery would not be an efficient use of resources. Consequently, specialists in Maastricht offer neuromonitoring at a distance to several centres across Europe and this has been found to be a cost-effective solution that improves the quality of health care provision in these centres. Analysis of this case study, undertaken as part of the ECAB project, found that most common barriers for telemedicine across borders can be overcome when there is willingness to collaborate and when trusting relations are developed and maintained across countries.

A systematic review of the available literature on telemedicine was carried out, as part of the ECAB project, to discover factors that hinder or support implementation of cross-border telemedicine services (Saliba et al., 2012). Most services deliver a combination of types of telemedicine, but the most commonly represented specialties were telepathology, telesurgery, emergency and trauma telemedicine and teleradiology. Most services link health professionals, with only a few linking professionals directly to patients. A main driver for the development of cross-border telemedicine is the need to improve access to specialist services in underserved rural areas, but telemedicine programmes can also help with sharing expertise and overcoming barriers to the implementation of services. Strong team leadership, training, and flexible and locally responsive services delivered at low cost, using simple technologies and within a clear legal and regulatory framework, are all important factors for the successful implementation of cross-border telemedicine services.

6.4 Professional standards

Considering the scale of professional mobility, it is important to assess its potential impact on quality of care. The EU Directive on the recognition of Professional Qualifications (European Union, 2005) assumes that all EU doctors meet the same professional standards, but a small number of high-profile incidents of medical malpractice among migrating EU doctors have raised concerns over how doctors are regulated between countries, and highlighted

potential risks for safety and quality of care. Mobility of patients between EU Member States has also drawn attention to how variation in the practices of medical practitioners between countries can impact health care experience, patient safety and quality of care (Legido-Quigley et al., 2011b). For example, there have been calls for increased quality assurance of care provided in the homes of elderly patients by live-in migrant carers from mostly Eastern European countries due to insufficient regulation of professional standards in receiving countries (Schmidt et al., 2013).

An exercise to map the regulatory oversight of doctors in different EU countries indicates that formal processes vary considerably. While the majority of European postgraduate educational programmes based in universities have been harmonized under the 'Bologna Process', it seems that most medical programmes are still far from the EU-favoured Bachelor and Masters concept. To date, only Belgium and the Netherlands have started to reform their medical education systems according to these requirements. Additionally, although the duration of study tends to be fairly similar, the content of medical training varies significantly both within and between countries, with varying emphasis on practical versus theoretical training (Risso-Gill et al., 2014). A case study of German medical specialists working in hospitals in Austria found that, despite a bilateral agreement existing between the two countries on the recognition of academic degrees since 2003, differences in specialist training continue (Schmidt & Klambauer, 2014). Variations in the gualifications of geriatric nurses and long-term carers in Austria and Germany create important barriers to professional movement due to non-recognition of diplomas (Winkelmann, Schmidt & Leichsenring, 2013). Given the historical and structural differences between Member States' health systems, countries need the flexibility to set and maintain professional standards and standards for medical education. However, to ensure patient safety, the minimum requirements for professional gualifications, as outlined in the Professional Qualifications Directive, need to be fulfilled. The reluctance to harmonize medical education within the EU may reduce the opportunities for medical professionals to train in other Member States, which many value as an opportunity for exchange of knowledge and skills (Legido-Quigley, Saliba & McKee, In press).

Following graduation, the processes involved in being registered and licensed to practise medicine are regulated by law, but vary considerably between countries (Kovacs et al., 2014). Furthermore, the United Kingdom has now introduced a system of revalidation, whereby all physicians must demonstrate their fitness to practise every five years, while a few other countries have much less ambitious initiatives (Solé et al., In press). However, these countries are in the minority in the EU. There is also much variation in the way medical regulatory bodies manage professional issues regarding quality assurance and patient safety (Risso-Gill et al., 2013). Some countries employ punitive

actions more frequently than others, and cover a broader scope of activity, beyond professional standards for quality and safety. Therefore professionals' "fitness-to-practise", and the disciplinary processes which regulate them, vary considerably, raising issues about the meaning of quality of care and patient safety as a result of increasing patient and professional mobility (Struckmann et al., 2014).

7 Conclusions

Patient mobility has received a great deal of political attention in the EU. However, the scale and nature of it is increasingly contested as it is recognized that different actors have different interests, with some arguing for greater patient mobility as a means of introducing more competitive markets into health care, while others argue that the health needs of the patients should come first (Glinos, 2012). Crucially, patient mobility is a fairly rare phenomenon, as most patients want to be treated at home in a familiar setting and health system. By contrast, issues relating to health professional mobility have received less attention, yet this is an important policy issue for the EU considering the scale of and reliance on professional mobility between countries, and existing variations in educational and professional standards.

For those patients who do receive care in another country, either because they are in another country when they fall ill, or because they live in border regions, or because the appropriate care is unavailable at home, there are certain risks to continuity of care and follow-up, which require careful attention. Strengthening the implementation of clinical guidelines, standardization of discharge summaries, optimal use of technologies such as telemedicine and appropriate regulation of professional standards are all likely to be beneficial for patients receiving care in their home country as well as for those who travel abroad. Addressing language barriers through interpreters and language training professionals is also important for the safety of mobile patients, but again, these measures have come to be seen as vital for all high-quality care due to the increasing ethnic heterogeneity of Europe (Legido-Quigley et al., 2007).

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