

Delivering hospital services: A greater role for the private sector?



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Abbreviations used in the report

DEA	Data Envelopment Analysis
DRG	Diagnostic Related Group
IMF	International Monetary Fund
ISTC	Independent Sector Treatment Centre
NHS	National Health Service (United Kingdom)
OMC	Open Method of Coordination
PFI	private finance initiative
PPP	public-private partnership
QALY	quality-adjusted life year
REA	rapid evidence assessment
SFA	Stochastic Frontier Analysis

Executive summary

Introduction

This report examines the role and contribution of the private provision of hospital services (both for-profit and non-profit) in the European Union, with a focus on medical services. The report maps the extent of private provision across Europe, examines the drivers for increased private provision, describes how it takes place and presents the views of different stakeholders. The report also analyses the implications of private provision for the public sector and for the efficiency, accessibility and quality of the services delivered.

The research involved contributions from Eurofound's network of European correspondents, a literature review to identify studies analysing the link between hospital ownership and the services delivered, and six national case studies highlighting factors that influence service delivery.

Policy context

Healthcare reforms have attracted increasing attention in the EU's economic monitoring system, the European Semester, with 11 Member States receiving country-specific recommendations in 2016, mostly concerned with increasing cost-effectiveness and improving accessibility. Ensuring access to high quality healthcare is one of the key elements of the European Pillar of Social Rights.

An Expert Panel on Effective Ways of Investing in Health was set up in 2012 to provide scientific advice in areas such as commissioning from private providers, competition among providers of healthcare services and public-private partnerships (PPPs). The Social Investment Package, presented in 2013, included a Commission Staff Working Document that set out the role of the EU in healthcare. Also in 2013, the Joint Assessment Framework (JAF) indicators methodology for health was piloted.

Key findings

Trends in private provision

The past 10 years have seen an increase in private for-profit hospitals and their number of beds in most Member States (for which data are available), in particular in Bulgaria and Romania. These hospitals tend to be small and offer fewer types of treatment than public ones. Non-profit provision fell during this period (in all countries for which data are available), with the exception of Italy and Portugal.

This increase in for-profit provision has taken place in the context of a decrease in the number of public hospitals and the number of their beds. The economic and financial crisis accelerated the process in some Member States, with the closure of public hospitals creating new opportunities for private providers.

A precursor to this increase in private provision was the introduction of competition and market-oriented mechanisms that create opportunities for profit. Policies that favour the role of private providers and which aim to diminish the role of the public sector tend to have, as their rationale, gains in efficiency and a reduction in public expenditure and waiting lists in public hospitals.

Forms of privatisation

Corporatisation (the change of legal status of public hospitals to become companies under private law) has been used in Poland as way to reduce local authority debt and in the UK to give hospitals more autonomy.

Outsourcing has been used in many countries, mostly in relation to non-medical activities such as catering, cleaning and security. Some of the health-related services that have been outsourced include laboratory testing and diagnostic services, sterilisation of medical instruments and routine elective surgery.

PPPs have been established mostly for hospital construction, renovation and building alterations, but they have also been used for the management and delivery of services, mainly in western Europe. There are few PPPs in central and eastern Europe.

The full or partial sale of public hospitals is an uncommon process in most of the countries analysed, with some having cancelled privatisation plans due to public opposition.

Implications for service delivery

No conclusive evidence was found on which type of hospital is more efficient; the incentives provided by reimbursement mechanisms have a major influence on the efficiency of all types of hospitals. Several studies highlight the influence of staff and work processes on technical efficiency; offering fewer types of treatment than public hospitals allows private hospitals to standardise processes more efficiently.

Studies in some of the countries where care has been purchased from private hospitals with the aim of reducing waiting lists in public hospitals (Ireland and the UK) show it is not entirely clear whether this strategy has been successful, or whether it is more cost-effective than investing in developing the capacity of public hospitals.

Patients in private hospitals usually have conditions requiring treatments that are more profitable than those provided in public hospitals. There are also differences in the age, socioeconomic status and insurance coverage of patients in public and private hospitals. Patients in private hospitals with complications tend to be transferred to public hospitals.

The availability and coordination with other levels of healthcare and social services are additional factors influencing access to hospitals. The reluctance of doctors to refer patients is one of the reasons the purchase of

care from private hospitals has not been fully availed of in Ireland and the UK.

The studies identified by the literature review did not find a clear relationship between the type of hospital ownership and the quality of care provided. Comparing or evaluating the care outcomes of patients with different levels of complexity is difficult. This is partly due to data about the quality of care in private hospitals not being publicly available in several countries.

Policy pointers

- The debate about the relative merits of public or private provision is complex and demands careful framing, given the differences between public and private hospitals, and because service delivery is influenced by factors such as the types of services offered and the reimbursement mechanisms.
- Unscheduled transfers of patients with complications to public hospitals could be avoided by having agreements between public and private hospitals.
- Private hospitals can contribute towards the reduction of waiting lists in public hospitals. Having a more structured relationship between public and private hospitals than on-the-spot contracting, could reduce the selection of more profitable patients and the referral of unscheduled complex cases to public hospitals. Greater coordination of information on patients and staff is required. The public sector can act as a broker, establishing a repository of information, complaints and good practices to which both public and private hospitals contribute.
- The availability of home and residential care services has an impact on the accessibility of hospitals, as it reduces the occupation of beds by patients unable to be discharged due to a lack of suitable care elsewhere.
- There is a need for more robust research comparing the accessibility and cost efficiency of public and private hospitals. There should also be regulation and incentives in place for private hospitals to make data available about access and quality outcomes.

Introduction

This report brings together the findings of the research project ‘Delivering hospital services: A greater role for the private sector?’, carried out by Eurofound in 2015 and 2016, and continues the work started in an exploratory project that examined the role of the private providers in different social and health services and its implications for service delivery (Eurofound, 2015a).

This report focuses on private hospital services, both for-profit and non-profit. The research questions addressed are:

- To what extent and in which areas are private providers expanding and/or replacing the public sector in the delivery of services in hospitals?
- What are the consequences of higher private sector involvement for the quality, accessibility and efficiency of services?

This report aims to describe private provision across Europe and to analyse the influence of hospital ownership on service delivery. It also contains recommendations on how healthcare reforms can maximise the advantages of private provision while avoiding problems associated with it.

Private hospitals (as a sector) are analysed in their role as service providers. Therefore, the sector’s financing role is described only by explaining how it has affected the care provided. For example, when describing PPPs where the private sector has only a financing role, these are described in terms of how the partnership has affected the services delivered.

Although the focus of the report is mainly on health related services, such as chronic and acute care, inpatient and outpatient, laboratory services and diagnostic testing, changes in the provision of non-medical services such as laundry, catering, cleaning, security and administrative services are also reported in the overview of developments in selected Member States.

EU policy context

Although Article 152 of the European Commission Treaty (previously Article 129) gives very limited competence to the European Union to legislate on health policy, the EU is ‘entering national healthcare systems by the back door of the internal market’ (Hervey and Vanhercke, 2010, p. 116). Since 2004, healthcare and long-term care have also been addressed through ‘soft law’ governance when the Open Method of Coordination (OMC)¹ was extended to healthcare and long-term care with the aim of having a common framework for the reform and development of services (European Commission, 2004). Furthermore, Article 2e of the Treaty of Lisbon (European Union, 2007) gives competences to the EU to carry out actions to support, coordinate and supplement the actions of Member States. EU action is foreseen, in particular, on cooperation in cross-border areas and the exchange of good practices. The Treaty of Lisbon also states that the EU shall respect the responsibility of Member States in defining their health policy as well as organising, managing and delivering health services.

These actions are taking place within the framework of EU economic governance (known as the European Semester), with the European Commission providing recommendations on health system reforms as part of its Annual Growth Surveys. These have made the modernisation of public administration one of its priorities since 2012. The Annual Growth Survey in 2016 (European Commission 2015a) called for a continuation of reforms to make healthcare more cost-effective and to ensure adequate access, together with modernisation in the areas of provision and financing. Implementation measures at the national level are reported by Member States in their national reform programmes, which are used by the European Commission for monitoring and issuing country-specific recommendations. The number of country-specific recommendations in the field of healthcare increased from 5 in 2013 to 11 in 2014. In 2016, 11 countries received recommendations about healthcare, focusing mainly on increasing cost-effectiveness (see Box 1).

1 OMC promotes the mutual learning and the comparison of the performance of Member States in several areas of health and social protection.

Box 1: Country-specific recommendations on healthcare, 2016

Bulgaria: ‘Improve the efficiency of the health system by improving access and funding, and health outcomes’.

Cyprus: ‘Adopt legislation for a hospital reform and advance with the planned implementation of universal healthcare coverage’.

Czech Republic: ‘Take measures to ensure the long-term sustainability of public finances in light of future risks in the area of healthcare’.

Finland: ‘Ensure timely adoption and implementation of the administrative reform with a view to better cost-effectiveness of social and healthcare services’.

Ireland: ‘Enhance the quality of expenditure, particularly by increasing cost-effectiveness of healthcare’.

Italy: ‘Take further action to increase competition in regulated professions, the transport, health and retail sectors and the system of concessions’.

Latvia: ‘Improve the accessibility, quality and cost-effectiveness of the healthcare system’.

Lithuania: ‘Improve the performance of the healthcare system by strengthening outpatient care, disease prevention and health promotion’.

Portugal: ‘Ensure the long-term sustainability of the health sector without compromising access to primary healthcare’.

Slovakia: ‘Improve the cost-effectiveness of the healthcare system’.

Slovenia: ‘Complete and implement the reform of the long-term care and healthcare systems, making them more cost efficient to ensure long-term sustainability of accessible and quality care’.

Source: *European Commission Country-specific Recommendations, 2016.*

Reforming healthcare is also one of the key messages in the Commission Staff Working Document *Investing in health* (European Commission, 2013a). This is part of the Social Investment Package and sets out the role of the EU in healthcare and how it supports the Europe 2020 goal of smart, sustainable and inclusive growth. The document calls for efficiency gains in healthcare in order to contain costs, to ensure its sustainability and to reconcile it with fiscal consolidation goals. Some of the proposed measures include introducing activity and/or quality-based payment for Diagnostic Related Groups (DRGs) and developing tools to better assess the efficiency of healthcare systems.

The Commission also supported these reforms in 2012 by setting up an Expert Panel on Effective Ways of Investing in Health. This panel provides scientific advice in areas such as commissioning from private providers, competition among providers of healthcare services and PPPs. In 2013, the Joint Assessment Framework (JAF)² methodology was piloted in healthcare to support the work of the Social Protection Committee and the European Commission in the OMC and the European Semester.

As well as the cost-effectiveness and sustainability of healthcare, its accessibility features prominently in the European policy agenda. A Communication in 2009 on health inequalities (European Commission, 2009), set out actions aimed at tackling this issue, which included providing information about funding, assessing the impact of EU policies and cooperation with Member States. The Cross-Border Healthcare Directive (European Parliament and Council, 2011) clarifies the rules and reimbursement for healthcare received in another country.

Ensuring access to high quality healthcare is also one of the objectives of the European Pillar of Social Rights, which is to become a reference framework to screen reforms at national level within the euro zone (as well as in other Member States that may wish to join). The preliminary outline of the Social Pillar highlights the need for affordable and timely healthcare, as stated in Article 35 of the Charter of Fundamental Rights (European Parliament, 2000). It also draws attention to the need for the cost-effective provision and financial sustainability of care mentioned in the Social Investment Package.

² The Joint Assessment Framework was developed by the European Commission and the Social Protection and Employment Committees in 2010 to monitor progress towards Europe 2020 goals on the basis of commonly agreed indicators.

1 Concepts and definitions

This chapter explains the concepts used in the report and briefly discusses their main elements. It can be difficult to explain and operationalise the concept of privatisation. Not only can the use of the correct terminology prove difficult, as various terms cover similar processes (liberalisation, marketisation and (re)commodification), but also the boundaries between public and private service provision are becoming increasingly blurred (Sirovátka et al, 2011, p. 49). In addition, in order to clarify privatisation as a concept, the notion of ‘public’ and ‘private’ first needs to be defined. For example, within the context of healthcare (including hospital care), it could be questioned whether purely private agents really exist ‘because they are always embedded in a system of public regulation that determines the scope for private activity’ (Maarse, 2006, p. 984).

National conventions also influence the meaning of public and private, which adds to the challenge, especially in a cross-country comparison. In the Netherlands, for example, health services are regarded as private activities if they are excluded from public funding (Maarse, 2006, p. 985). Moreover, privatisation appears in many forms; from the sale of public hospitals to, for example, outsourcing, change of legal status and PPPs.

Another challenge, which makes cross-country comparisons particularly difficult, is that these processes cannot be measured in an exact way (Hermann and Verhoest, 2012, p. 13). Within this context, qualitative studies are of specific importance. They not only provide valuable contextual information within each country, but by the careful selection of case studies they can also explore issues which seem of particular relevance to the topic.

Hospitals and hospital services

The definition of hospital services used in the current project is the one established in the System of Health Accounts used by OECD, the World Health Organization (WHO) and Eurostat:

Hospitals comprise licensed establishments that are primarily engaged in providing medical, diagnostic and treatment services that include physician, nursing and other health services to inpatients and the specialised accommodation services required by inpatients. Hospitals provide inpatient health services, many of which can be delivered only by using specialised facilities and professional knowledge as well as advanced medical technology and equipment, which form a significant and integral part of the provision process. Although the principal activity is the provision of inpatient medical care they may also provide day care, outpatient and home health care services as secondary activities.

(OECD et al, 2011, p. 131)

Where relevant, the report aims to place hospitals and hospital services within the broader context of healthcare. Within hospital services, this project looks only at clinical services, although when outsourcing is discussed, it also provides some information on non-clinical services such as cleaning, catering and laundry.

The report is mostly concerned with medical services, but it also discusses non-medical, health-related services such as laboratory services and diagnostic testing, due to the importance of the role in the private sector.

From public to private: Changing hospital forms

The following four types of hospital can be linked to privatisation:³

- **Public sector autonomous hospitals:** The government retains ownership of the hospital but gives some autonomy to the hospital management. The hospital can have independent legal status so that it can enter into contracts with a health insurance fund, for example National Health Service trusts in the UK. Similar models existed in central and eastern Europe, especially during the transition period, when the process of ‘corporatisation’ occurred.
- **Private management of publicly owned hospitals:** Examples of this form are found in Portugal – the State retains ownership, but the management of the facility is contracted to private companies.
- **Private for-profit hospitals:** Their importance is shown by the fact that 20% of all hospital capacities are covered by this type in France, Germany, Portugal and Spain (Busse and Wörz, 2002).
- **Private non-profit hospitals:** These are private hospitals without a profit objective, which includes hospitals operating under the ideology of religious or community missions. The hospitals receive funding through public channels and are commonly found in countries such as Austria, Germany, the Netherlands, Sweden, Switzerland and the UK (Saltman et al, 2011). This type of hospital can also be found in eastern Europe (for example, in Hungary).

This is not a comprehensive list and is based on categories of hospital ownership. Since this research focuses on provision, the categories selected are those which could be of relevance and have implications for delivery.

Not surprisingly, privatisation has led to major organisational transformation in hospitals, mostly driven by the new forms outlined above. However, the organisational restructuring was not always linked directly to these forms of privatisation. As part of marketisation, internal markets were created within hospitals, where

3 Based on McKee and Healy (2002, Box 7.1, p. 122).

departments were transformed to separate cost centres (Schulten and Böhlke, 2012, pp. 90–95).

Privatisation, liberalisation and marketisation

The term ‘privatisation’ refers to transformation from the public to the private sphere (Frangakis et al, 2009, p. 2). However, the increase in private sector provision in the hospital sector does not only include the process of privatisation, but also the emergence of new private hospitals. This development can be linked to general trends in the past decade: the State transforming from a ‘provider state’ to a ‘guarantor or enabling state’ (Huber et al, 2008), in that it is ‘more market and less state’ (Gilbert, 2005) provision of services across the EU. The same process can also be observed within healthcare reforms.

Within the context of hospitals, the distinction between marketisation, liberalisation and privatisation it is necessary to understand the process of transformation and how and in what forms private players became increasingly involved in hospital services. Maarse (2006, p. 988.) also emphasises the ‘evolutionary character’ of privatisation, arguing for the introduction of ‘the notion of a continuum, ranging from precursors of privatisation to moderate forms of privatisation to radical forms of privatisation’ (Maarse, 2006, p. 988).

At the same time, the distinction – especially between marketisation and liberalisation – seems challenging since these two processes often occur together and simultaneously. This is particularly true for the hospital sector, where liberalisation occurred in a different way than, for example, in classical network industries such as post and telecommunications. It did not simply mean the opening of markets to new competitors, but rather its marketisation – the introduction of market-oriented arrangements (Schulten and Böhlke, 2012).

‘Liberalisation’ in this instance can be described as abolishing public sector monopolies and creating public service markets with at least two providers so as to generate competition for customers. The introduction of competition, however, does not necessarily lead to changes in ownership (Hermann and Verhoest, 2012, p. 7). Within the context of healthcare, including the hospital sector, liberalisation is most often referred to when the increasing need for patients’ choice is high on the agenda, while the objective is to achieve greater efficiency so as to contain costs under tight budget constraints. In this case, the need for more competition among service providers and insurance funds is advocated.

The term ‘marketisation’ means introducing market elements to the provision of public services (Hermann and Verhoest, 2012, p. 9) with the aim of market exposure. It is mainly used to describe the mechanism through which the process of liberalisation takes place. For example, changes in hospital financing could be regarded as an important element of liberalisation. One of the major

changes was the introduction of the DRG systems, where instead of full coverage on a daily basis, diagnosed cases could be reimbursed, irrespective of the treatment applied and the actual costs incurred in an individual hospital. As a result, it became possible for hospitals to make financial profits or indeed deficits – a development that sparked the interest of investors. Subsequently, since the 1990s, private for-profit providers have been emerging (Schulten and Böhlke, 2012). These developments paved the way for competition, which can often be associated with privatisation (OECD, 2012, p. 26). Marketisation took various forms; starting with the outsourcing of non-clinical activities such as laundry, catering and cleaning. However, this is not a subject of the current research and is only mentioned for reference.

The other emerging forms of privatisation with which this research is concerned are, according to Hermann and Flecker (2012):

- **Outsourcing of health-related services:** For example, diagnostic testing, laboratory services and radiology;
- **PPPs:** Public authorities contract private players to build or renovate buildings, and/or to run hospitals (called functional privatisation);
- **Change in the legal status of hospitals:** The corporate status of the hospital is changed so that it can operate under private law (called formal privatisation);
- **Full privatisation:** The sale of publicly owned hospitals to private corporations.

In principle, this last form could be deemed radical if privatisation is seen as a continuum (Maarse, 2006). Even in this case, it is important to identify what ‘private’ actually means; for example, how the services are funded: Is it fully or partially funded through public channels? Does the private provider operate on a non-profit or a for-profit basis?

Privatisation has often been the subject of fierce political debate. It could be slowed or revoked due to private failures, which could include the absence of effective cost control at macro level; cost shifting to the public sector, for example, due to cherry picking, restricted access to healthcare, and increasingly limited possibilities for public accountability (Maarse, 2006, p. 1008).

Service delivery dimensions: Efficiency, accessibility and quality

Describing each of the three main service delivery dimensions in hospital services (access, efficiency and quality) can be complex. However, from an analytical point of view, it is useful to distinguish between the different levels of hospital-related decision-making (Saltman et al, 2011, pp. 4–5):

- **Macro:** National government decisions, determining the context within which hospitals operate in a given country (structure, organisation and financing of the healthcare system);

- **Meso:** The overall institutional level of the hospital or hospitals;⁴
- **Micro:** Day-to-day operational management of staff and services inside the organisation.

Where most aspects of efficiency (such as cost and technical efficiency) are mainly linked to the micro or meso level of hospital governance, many of the different aspects of access are related to the macro level. With regards to quality, its first element (structure) could also be linked to the macro level, whereas the other two (process and outcome) are more related to the meso and micro levels.

Efficiency

There are various widely applied methods of quantifying this dimension; the most important ones are mentioned in Chapter 4 (literature review) with more details available in Hollingsworth (2008). The following forms of efficiency are of key importance:

Technical efficiency: The optimal use of available resources (Figueras and McKee, 2012, p. 24). Companies are technically efficient if they produce on a production possibility frontier (PPF) which ‘represents the maximum output attainable from each input level’ (Coelli et al, 2005, p. 3). Illustrative examples of technical inefficiencies in hospitals include excessive length of stay, overstaffing or over-prescribing (Hsu, 2010).

Allocative efficiency: This can be measured if information on prices is available. The other assumption is cost minimisation and profit maximisation behaviour. Allocative efficiency means that when a mix of inputs is selected, for example labour and capital, ‘that produces a given quantity of output at minimum cost’ (Coelli et al, 2005, p. 5).

Cost efficiency: The term covers the financial input only. Therefore, input price information is needed to measure it. If the total overall cost efficiency is considered, however, not only the input price should be taken into account, but also that which ‘can be expressed as a product of technical and allocative efficiency measures’ (Coelli et al, 2005, p. 53).

Scale efficiency: According to its definition, a unit (a hospital) is ‘scale efficient when its size of operations is optimal, so that any modifications on its size will render the unit less efficient. The value for scale efficiency is obtained by dividing the aggregate efficiency by the technical efficiency’ (Coelli et al, 2005).

It is assumed, with regard to cost efficiency, that hospitals aim to minimise their costs. This, however, is not always the case. For example, within the context of market failure in healthcare, issues such as ‘Cadillac-only medicine’ or ‘medical arms race’ are often raised. These concepts mean that private provision may be less cost efficient since, under a competitive environment, they are incentivised to ‘show off’ (such as with the equipment they possess), although from a medical point of view that may not be needed (Czypionka et al, 2014).

In political debates, the size of hospitals is often raised and scale efficiency can be an important argument. Smaller hospitals are usually at higher risk of being closed down than larger ones – although the closure of small local hospitals is often opposed to by local politicians. The relationship between volume and quality could also be one of the subjects of such debates.

When measuring efficiency in healthcare (including hospital services), the gains in the health status of patients can be regarded as the final output (Hollingsworth, 2008). However, as explained by Hollingsworth, most research uses some variant of intermediate outputs such as number of patients treated, inpatient days or discharges. Hollingsworth also questioned to what extent these variables could be regarded as ideal, even if adjusted with case-mix,⁵ since it does not capture health improvement. In addition, health service players could have other objectives, including quality of service. Even if in some analyses, outcome measures such as examining changes in health status or mortality are assessed, quality as an objective should also be included in measuring outcome. To address these shortcomings, Hollingsworth suggested some new measurement techniques (the use of multivariate models), which could take into account different objectives within a system of equations and, at the same time, allow for correlations across equations.

When measuring efficiencies, input variables often include the number of staff and capital invested/applied. Although the first aspect, technical efficiency, is clear (as is its definition), Palmer and Torgerson (1999) introduced the term ‘productive efficiency’ and with that the concept of the ‘relative value for money of interventions with directly comparable outcomes’.

To illustrate this with an example, they explain it using the alternative of a biochemical screening programme versus the maternal age programme:

If the sum of the costs of the new biochemical screening programme is smaller than or the same as the maternal age programme and outcomes are equal or better, then the biochemical programme is productively efficient in relation to the maternal age programme.

(Palmer and Torgerson, 1999)

Palmer and Torgerson use the term ‘allocative efficiency’ in a much broader context than Hollingsworth (2008), introducing a societal perspective where ‘allocative efficiency is achieved when resources are allocated so as to maximise the welfare of the community’. This aspect of efficiency can be directly linked to the macro-level of decision-making of hospital services.

Accessibility

In relation to the accessibility of public services for service users, Eurofound’s programme emphasised two terms: affordability and the availability of services to users’ needs. Whereas affordability refers to the patients’

4 Occasionally, this level may incorporate some physically separated hospitals (see the example in Saltman et al 2011, Chapter 10).

5 Case-mix is a measure that allows comparison of activity and costs in hospitals, whereby patients are classified in DRGs that have similar clinical attributes and resource usage.

perspectives (co-payment, cost sharing); availability covers service delivery with all its complexity. This means not only health personnel and facilities (micro-level of hospital governance), but also that patients have regular access to all levels of healthcare (primary, secondary and tertiary).

Eurofound's analysis of access to healthcare focused on five aspects: Legally covered, affordable, physical, timely and informed (Eurofound, 2013), which are also relevant to hospital services.

Legally covered access

This refers to population coverage (health insurance coverage), which is an integral element of a broader definition of access (European Commission, 2014, pp. 8–9), and from the point of view of hospital governance, it appears on the macro level. Although healthcare coverage for hospital services is, in principle, universal in most EU28 Member States, eligibility depends on residency status or having social insurance – in most of the countries (Eurofound, 2013).

In principle, the extent (or depth) of coverage can also be related to legally covered access, since in principle, services that are covered by publicly financed health insurance should be legally regulated. The extent of coverage, however, varies more between Member States than population coverage. For example, there are certain services that are not included in the publicly funded healthcare services in all Member States; although not linked directly to hospital services, a typical example is dental care.

The problem here is that there is no exact definition of publicly financed treatments in several Member States. This causes not only uncertainty among the population, but also raises the importance of other aspects of access such as a lack of informed access, which can adversely affect disadvantaged groups.

Affordable access

This is linked to legally covered access, especially to the extent (or depth) of coverage. Affordable access can be problematic in countries with high private healthcare finance (expenditure mostly in the form of high private payments within cost-sharing arrangements). Affordability is also a relevant issue for low income patients, which raises the issue of equity of access. From this aspect, it is important to identify which are the services where out-of-pocket payments (co-payments for certain publicly financed services) are required.

Within this context, it is important to emphasise that one should not confuse the term 'equity' with 'equality'. Equity refers to fairness, meaning that some individuals receive more care than those who have differences in their ability to benefit (such as financial status) or who have particular needs.⁶ This could be called 'vertical equity' – unequal treatment of unequals (Saltman et al, 2004, p. 105). Whereas equality (equal access) should be universal and, in this regard, related to legally covered access.

Private payments not only include formal arrangements, but can also take the form of under-the-table (secret) payments. The latter also affect affordable access (Eurofound, 2013, p. 14), even if (in most cases) such payments are not included in the OECD/WHO/Eurostat figures. Although there is considerable interest in informal payments, this research does not deal with it directly. However, a Eurofound report in 2015 (Eurofound, 2015b) touched on the issue, suggesting that informal payments have sometimes been internalised, meaning that they have been made formal by means of for-pay/private provision. The advantage of formalisation is that the payment becomes more transparent and doctors feel more comfortable about it, but the downside is that it may adversely affect patient access.

The Third European Quality of Life Survey (EQLS) in 2012 found that although, in general, there is a correlation between the share of out-of-pocket private expenditure of total spending on health and the proportion of people reporting difficulties due to costs, there are countries that are exceptions to this rule. The differences between countries may be explained by cross-country variations in the composition of the out-of-pocket expenditure. The subcategories in the System of Health Accounts (OECD, 2011) show, for example, that out-of-pocket payments may consist of co-payments of necessary services not publicly financed, as well as voluntary health insurance or pharmaceuticals. It was also revealed that since 2009, the share of people reporting their needs had not been met due to financial constraints had increased. A significant increase was observed among unemployed people, migrants and urban dwellers (Eurofound, 2013, p. 17).

Access to healthcare (including preventative care) is a right guaranteed by the EU's Charter of Fundamental Rights (European Parliament, 2000). Access is listed among the four common values of EU health systems, along with universality, solidarity and equity (European Commission, 2014, p. 2).

The need to ensure access at societal level prompted its operationalisation for measurement for a given population. Access can be measured as the proportion of a given population in need of health services that can obtain them (see European Commission, 2013b, referring to the original definition by the WHO Regional Office for Europe).

Physical access

This term refers to the access and availability of amenities and has the following key elements:

- Certain specific services and/or treatments are available in the hospitals.
- The geographical distribution of hospitals at national level and good access to high quality and affordable transport. Patients must be able to get to the place where the hospital services are located easily. The distance to institutions in regions and/or smaller

⁶ This is also emphasised in the Joint Assessment Framework 2015 (JAF) update. Within the context of access, it underlines the need for ensuring 'equity in financing', where payments match the ability to pay. The document also refers to 'equity in delivery' both in vertical terms (different treatment for different needs) and horizontal (equal treatment for equal needs).

areas could determine travel time for patients, and a cumbersome and long journey could adversely affect a patient's health condition.

- Ease of access to hospital buildings is crucial for certain population groups, especially within the context of an ageing population in the EU, where there is an increasing share of the population who may have impaired mobility.

Timely access

This term is linked primarily to availability, meaning that the service is available when patients need it due to their health conditions. Waiting lists (an important indicator also used in this research) pose a serious obstacle for patients getting the treatment they need on time. This aspect of access is also related to affordability.

Timely access is essential for ensuring equal access. Previous research has shown that people on a low income are at a disadvantage since they do not have the resources to seek alternative private care and have to wait their turn in the queue for public care. For example, older people in nine EU countries with a low income and a low level of educational attainment experienced long waiting times for non-emergency surgery (Eurofound, 2013, p. 21).

Informed access

This term refers to both service users (patients and providers) having sufficient knowledge to take informed decisions, thus facilitating adequate service provision. In healthcare, including hospital services, this is of high importance due to the complexity of health systems.

People need to be aware not only of their entitlements, but also be well-informed about how the healthcare system works in order to avail of services. This also includes users being aware of their legal rights. A lack of knowledge of one's rights or understanding of the health system, as well as administrative problems, were the most frequently quoted barriers to access in a survey by Doctors of the World of over 8,000 patients (cited by Eurofound, 2013, p. 20).

In healthcare, where information asymmetry is prevalent, there is a need for patients to be constantly informed of their illness and treatments – and of possible medical procedures they can choose.

Ensuring informed access is also important from an equity point of view. As highlighted by Eurofound research (Eurofound, 2013, p. 20), problems with informed access were found to be especially prevalent among the most vulnerable groups, such as the Roma.

Quality

In Eurofound's exploratory research (Eurofound, 2015), the objective of achieving high quality in service delivery was understood as fulfilling the service users' requirements by responding to their specific (individual) needs.

If quality of care is assessed, the distinction between the following three aspects is widely accepted and adopted by research communities and organisations aiming at quality improvement:⁷

- structure (input);
- process;
- outcome.

Structure describes the circumstances or settings under which care is provided (material and human resources as well as organisational characteristics).

Process refers to the content of healthcare, namely how resources are used (the activities of healthcare providers regarding diagnosis, surgery, prevention, patient education and so on).

Outcome means those changes that can be attributed to healthcare, with such diverse indicators as satisfaction and mortality. These indicators may be related to the findings of the Patient Reported Outcome Measures (PROMs) in the UK.⁸

Structural characteristics, such as ownership and its impact on process and outcome is a key component of this research. However, there are problems with assessing the impacts because the relationship is not straightforward (Romano and Mutter, 2004, pp. 133–134).

In its JAF in the area of health, the EU also adopted these three dimensions to measure the quality of healthcare (European Commission, 2015, pp. 3–13). More details can be found in Table 1.

Indicators of these dimensions could be as follows.

- **Structure:** Apart from ownership, other key determinants of functioning include staff qualifications, nurse-to-patient ratios, equipment, facilities and the size of healthcare institutions/hospitals.
- **Process:** Examples include survey results on specific aspects of care or specific care, such as how patients are treated: the Patient Reported Experience Measures (PREMs) in the UK, and the waiting time for certain surgeries (Table 1).
- **Outcome:** Examples include survival, mortality, discharges and readmissions.

The fact that providers have to cope with high risks is reflected in one of the first attempts to define quality in healthcare: it should be managed to achieve the 'best balance of health benefits and risks' (Donabedian, 1980). Related, in part, to high risks, another early definition points to an important aspect that is also specific to healthcare, namely the resource need, which states that the primary objective should be to enable healthcare to improve the health status and satisfaction of a given population 'within the resources which society and individuals have chosen to spend for that care' (Romano and Mutter, 2004). The latter statement points not only to

7 Both Romano and Mutter (2004, p. 133) and Legido-Quigley et al (2008, p. 10) refer to physician Avedis Donabedian who first described this distinction.

8 See Romano and Mutter (2004, p. 133) and Legido-Quigley et al (2008, p. 10).

the importance of quality at societal level, but it is also relevant to this research since the emphasis on resources is a key issue and links closely to current debates on the extent of private sector involvement in healthcare.

The third aspect (the high relevance of professional knowledge) is highlighted in the following highly influential and widely quoted sentence⁹ which defines quality of care as:

the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.

(Lohr, 1990)

Romano and Mutter (2004) remark that these definitions try to distinguish between clinical quality and other non-clinical aspects of service delivery – the latter could be called ‘amenities’. Amenities include not only comfort and convenience, which are extremely important in hospitals, but also appearance as well as other patient-centred indicators. These include telephone inquiry reply time, prompt complaint resolution and the giving of adequate information to patients and their relatives. Although, as they point out, the boundaries between amenities and other aspects of quality could be blurred, the distinction is still useful as it focuses attention to ways in which providers allocate their resources, such as how likely they are to invest in improving patients’ outcomes, or if they prefer to invest more in comfort.

The fact that the boundaries of these two aspects of quality can be blurred not only points to the difficulties in measuring quality, but indicates that there is also a close link to access¹⁰; the examples of patient-centred measures could belong, for instance, to the categories of timely, informed access or availability.

This distinction between these two aspects of quality is also relevant to this research. In a competitive environment, some private providers (in principle) may want to attract patients by prioritising comfort over improving the outcome of the patient’s health. There is, however, no doubt that the two are closely linked. Quality of amenities is of great importance, especially for patients who have to stay in hospital for a long time due to chronic illness, or when contact between patients/people (relatives) and service providers is frequent. This could be an aspect to consider when assessing the impact of private sector involvement on quality.

In order to operationalise the definition of quality, besides underlining current professional knowledge (the importance of standards), it is worth emphasising two other points from the above definition:

- It identifies two groups as targets for quality assurance purposes: individuals and populations.
- Compared with earlier definitions, it covers broader target groups than just patients, meaning a broad definition, which includes health promotion and prevention.¹¹

For an elaboration of quality indicators, an emphasis on the types of quality problems may also be useful. Such problems could include:

- inappropriate use of care, such as overuse – providing too much/unnecessary care (closely related to the dimension of efficiency);
- inappropriate underuse, or misuse of care – ‘assessments of the quantity and of the quality of care are thus inextricably intertwined’ (Donabedian, 1980).

Due to its close connection to efficiency, it is understandable that when dimensions of quality are identified by authors and organisations defining quality, efficiency is always listed among them. Even if access is mentioned less frequently among quality dimensions, it is still important. It is worth noting that equity is also included in some classifications¹². Safety, appropriateness, responsiveness, satisfaction, health improvement, continuity and prevention/early detection are also mentioned among the dimensions (Legido-Quigley et al, 2008, pp. 5–6).

The European Commission’s JAF has over 40 indicators in the area of health. In its summary overview, it was unable to deal with such a wide range of indicators and so the aim was ‘to identify some indicators that, together, could be representative of the overall quality of the health care system’ (European Commission, 2015, p. 28).

The JAF includes process and outcome measures, based partly on the OECD Quality of Care Indicators¹³ (European Commission, 2015, pp. 25, 27–30). Table 1 lists the indicators that are specifically relevant to hospital services.

Table 2 lists the key elements of the definitions of the three dimensions.

9 This definition was first published in 1990 by the Institute of Medicine (Lohr, 1990) and quoted, for example, by Romano and Mutter, (2004, p. 132) and Legido-Quigley et al, (2008, p.4).

10 This is confirmed by the fact that Andersen et al (1983, p. 49) listed ‘convenience of services’ or consumer satisfaction with services among operational measures for access whereas, as can be seen here, these could also be regarded as indicators for quality.

11 Legido-Quigley et al (2008, pp. 3–4) also list other elements such as measurement (scale), importance of individual patients’ needs, lifestyle preferences and values. This implies that patients’ views are taken into account during decision-making.

12 See Table 1.2 on dimensions of quality of care in Legido-Quigley et al (2008, p. 5).

13 For more information about these indicators, see <http://www.oecd.org/els/health-systems/health-care-quality-indicators.htm>

Table 1: Indicators relevant to hospital services among Joint Assessment Framework (Health) and OECD Health Care Quality Indicators

Joint Assessment Framework (Health)	OECD Health Care Quality Indicators
Cancer care	Avoidable hospital admissions
Care for acute exacerbation of chronic conditions (AMI)	Waiting times for hip fracture surgery
Care for chronic conditions	Surgical complications
Care for mental disorder	
Patient safety	

Note: The focus here is on process rather than clinical outcome indicators.

Source: European Commission (2015); OECD (2015, Chapter 8).

Table 2: Key elements of the definitions of efficiency, accessibility and quality

Efficiency	Accessibility	Quality
Cost efficiency	Physical accessibility	Structure (input)
Technical efficiency Overall efficiency (technical and allocative price efficiency)	Timely accessibility	Process Outcome
	Informed accessibility	
	Legally covered accessibility	
	Affordable accessibility	

Source: Authors' elaboration based on the descriptions given above.

2 | Overview of the methodology

This report is based on several types of evidence. Firstly, private provision in 14 Member States was mapped using a questionnaire completed by the Eurofound research team and Eurofound’s Network of European correspondents.

Secondly, a literature review and six case studies were conducted to understand the effect of hospital ownership on service delivery. Given the need for robust evidence that controls factors that may have an impact on service delivery other than hospital ownership, the project gathered evidence that had been searched, appraised and synthesised in a systematic way in the form of a literature review using the rapid evidence assessment (REA) method. The findings from this review informed the selection and design of the six country case studies carried out to gain more in-depth understanding of the differences between public and private hospital services and the reasons behind them. This was achieved by including – in the semi-structured interviews – questions about the dimensions of service delivery identified in the REA as being affected by hospital ownership such as length of stay, upcoding and mortality rates.

Finally, the report also benefited from the input of stakeholders such as trade unions, employer associations, academia, and hospital associations. Given the sensitivity and complexity of the topic, input from different perspectives has been employed to secure an accurate and balanced interpretation and presentation of the evidence available – and the policy pointers derived from them. The different methods and their objectives are summarised in Table 3.

National overview of private provision

This report brings together the findings obtained from desk research carried out by Eurofound’s Network of

European correspondents in Austria, Bulgaria, Estonia, France, Italy, Latvia, Poland, Portugal, Romania, Spain and the UK. A questionnaire was distributed in April 2015 among the correspondents that carried out the desk research and consultation with relevant stakeholders from May to September that year. Eurofound’s research team also provided information obtained between January and April 2016 from Germany, Hungary and Ireland.

In order to focus on countries where the private sector plays a substantial role in service provision, it was decided to choose countries where the number of beds in private for-profit¹⁴ hospitals constituted at least 5% of the total number of hospital beds in 2011.¹⁵ This led to the inclusion of Cyprus (49%), Greece (30%), Germany (30%), Italy (28%), Poland (27%), France (24%), Spain (18%), Bulgaria (13%), Austria (12%), Latvia (9%), Portugal (8%) and Estonia (5%). Romania was also added to the list of countries given that it is – by far – the country in Europe where the number of beds in for-profit hospitals has increased the most in recent years.¹⁶

The number of hospital beds does not completely capture the extent of public and private provision. In addition, comparable data were not available in several Member States. Countries were therefore selected for review taking into account whether there had been relevant policy developments and whether the research team could gather information easily. This led to the inclusion of Hungary, Ireland and the UK, and the exclusion of Cyprus and Greece.

The description of for-profit and non-profit private provision in these countries includes:

- the main drivers for increased private provision;
- the process and form by which the private sector provides hospital services;
- the impact of the economic crisis and austerity measures on hospital services;

Table 3: Objectives of different methods used to obtain evidence for this report

Method	Objective
Questionnaire completed by Eurofound’s research team and the Network of European correspondents	Overview of private provision in 14 Member States
Literature review and case studies	Gathering evidence about aspects of service delivery influenced by hospital ownership, with particular emphasis on those aspects identified in the literature review
Expert meetings	Review of the report and discussion of the policy pointers

Source: Authors’ elaboration based on the descriptions given above.

14 The number of beds in non-profit hospitals was not used as a criterion given the gaps in the data available from Eurostat.

15 2011 was the latest year for which data were available at the time the countries were chosen.

16 According to Eurostat data, there were 3,627 beds in for-profit hospitals in 2011 compared with 960 in 2007, an increase of 278%. The reason behind this is the increase in the number of for-profit hospitals in Romania from 23 in 2007 to 98 in 2011.

- whether private provision has contributed to tackling some of the challenges faced by Member States as a consequence of the crisis (for example, whether it has contributed to achieving savings, reducing deficits or containing costs).

The analysis also presents information about the impact of private provision on service delivery (for example, changes in staff, number of beds, types of services offered and their accessibility).

Finally, the national overview includes the views of service users, the public, social partners and other organisations (such as political parties and think tanks) about the role of private providers in the hospital sector.

Literature review

The role of for-profit private providers in healthcare and their impact on service delivery elicits polarised views (particularly in the privatisation of hospitals), often being a central issue in the political debate. In addition, studies analysing the impact of hospital ownership on the quality, accessibility and efficiency of services give mixed results and tend not to focus on the situation of hospitals in Europe. This report includes the results of a literature review that identified, appraised and synthesised the findings of European research studies. This research provides further insight into how private provision influences the efficiency, quality and accessibility of services through case studies carried out in six Member States.

As stated above, the methodology used for the literature review of studies looking at the private provision of hospital services was an REA. This type of literature review can be described as an assessment of what is known about an issue by using systematic review methods regarding the search strategy and critical appraisal. However, it makes concessions on the breadth and/or depth of the process (Grant and Booth, 2009). Studies are only included if they satisfy certain quality criteria.

The REA was primarily conducted in the period between mid-August and the beginning of October 2015. All the articles were made accessible in case the full text was required. To safeguard the quality and limit selection bias, a second opinion was given by a second researcher about the articles that were identified as disputable at the full text stage. The search and appraisal processes are explained in more detail in the Annex.

Country case studies

Objectives

The six country case studies synthesised in this report aim to provide further insight on the influence of private provision on the efficiency, quality and accessibility of the medical services delivered in hospitals. As efficiency, quality and accessibility cover a wide range of indicators, particular attention was given to the outcomes identified in the literature review as being influenced by private provision. The case studies are therefore intended to

complement the literature review by providing a better understanding of the reasons behind the differences in public and private service provision.

As many studies identified in the review had findings that are mixed or context specific, the case studies also provide an illustration how private provision takes place in different countries. Furthermore, the case studies explore the relations between the three dimensions of service delivery, which seem to have been rarely addressed by previous research which appears to be mostly focused on one dimension of service delivery (Hsu, 2010; Tiemann et al, 2012). However, the information provided by the case studies is context specific and is constrained by the limited access to thorough studies.

The case studies also show how the quality of medical services is monitored (and improved) in private hospitals, either by the hospitals themselves with internal quality management mechanisms or by third parties (for example, inspections, accreditation). These quality monitoring and improvement procedures are compared with those in public hospitals. The interviews carried out as part of the case studies also provided input for policy recommendations about how to improve service provision in private hospitals and how the public sector can contribute to this.

Design and selection

The design of the case studies followed the embedded multiple case study approach described by Yin (2003), with private hospitals (in general) in each country being the unit of study and the clinical services in two individual hospitals per country as embedded subunits. The information in the country case studies was gathered through interviews and analysis of the documentation and archival records available. Having access to interviewees and documentation was therefore the main criterion for selecting the countries and the hospitals. The case studies carried out in Germany and Ireland by the Eurofound research team during January to March 2016 were used as pilot case studies.

The initial approach was to choose countries where it was possible to access evaluations of service delivery in individual hospitals. However, the pilot case studies and the initial contacts and desk research showed that this information was generally not available. In many cases, interviewees were not able or willing to provide information about service delivery in specific hospitals, preferring to discuss private hospitals in the country in general. Therefore, selection depended on other sources of documentation and archival records such as inspection reports, data provided by hospitals or other organisations, and studies focusing on several hospitals. These documents and archival records were used to design the semi-structured interviews as well as to contextualise the information provided by the interviewees.

The results from the questionnaire filled in by Eurofound's Network of European correspondents and the studies identified in the literature review indicate that service delivery is greatly influenced by factors outside of hospitals. So while the unit of study is

private hospitals and their medical services, the unit of data collection includes information and interviewees from outside hospital settings in order to gather more information about how external factors influence service delivery. To obtain information about the context in which hospitals operate, the country case studies were chosen from the 11 Member States for which the national correspondents provided information.

Since the study focuses on private provision during the past ten years, whenever possible the preference was to use newly built private hospitals (for-profit and non-profit) since 2004, or hospitals sold to the private sector after that date. Given the need to finalise the pilot case studies in Germany and Ireland by March 2016, and because there was no background information on these two countries

from the Network of European correspondents, their focus was more on the national setting than on individual hospitals and the cut-off point of 2004 for the building and privatisation of hospitals. The rest of the case studies were carried out between February and June 2016 by a consortium of contractors.

Box 2 lists the countries selected and the hospitals included in each case study. A further aim was to include countries representing different types of healthcare systems. Furthermore, it was hoped to include both for-profit and non-profit hospitals, as well as different types of privatisation. However, given the need to prioritise those countries where information was available and where it was possible to do interviews, most of the hospitals included in the case studies are for-profit.

Box 2: Summary of the country case studies and hospitals

Austria: Social health insurance system

Citizens are insured in a fund based on the location of their employment, with no free choice of funds. Patients receive free treatments at all hospitals financed by health funds, so-called 'fund hospitals'. The health funds themselves receive funding from health insurance funds as well as the regional and national government. In 2014, Austria had 154 public hospitals and 125 privately owned hospitals. Of the private hospitals, 82 belong to private companies, 37 to religious orders and 6 to foundations (Bundesministerium für Gesundheit, 2015). Private not-for-profit hospitals are often those run by religious orders which get reimbursed for their services by regional health funds – like public hospitals, and receive the same amount of funding per treatment. Private not-for-profit hospitals, therefore, have a public mandate for the provision of health services and thus treat all patients with statutory health insurance for free.

- Krankenhaus Oberndorf (PPP) is a former public hospital where private providers are in charge of human resources management, with staff having contracts either with the public sector or the private company. Patients with statutory health insurance can get free treatment at this hospital. The hospital covers a variety of specialities including internal medicine, general and trauma surgery, orthopaedics and intensive care, and has just over 100 beds.
- Privatklinik Graz Ragnitz (private for-profit) provides infrastructure for independent physicians to treat patients, including inpatients services. It has just less than 150 beds and is the only private for-profit hospital in Austria with an intensive care unit.

Germany: Social health insurance system

In 2012 there were 2017 hospitals with a total of 501,475 beds (6.2 beds per 1,000 people; higher than any other EU country). Of these, 48% of beds were in publicly owned hospitals, 34% in private non-profit and 18% in private for-profit hospitals (Busse and Blümel, 2014).

Of the 2017 hospitals, nearly 30% of them were public, 36% private not-for-profit and 35% private for-profit (Nolte et al, 2014).

- Non-profit hospital group: Group of 10 hospitals including 2 privatised hospitals.
- Non-profit hospital: Hospital with approximately 600 beds.

Ireland: National health insurance system

The vast majority of the revenue of private hospitals (approximately 45%) comes from voluntary health insurance, with individual hospitals contracting with health insurance providers. In 2016 there were 50 public hospitals and about 20 private hospitals.

- For-profit hospital: Private hospital with an emergency department.
- Non-profit mental health hospital.

Italy: National health insurance system

Since 2001, after a Constitutional reform, the National Health System has become regionally based. The 19 regions and 2 autonomous provinces are responsible for the organisation and delivery of health services through local health units. The private hospital sector can be divided into two categories:

- Private hospitals that can provide performance equivalent to public hospitals recognised as ‘accredited hospitals’ that receive a fee for their services directly from the regions or the National Health System.
- Non-accredited private hospitals that are only authorised to perform certain healthcare activities and are paid for directly by citizens. These hospitals either do not have suitable performance levels, are not needed for the general public strategy of the region, or may choose not to be accredited.

In 2014, there were 1,435 hospital facilities in Italy, of which 760 were public hospitals, 608 private accredited and 64 private not-accredited hospitals. In the private sector, 28 hospitals are religious or belong to a religious order (*classificato*), 50 are National Institutes for Scientific Research (IRCCS) and 3 are private university hospitals.

- For-profit hospital, previously non-profit: Large hospital that includes a research institute.
- Centro Ortopedico di Quadrante (PPP): Previously public, now managed by the private sector, focusing on orthopaedics, rehabilitation and ophthalmology. It has around 93 beds and approximately 190 employees, 60 of which have a contract with the public sector, while the rest are private.

Romania: Healthcare in transition

The Romanian healthcare system is dominated by public funding, generated through a combination of mandatory health insurance, with contributions from both employer and employees as a percentage of gross salary, and direct contributions from the state budget via the Ministry of Health. In 2014, there were 527 hospitals in Romania, 161 of which were private. Private hospitals tend to be small, with only 58 providing more than 20 beds and only 16 hospitals with more than 100 beds.

- For-profit hospital: Consists of two private facilities, one multidisciplinary hospital (approximately 75 beds) and an obstetrics/gynaecology facility (approximately 140 beds).
- For-profit hospital: Multidisciplinary inpatient facility specialising in cardiovascular diseases with approximately 140 beds.

UK: National Health Service (NHS) system

In 2013, 465 hospitals in the UK were owned and managed by private companies. Their largest source of revenue in 2012 came from patients with private medical insurance (55%), followed by patients funded through the NHS (27.5%) (CMA, 2014). Only a small number of private hospital services operate completely independently of the NHS, accepting only private patients.

- Nottingham NHS Treatment Centre (newly built for-profit clinic): Opened in 2008, located next to an NHS Trust hospital from which more than 90% of its staff were seconded under protected terms and conditions (for example, remuneration and pension entitlement)
- Circle Bath (newly built for-profit hospital): Opened in 2010 and offers 30 overnight beds and 22 day surgery beds to private and NHS patients. It runs four operating theatres and an endoscopy suite, as well as a full diagnostic service.

Note: *The healthcare system typology used was developed by Böhm et al (2012).*

Source: *Case studies.*

Methodology and synthesis

The case studies follow the quality standards set out by Eurofound (2007), including the recommendation that case studies should include the views of different stakeholders. Interviewees were therefore selected on the basis of the extent they could provide information specific to the two hospitals selected in each country, the situation in similar public hospitals and/or the influence of factors external to the hospital's settings.

A total of 40 interviews were carried out, including representatives from the following organisations:

- governments;
- regulatory/monitoring bodies such as inspectorates and quality assurance agencies;

- private medical service providers;
- hospital managers;
- professional associations (for example, doctors, nurses and medical technicians);
- patients' associations;
- trade unions;
- other (evaluators, academic experts, insurance companies, carers and patient family associations).

As some interviewees and hospitals preferred to be anonymous, in some cases only the occupation, type of organisation and country are included in the research

report (for example, an interview with a member of staff in a for-profit hospital in Ireland).

The interviews were semi-structured to ensure that service delivery domains and policy recommendations were covered, while at the same time, allowing interviewees to refer to those issues more relevant for them in each domain.

The questionnaire was adapted according to the type of informant. The information provided by the literature review, the questionnaire completed by national

correspondents and other sources of information were used to pose additional questions relevant for hospitals (in some countries) for specific forms or private provision such as PPPs.

The 'cross-cutting' case synthesis focused on themes that cut across the interviews and documents, presenting the different views and evidence available about a specific topic. The analysis was guided by the links between private provision and services delivery described in the literature review.

3 Private provision of hospital services

This chapter describes the form in which private provision (for-profit and non-profit) occurs. It is based mainly on the information provided by the Network of European correspondents and the Eurofound research team from 14 Member States (Austria, Bulgaria, Estonia, France, Germany, Hungary, Ireland, Italy, Latvia, Poland, Portugal, Romania, Spain and the UK). The chapter examines the privatisation of hospital services and describes the context in which private provision takes place, with a particular emphasis on the market-based mechanisms introduced to make hospitals more competitive.

Drivers of private provision

Policy driven private provision

Changes in policy that favour the role of the private sector as the service provider and diminish the role of the State have been one of the drivers for increased private provision in Austria, Estonia, Italy, Poland, Portugal, Spain and the UK. Policies that proactively increase the role of the private sector are linked to wider policy and ideological changes in other areas (Maarse, 2006). Furthermore, the role of the EU in liberalising other sectors has been identified as a driving force promoting the idea of privatisation as an efficient policy strategy (Schulten, 2006).

The rationale in many cases is that a bigger role for the private sector leads to gains in efficiency. In Estonia, for example, liberalisation began in the early 2000s and was seen as a tool to achieve a more efficient use of resources, making it easier to downsize the provider network and obtain transparent contractual arrangements. Gains in efficiency were also one of the stated reasons for the introduction in 2011 in Poland of an act on medical activity, which included provisions concerning the transformation of public hospitals into commercial companies providing medical services. Similarly, achieving higher quality of services by taking power away from health authorities and placing it with managers and medical staff was the main rationale for the purchaser/provider split established in the NHS in the UK in 1990.

Containing costs and reducing government expenditure

Supply factors (for example, technological changes and the need for new skills), the rise in prices of pharmaceuticals and equipment, and an increase in the demand for services, have all contributed to rising costs (André and Hermann, 2009).

Cost containment was one of the main concerns in Portugal in 2002 when a newly elected government introduced a legal framework for the management of hospitals. The reduction of the operational costs of hospitals was also part of the Memorandum of Understanding signed in 2011 by the Portuguese government, the European Commission, the International Monetary Fund (IMF) and the European

Central Bank. In the UK, the introduction in 2012 of a new Health and Social Care Act was justified by citing rising demand and cost of treatments, the need for improvement and the state of the public finances (Department of Health, 2012). In France, the costs of public and private hospitals are compared in the National Cost Study. The aim of this study is to establish 'yardstick competition' and to put pressure on hospitals to reduce their cost.

Reducing debt in public hospitals has also led to privatisation. In Poland, the government's B Plan sought to address hospital debts. Since 2011, local governments (which own public hospitals) have been able to convert indebted entities into companies and obtain partial debt relief, or take over the debt. In Germany, regional public hospitals ran up deficits due to the financial crisis and the shift to the DRG system (Klenk and Pieper, 2012). According to Klenk 'Public authorities in turn have welcomed the new actors as they have promised smart solutions for indebted communities withdrawing from funding responsibilities' (Klenk 2011, p. 263). The EU Stability and Growth Pact put further pressure on the German government to comply with the public deficit limits (Schulten, 2006). Regions, districts and cities are selling their hospitals to the private sector because they can access financial capital more easily and the ageing population makes it an attractive sector for private providers. One of the hospitals included in the Austrian case study belonged previously to the local authority. Given that it was increasingly difficult to sustain the hospital financially, the municipality looked for a private partner to establish a PPP (Municipality of Oberndorf, 2007).

The introduction of co-payments in public services has also led to increased use of private hospital services. In Italy, the increase in co-payments for blood and laboratory tests has led to an increase in the use of privately provided services as their waiting times are shorter and the costs are similar.

Tackling waiting lists and meeting the demand for specific services

Services for which there are long waiting lists in public hospitals constitute a market niche for private providers in Estonia, Italy and Latvia. In Estonia, for example, gynaecology, ophthalmology, urology, surgery involving the head and neck, psychiatry and orthopaedics are provided by the private sector due to the long waiting lists in public hospitals. The two hospitals included in the Romanian case study were established to meet demands that were either not met or were underfunded by the public health system.

Contracting out care to private hospitals is one of the options followed by the public sector to reduce waiting lists in public hospitals. The initial objective of the establishment in the UK of Independent Sector Treatment Centres (ISTCs – private specialist hospitals contracted to provide treatment for free to NHS patients) was to reduce waiting times in the

NHS by separating planned procedures from emergency care and thus increase the surgical capacity available to the NHS (Department of Health, 2006). In Ireland, the private sector has been frequently contracted out to provide diagnostics for patients in public hospitals.

Private provision in the past decade

Available data about the number of public and private hospitals and their beds show a decrease in the number and capacity of public hospitals between 2006 and 2014. During this period, the number of beds in for-profit hospitals increased in 9 out of the 15 Member States for which data are available, with particularly sharp increases in Bulgaria and Romania.

Increases in the number of hospital beds in private hospitals in France, and to a lesser extent in Greece, are coupled with decreases in the number of private hospitals. This indicates that the increased role of the private sector has occurred as a result of mergers and the expansion of the capacity of already existing hospitals.

By way of contrast, in Bulgaria, where the large number of hospitals is highlighted as one of the main challenges for the health system, only one private hospital has closed up to 2015. Mergers between hospitals are planned by the Ministry of Health in order to achieve savings. Some of the hospitals with large debts have closed, while others have been transformed into smaller medical institutions for outpatient care.

Similarly, some of the hospitals closed in Romania as part of the National Plan of Rationalising Hospital Capacity reopened during the past two years under various systems of specialisation, either for ambulatory services (12 general medical centres) or other medical services (for example, 21 elderly care centres).

In Portugal, mergers have taken place as part of the austerity measures. After the signing of the Memorandum of Understanding in 2011, the Portuguese government set a target to reduce the operational costs of hospitals by €200 million, including a reduction in the number of management staff (from eight to five members of hospital boards). This led to a reorganisation and rationalisation of the hospital network through the specialisation and concentration of hospital and emergency services, and the joint management and operation of hospitals. The closure of public hospitals was offset, in some cases, by the absorption of their services by other public hospitals.

Non-profit provision decreased during the 2006–2014 period in all the countries for which data are available, with the exception of Italy and Portugal. In France, the fixing of reimbursement rates since 2010 has meant that some private non-profit hospitals have faced closure (HOPE, 2011).

Table 4 shows the percentage change by ownership type in the number of hospitals and hospital beds between 2006 and 2014 in those countries for which data are available.

Table 4: Percentage change in the number of hospitals and hospital beds by ownership type, 2006–2014

Countries	Public hospitals (%)		For-profit hospitals (%)		Non-profit hospitals (%)	
	Beds	Hospitals	Beds	Hospitals	Beds	Hospitals
Austria	-2.4	-1.9	41.0	27.7	0.4	
Bulgaria	-8.6		291.5			
Cyprus	7.4		-3.4			
Denmark	-27.5		-5.7		-2.4	
Estonia	-9.2	-42.9	-31.1	-36.4	-44.2	-62.5
Finland	-32.6	-34.5	-37.1	13.3		-15.1
France	-12.9	39.9	3.6	-5.2	-9.1	-11.1
Germany	-6.7	-13.5	8.2	2.4	-6.1	-33.3
Greece	-18.6	-12.1	0.3	-8.8	-43.6	
Hungary	-10.9	-4.4	-0.2	0	-6.8	0
Italy	-14.5	-16.4	-0.2	-6.7	8.1	6.1
Latvia	-38.3		20.2			
Lithuania	-9.6		29.7			
Luxembourg		-64.3				
Poland	-7.9	-12.2	0.5	57.5	0	0
Portugal	-12.1	-7.1	45.4	11.1	2.2	16.3
Romania	-12.1		633.4			
Spain	-1.5		-9.8	-5.7	-19.1	-15
UK	-18.2					

Notes: Data for Hungary correspond to 2006–2011 (number of beds) and 2007–2011 (number of hospitals).

Data for Italy correspond to 2006–2013 (number of beds) and 2007–2014 (number of hospitals).

Data for Poland correspond to 2007–2011.

Source: Eurostat and OECD.

The closure of public hospitals creates a gap in provision, providing new opportunities for the private sector with the possibility of reusing the existing infrastructure. As a consequence of the restructuring of public hospitals in Latvia, for example, equipment that in many cases had been recently obtained from State-funded or EU-supported healthcare development programmes could be bought by doctors and owners of private companies.

However, a decrease in public and non-profit provision does not necessarily mean its replacement by for-profit providers. Closures in many countries have been offset by the creation of alternative structures. This shift in the type of care is linked to a longstanding trend that aims to reduce expenditure by closing hospitals or reducing their capacity (Schulten and Böhlke, 2012). It is also linked to reforms accelerated by the crisis that aim to reduce hospital stays and (in some countries) promote community care (Eurofound, 2014).

In France, the longstanding reduction in the number of acute care hospital beds has run parallel to the development of ambulatory care. According to a study by DREES (2014), the number of acute care hospital beds fell from 468,000 in 2003 to 415,000 in 2012, mainly in long-stay services (from 80,000 to 32,000).

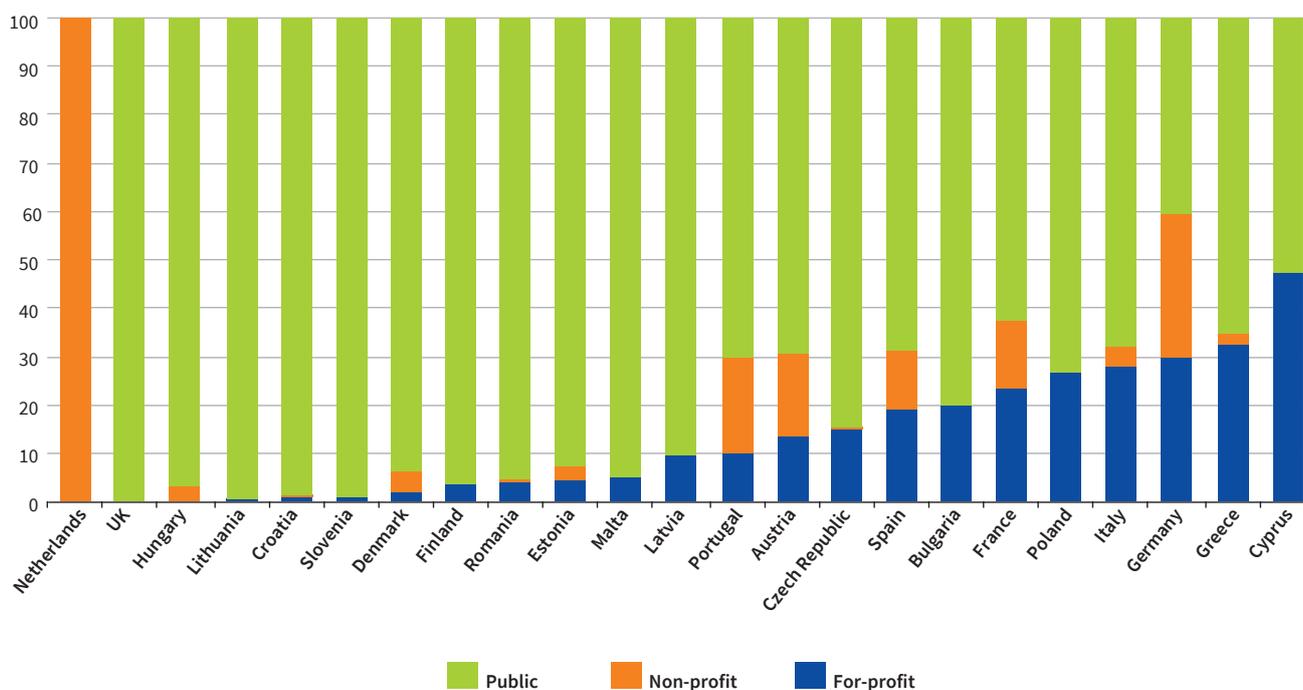
In Italy, the main measure adopted to curtail health costs was the generalised reduction in centres with a small number of beds or with departments performing a small number of services. This reduction was meant

to be compensated for by an increase in domiciliary and residential healthcare services and early screenings of pathologies, but this did not take place in those regions whose health budgets had been reduced.

Figure 1 shows the current share of beds in hospitals by ownership type in 2014. Private for-profit provision ranged from a fifth of the total number of hospital beds or more in Bulgaria (20%) to almost half in Cyprus (48%), with the position in France (24%), Poland (27%), Italy (28%), Germany (30%) and Greece (33%) in between. Non-profit hospitals constituted more than a tenth of the total number of beds in Spain (12%), France (14%), Austria (17%), Portugal (20%) and Germany (29%); in the Netherlands all hospitals fall into the non-profit category.

There are wide variations in the degree of private provision within countries. In Spain, for example, the devolution of healthcare to the regions in 1997 led to different levels of private provision, depending on the political party in power in the regional government and the interest groups present in each region. This resulted in wide differences in terms of the health expenditure allocated to private contracting, ranging from Catalonia allocating 24% of its health budget, to the neighbouring region of Aragon allocating just 4%. This disparity also affects the types of private provision arrangements. For instance, health consortia have been relatively frequent in Catalonia, whereas several privatisation processes have been adopted in Madrid and Valencia.

Figure 1: Share of hospital beds by ownership type, 2014 (%)



Notes: Data for public hospitals in Denmark correspond to 2015, Hungary to 2011 and Italy to 2013.

Source: Eurostat.

Liberalisation, marketisation and privatisation

Liberalisation and marketisation of the hospital sector

Unlike other sectors, the liberalisation of hospital services does not just entail opening up the market to new competitors, but also promoting competition and introducing market-oriented mechanisms, mainly in the hospital financing system (Schulten and Böhlke, 2012). This includes the introduction of a split of the funding and delivery of services. It also includes reforms that replace the full cost coverage with performance-based reimbursement (Herman and Verhoest, 2012). This has led, in several countries, to the introduction of DRGs – patient classification systems that collect patient discharge data (Quentin et al, 2011). DRGs were introduced primarily to improve the efficiency of hospitals through incentives, giving the possibility of making a profit or having a deficit depending on the competitiveness of the hospital. DRGs have gradually been implemented in European countries since the 1980s in order to classify patients and, later on, for payment purposes (Geissler et al, 2011).

The increase in price-based competition can lead to privatisation and an increased role for private providers if it creates an opportunity for making profits (Krachler and Greer, 2015). Otherwise, liberalisation can lead to the public sector continuing as a private monopoly with no market competition, which can itself be a precursor to market competition (Maarse, 2006).

In Spain, the General Health Law in 1986 approved the so-called agreements or ‘accords’ with the private sector by which private hospitals can offer some kind of health service to national health service patients depending on the coverage level of each agreement; the amount of private resources aimed at patients in the public health system varies. This law establishes that non-profit entities should be prioritised when it comes to establishing these agreements. Nowadays, around 49% of the private hospitals in Spain have some type of agreement by which they offer health services to patients of the National Health System. Further legislative changes in 1997 gave other entities (not just public administrations) the possibility of managing public hospitals via agreements with private centres, indirect management forms, private foundations, and so on.

In Italy, Legislative Decree No. 502 (30 December 1992), which governs the institutional accreditation system, provides the possibility for private healthcare facilities to operate within the National Health Service. A decree from 1993 sets out that local health authorities are supposed to agree on predicted fees to fund the supply of healthcare services by public and private providers.

In Poland, the 1999 General Health Insurance Act introduced a social insurance system and 16 regional sickness funds to finance the direct costs of health services to patients through contracts between service providers and buyers. The high level of administrative work and the lack of funding for certain functions led in 2003 to these

sickness funds being replaced with a National Health Fund. A system mostly based on UK Healthcare Resource Groups (a variant of DRGs adapted to the healthcare system in the UK) was introduced in 2008.

In Hungary, purchaser and provider functions were split in 1993 with the establishment of a new purchasing body, the National Health Insurance Fund Administration. A DRG-type output-based payment method, called Homogeneous Disease Groups, was also established in 1993 (Gaál et al, 2011).

In Romania, the 2006 National Health Reform Law made numerous provisions for the accreditation and certification of private health service providers. These accreditation and certification standards favoured the liberalisation of health services, as such providers could now ‘officially’ take over certain publicly funded activities, especially laboratory testing and ambulatory services. The DRG system was first introduced in 2005 and was subsequently the subject of reform, with the current version last regulated in 2012.

In Austria, there is no special national legislation on liberalisation issues affecting the hospital sector, since the maintenance and management of public hospitals generally falls within the responsibility of the federal states. DRGs have been in place since 1997.

Rather than a liberalisation of the hospital sector, what has taken place in other countries is a change in the legal framework (Estonia) or the possibility of privatising hospitals (Bulgaria, albeit for a limited period). In Bulgaria, DRGs have not been introduced and payments to hospitals are based on clinical pathways that set fixed prices for categories made up of similar diagnoses. This system has been criticised because prices have no direct connection to the actual costs incurred by hospitals (for example, it is not connected to the degree of severity within a diagnosis) (Konstantinov, 2011).

Corporatisation of public hospitals

The change of legal status of public hospitals to become companies under private law has taken place in several countries with the objective of reducing public debt, introducing new management strategies, increasing the independence of hospitals and giving better access to finance.

Since the 1980s, virtually all Austrian provinces have established hospital holding companies fully owned by the federal states. Public hospitals are managed by private law corporations, but are fully owned by the province. In most federal states, the holdings that manage public hospitals are organised according to private law. Nevertheless, the provincial authority – as the owner of these holding companies – has full liability.

In Estonia, the change in the legal framework applied to existing hospitals. The liberalisation of hospitals took place in 2001 and 2002 when a new Health Services Organisation Act and a new Health Insurance Act were adopted. As a consequence of the new legislation, all public hospitals began to act under private law, having full managerial rights over assets and access to financial markets. Most

hospitals are either limited liability companies owned by local governments or foundations established by municipalities or other public agencies. Therefore, most hospitals are public but they are run as businesses, with management incentives aiming at efficient financial performance (Kahur et al, 2011).

In the UK, the National Health Service and Community Care Act 1990 introduced the possibility of hospitals and other healthcare providers to be independent from health authority control by having trust status, with health authorities becoming the purchaser of care from these trusts. These NHS foundation trusts have better access to capital funding and can accumulate surpluses or run temporary deficits (Harrison, 2013). Between 2004 and 2013, a total of 147 foundation trusts were licensed.

In Poland, the conversion from public to private hospitals included some degree of debt relief, which was used to prevent possible mergers or closures. The 2011 Act on Medical Activity allowed the transformation of public hospitals into commercial companies providing medical services. In the period between 2002 and 2014, a total of 170 public hospitals were transformed into limited companies; the number of public hospitals transformed into limited companies doubled during the financial crisis.

Corporatisation has been the main form of privatisation in Portugal. Up to 2002, all public hospitals belonging to the administrative public sector were subject to public/administrative law. The reform introduced that year established a new legal regime whereby hospitals would have one of the following legal statuses:

- public establishment;
- public establishment managed by a private company;
- public limited company with exclusively public capital;
- private establishment (for-profit or non-profit).

A further reform took place in 2005 by which all public limited companies of exclusively public capital changed their status to a public establishment managed by a private company.

In 2008, the Hungarian Parliament passed a law allowing for the corporatisation of hospitals. As a consequence, 36 of the 126 state and local hospitals were transformed. However, the law was overturned by the government that came into power in 2010.

Full or partial privatisation of hospitals

The sale of public hospitals – partially or in their entirety to private providers – is still an uncommon process in most of the countries analysed.

Although partial privatisation of public hospitals in Austria first took place in the 1990s, such privatisations have rarely occurred since. Privatisation in Bulgaria has led to several changes in the law. The law, passed in 1999, provided for 72 hospitals to be privatised and in 2002, a privatisation moratorium was provisionally imposed. In 2005, the government started a public debate to resume

privatisation, but the process stopped because of concerns about a lack of transparency in the privatisation process. The then Minister of Health declared that until the end of 2015, the New Law for Medical Institutions would accept the possibility of privatisation of some state-owned hospitals, with preferential shares for the staff. This plan was withdrawn later in the year due to a lack of political support. Up until 2015 the only privatisations taking place concern the sale of parks, gardens and surrounding facilities at hospitals, with the objective of paying the debts of the clinics.

There have also been cases in which privatised hospitals have been reclaimed by public authorities. This was the case for example in Austria, where a public hospital in Kitzbühel was sold to a private investor in 2001, but was taken back by the public authorities after a five-year period when part of the hospital was withdrawn from the public funding programme.

In the UK, the only privatised NHS hospital to be operated by a private company (Hinchingsbrooke Hospital) had financial difficulties and was operating with a substantial deficit. So part of the rationale for the privatisation was to improve the hospital's finances. A contract with healthcare provider CircleHealth began in February 2012. But on 31 March 2015, CircleHealth withdrew from the contract and the hospital returned to NHS control, with CircleHealth explaining that the contract terms were no longer viable.

Public-private partnerships (PPPs)

PPPs can be considered as a sort of 'functional privatisation' (Schulten and Böhlke, 2012) with different degrees of responsibility and risk. The decision on the most appropriate PPP option depends on the capacity of the public sector to regulate and control the quality of care, the hospital's needs and circumstances, and the public consensus on the need for reform (Taylor and Blair, 2002).

In many of the countries analysed in this research, there are no official data about the number of PPPs because this information is not included in official statistics. In Italy, a study by Longo et al (2014) matched administrative sources with other non-statistical sources. The study identified 20 projects from 2002 onwards (14 from 2005). Between 2005 and 2012, six projects involved the participation of private companies in hospital management and seven in the construction or renovation of facilities.

PPPs are very limited in the Member States from central and eastern Europe that were selected for analysis and the case studies. Between 2005 and 2011, only four partnerships were established in Poland (Książek, 2012). This lack of PPPs can be attributed to factors such as insufficient regulation, lack of experience of PPPs or lack of trust between public and private partners. Some ventures have been suspended because the private investor wanted more money than the public partner could invest in the partnership.

A similar situation can be found in Estonia, where only one health promotion organisation has state investment. In Latvia, PPPs were blocked during the austerity period, with the 2010 Letter of Intent to the IMF including a commitment not to launch PPPs in 2010 and 2011 (except for concessions where the government assumed no risk or liability). In Bulgaria, PPPs can be established for a period of 5–35 years, but it is unclear what the actual number of PPPs in place is. In Romania, the lack of a clear regulatory framework made PPPs unattractive for foreign investors.

On the other hand, PPPs are fairly widespread in the UK, with over 130 PPP arrangements completed, underway or have been approved since 2001. In both Spain and the UK, PPPs tend to take the form of private finance initiatives (PFIs). In the UK, PFIs involve the private partners designing, building and in many cases operating new infrastructure with contracts typically lasting 30 years (Atun, 2007). PFIs were first applied in Madrid in 2007; they have been also developed in Catalonia,¹⁷ Castile and Leon, the Balearic Islands and Galicia (Alan Salud Mental, 2013; FADSP, 2014a; Sánchez Bayle, 2014). A report published in 2014 by the Federation of Associations for the Defence of Public Health (FADSP) found that the Madrid region had the largest number of hospitals with public–private models, including the two types (PFI model and administrative concession model¹⁸) (FADSP, 2014a). In other regions, it is more common to apply either model. For instance, in the Valencia region, the administrative concession model is commonly used (five hospitals have this model). One of the best known examples of concession in this region is the hospital at Alzira that applied administrative concession processes back in 1999, setting a good example for other privatisation models to follow.

Finally, it is worth mentioning the return (which could be classified as a concession) in Portugal in 2013 of the management of public hospitals to the Misericórdias (charities linked to the Catholic Church). This involved those hospitals owned by the Misericórdias during the dictatorship and were returned to them on the basis of a 10-year (renewable) cooperation agreement between the Misericórdias and the Regional Health Administrations. Currently, three hospitals have been returned and have agreements.

In Poland, the aim of the few PPPs is to construct, renovate and carry out building alterations. While in Portugal, construction PPPs involve a 30-year contract that includes the design, building and operation of infrastructure facilities. In Austria, PPPs are often established with private companies co-financing investments such as building alterations and extensions. In Estonia, several old buildings have been bought and/or renovated by hospitals with private owners, but no new hospital buildings have

been built. In the framework of the Hospital Plan 2007, the French government decided to use PPPs as an investment tool. Around 24 PPPs were concluded in this framework for a total of €613 million. The PPPs established included four to build new hospitals or extensions to existing hospitals, and eight projects to increase the capacity of existing hospitals. In the UK, PPPs entail (in most cases) the provision of the physical facilities by the private partner, with the NHS in charge of clinical services. In countries such as Germany, Portugal and Spain, some PPPs entail the provision of clinical services by the private partner (European Commission, 2016a).

Management is another area for which PPPs have been established. In Austria, a PPP was signed between the municipality of Klosterneuburg and a private management company to run the town's hospital. In Portugal, PPPs are carried out through a 10-year contract, which includes the delivery of services and the management of facilities.

Commissioning, outsourcing and contracting out services

In all the countries included in the in-depth review, outsourcing is mostly concerned with non-medical activities. In Austria and Portugal, for example, outsourcing is carried out for catering, cleaning, gardening, laundry and security. In Hungary, laundry, catering, energy and accounting have been outsourced since the end of the 1990s. In relation to catering services, the opposite has occurred in the Netherlands where some hospitals have taken catering back as in-house service, as better nutrition helps towards speedier recovery of patients.

Services such as laboratories, dialysis centres, computed tomography, complementary diagnostic test and therapies have also been outsourced in many countries, for example in Latvia, where diagnostic services such as gastroscopy, endoscopy and radiology are contracted out. Clinical management has also been outsourced in Germany and Hungary.

In France, hospitals have outsourced cleaning and catering functions since the 1970s; other support functions such as IT management were outsourced later. By the end of the 1990s, hospitals started to contract out healthcare-related services such as the sterilisation of medical instruments or machine maintenance. However, this does not mean that there is a trend of outsourcing of healthcare services from the public to the private sector (Pauget et al, 2012).

In England, ancillary services such as laundry and catering have been contracted out for many years. Clinical services are purchased on behalf of the NHS and can be purchased from private or NHS providers and since 2003 some routine elective surgery and diagnostic services have been procured for NHS patients from private providers. Despite

17 In Catalonia, health consortia have a particular setting whereby health professionals can form and manage directly the hospitals and the services they provide. These entities can become part of the public health service via public procurement.

18 In the Spanish PFIs, the tender winner designs, builds and finances the whole building, including its medical equipment. The winner also provides general services such as cleaning, catering, parking and administration, but health assistance services are still provided by public sector personnel. The public administration pays a bonus for the maintenance of the facilities (normally for 20 or 30 years) to the private entity. Furthermore, the private entity can also take advantage of other owned services such as bars, shops and parking spaces. In the administrative concession model, a private entity becomes responsible for all or part of the services offered by a hospital (including health services); the company receives a per capita bonus according to the population assisted (privatisation levels depend on each contract).

the rate of private provision having grown in recent years, its provision within the NHS is still low (around 4% of all NHS elective operations) (Harrison, 2013).

Although there is no information on the total volume of outsourcing in Poland, a study on outsourcing in public and private medical centres indicates that outsourcing is used for approximately 30% of medical and non-medical services. The most frequently outsourced non-medical services are sewing, medical clothes (scrubs), laundry, medical transport, catering, security and the maintenance of medical equipment. The most frequently outsourced medical services are laboratory tests, magnetic resonance imaging, histopathology examination and pathology services (Kieszkowska-Grudny, 2013).

In Italy, the outsourcing of clinical services concerns those activities in which cost reduction and the acquisition of specialised knowledge was most needed, and ancillary services which public healthcare companies consider to be of limited strategic importance (Longo et al, 2014). Diagnostic and clinical services are less frequently outsourced. Among them, the ones that are more often outsourced are laboratory tests and nursing care. There was an increase in outsourced non-healthcare services (laundry, cleaning, canteen, heating) of 4.2% in 2011, slightly lower than the 4.6% increase observed between 2009 and 2010.

Impact on budgets and costs

In countries where private hospitals tend to receive public funding, the savings in public budgets derived from an increased role for private providers are lower. This is the case for instance in Poland, where more than 90% of total revenues of all hospitals come from the contracts with the National Health Fund. Commercialisation of public hospitals does not mean that they change their source of funding. A similar situation can be found in Bulgaria, where cuts in the National Health Insurance Fund cover the expenses of hospitals – including those that are private and have a contract.

Corporatised hospitals are allowed to introduce budget saving initiatives, since those entities that earn more than 50% of their costs are seen as private. Therefore, their debt is not counted towards their country's debt (as defined in the Maastricht Treaty). In order to hide debt, hospitals were often organisationally privatised to receive DRG payments from still public sources as 'payment', making them private entities in the eyes of the System of National Accounts – and thus Eurostat. This was amended after the crisis when Eurostat realised these practices existed and issued a revision of the manual on government deficit and debt. Since 2010, even pseudo-private entities are counted as public as the public sector is liable if they default.

One of the advantages of PPPs for the public sector is that they are essentially 'off the books'; that is, they do not require upfront capital expenditure, which in most cases means recourse to taxation and/or borrowing. In some countries during the economic crisis (but not in direct response to it), there was a reliance on PPPs to finance hospital investment (Thomson et al, 2014). Following the

crisis, these schemes were more appealing because of the policy objective to keep public finances under control, though the policy does mean that trusts incur future financial liabilities.

There are, however, a number of problems associated with PPPs, including tendering and monitoring transaction costs and private partners having more difficulties than the public sector in getting funding from financial markets. This has an impact on the long term savings incurred with PPPs (EPSU, 2014). Other complications associated with PPPs include the private sector not always assuming risks (or demanding extra payment for doing so), lack of transparency, delays and over budgeting (PSIRU 2014, Hall 2014). While there are experiences in Europe and elsewhere showing that PPPs have helped to build hospitals within time and budget, this has been achieved to the detriment of quality (for example, design features that benefit service users more than operators were not always incorporated) (McKee et al, 2006). Research carried out by the European Agency for Health and Consumers and the Expert Panel on Effective Ways of Investing in Health illustrates that there is no evidence to show PPPs are more cost effective than public provision, with evidence from Spain and the UK showing that their total costs may actually be higher (Schwiertz, 2016). Audit reports in Portugal identified missed deadlines during the adjudication process of PPPs and showed that government spending exceeded the initially estimated amount in four PPP hospitals (Tribunal de Contas, 2009, 2013).

A similar situation can be found in Austria, with the Accident Hospital of Linz (UKH Linz) having a PPP with a private investor (VAMED) that was dissolved as a consequence of increasing costs in the wake of the PPP. Another public hospital company in Austria (KAGes in Styria) sold its hospital's infrastructure to a subsidiary company in order to cover debts, but now has to pay rent for its former premises. The company that now owns the premises had to charge money for that transaction, meaning it has to pay interest (News.at, 2014).

A study in Italy found that the amount of public funding agreed at the beginning of a project is often revised upwards during its implementation (Longo et al, 2014). In some cases, the actual cost of structures doubled the amount of public funding initially agreed. In France, the Accounts Chamber noted that:

- PPP proceedings had been established in haste;
- the benefits given to PPPs had been poorly exploited;
- financial issues had been insufficiently taken into account.

According to the Accounts Chamber, PPPs are not an effective way to make savings in public budgets (Cour des comptes, 2014).

When comparing the efficiency of the hospitals or the quality of services they provide, it is important to take into account differences in the budgets allocated.

In France, public and non-profit hospitals receive additional funding for research and teaching activities, and for the provision of emergency and organ transplant

services. Furthermore, DRG payments to for-profit hospitals are lower than for public and non-profit hospitals. This difference is justified on the basis of differences in the size of facilities, the DRG mix and the patient population (Durand-Zaleski, 2013). In 2013, the French government decided to reduce the amount paid for medical treatments to public hospitals by 0.83% and to private hospitals by 0.21%. In 2014, private hospitals received 0.24% less for medical treatments, while the amount allocated to public hospitals remained stable. For 2015, the government decided to reduce the tariffs by 2.5% for private hospitals and 1% for public hospitals.

A report critical of privatisation in Spain by FADSP highlighted that budgets for hospitals managed by the public sector are lower than for the private sector. For example, it is stated that in 2010 the average budget per bed/per year was €277,375 in direct management centres and €434,686 in privately managed hospitals (FADSP, 2014b). Other reports provide an estimate with fewer differences in the budget, with a cost per bed of €322,963 per year in hospitals directly managed by the public sector and €318,489 in hospitals with other management forms (IASIST, 2011). This is linked to the fact that public hospitals in Spain are bigger (they have 71% more beds) and have more personnel (82% more) than the other types of hospitals in Spain.

The Alzira Hospital has been criticised in different reports, mainly by trade unions. The hospital was built in 1998 and ended up losing €2.67 million in its first four years of business. The contract said that the company should bear any economic losses but it was the regional government who paid for the losses and debts (Fundación 1 Mayo, 2013; Sánchez Bayle, 2014).

In contrast, the Bulgaria National Association of Private Hospitals states that the Ministry of Health is not signing contracts with private hospitals for certain medical activities and that they receive only part of the funding in most clinical paths or in emergency care, while the debts of public hospitals have been repaid from the State budget.

Studies about the situation in the UK argue that rather than the market mechanisms resulting in cost savings, adding up the direct and indirect costs shows that the marketisation of the NHS has cost more than if the NHS had provided the services directly (Paton, 2014). Furthermore, the private financing of NHS hospitals results in trusts having to spend a larger amount of their budget on capital developments (Hellowell, 2014). In 2012, the National Audit Office (NAO) published an initial report about the contracting arrangements and the early operation of the contract at the only hospital privatised so far. The report noted that the proposed savings were 'unprecedented' as a percentage of annual turnover. It also noted that, while improvements had been made to some areas of clinical performance, CircleHealth had generated a larger deficit than the financial plan specified. The NAO concluded that a number of financial challenges remained to be addressed (NAO, 2012, p. 9).

Views on private provision of hospital services

The studies gathered in the countries analysed indicate support for provision by public health services and a reticence to further involvement of the private sector.

In France, a survey carried out in 2012 for the public hospital federation shows that a large majority of French citizens (86%) have a 'good' or 'very good' opinion of public hospitals (TNS Sofres, 2012). According to a similar survey conducted for the private hospital federation in 2014, private hospitals have a very good reputation among citizens (Ipsos, 2014). Regarding the quality of care in private hospitals, 89% of the interviewees thought it was 'good'. Private hospitals differ markedly in their ability to offer hospitality and quality of stay (recognised by 89%) and to be swift in the care of patients (77%). Approximately 80% of those interviewed thought that private hospitals played an important role in the French health system and 24% that they were essential. However, people believe that public hospitals are more likely to guarantee equality of all patients with regard to access to care.

In Hungary, negative views of private providers led to protests against the acquisition of a public hospital in Eger by a private group (Hospinvest Zrt.). In March 2008, a referendum was held about user charges, which were rejected. As a consequence, the European Bank for Reconstruction and Development decided to sell its share of the hospital in March 2009 and Hospinvest went bankrupt in the same year.

According to a report by the Spanish Ministry of Health, the degree of satisfaction with the functioning of the public healthcare system was determined to be 6.4 points out of 10. Concerning the hospitalisation of patients, the data show that 63.5% of those surveyed preferred public services over private (Ministry of Health, Social Services and Equality, 2014). In 2015, the State Agency for the Evaluation of Public Policies and Quality of Services (AEVAL) published a report on the quality of public services, which included data on citizens' opinion about the health system. This report, which shows citizens' satisfaction level with public health centres and hospitals, found that since 1995 more than half of those surveyed have been 'very or quite satisfied' with public health services. The only exceptions were satisfaction levels with hospitals in 2013 and 2014, where 47.8% of those surveyed were 'very or quite satisfied' with services provided in public hospitals. In both cases (health centres and hospitals), satisfaction levels experienced a considerable decrease between 2011 and 2014 (AEVAL, 2015).

In Italy, a survey asked 1,200 people about their views on the Italian health system. According to this study, citizens complain about a shrinking of the public service which can hamper the accessibility of the National Health Service. In particular, people living in regions that are implementing the greatest cuts in the number of beds were the ones more likely to perceive a worsening of public health and more likely to seek healthcare outside their region. Those interviewed also complained about the wastage and weak managerial competences deriving from a very close relation

between politics and the management of health services (Fondazione Censis Cergas-Bocconi, 2012).

In Poland, 64.5% of respondents to a survey conducted in 2013 claimed that the privatisation of hospitals was not good for patients because it could lead to limited access to healthcare services, and 74% of respondents did not want their hospital to be privatised. Public healthcare in Poland is perceived as a special type of public service which should remain public (Nowyszpital, 2014).

In a consultative referendum initiated by the Vienna local authority in 2013, around 87% of participants voted against the privatisation of public utilities operated by the city of Vienna, including public hospitals (Der Standard, 2013).

In a 2009 survey in Bulgaria, due to the willingness of a local authority to establish PPPs, 44% of those interviewed said they were against private healthcare. The same survey found that 65% of Bulgarians believed corruption was widespread in the public healthcare sector – slightly higher than the EU12 average of 54%, but approximately the same as the corruption perceived in other public sector domains.

This public opposition has been one of the reasons why, in some cases, planned privatisations have not gone ahead. In Hungary, Poland and Spain, public opposition has been a deterrent for local authorities (which own most of public hospitals) to transform public hospitals into commercial companies.

Social partners

Overall, the information gathered shows that trade unions have been critical of privatisation processes and have

proactively opposed them with protests and strikes (Poland and Portugal).

In the UK, research by the Unite union indicated that around a quarter of the board members of clinical commissioning groups had links to private sector companies (Unite, 2015). The report argued that this represented a clear conflict of interest for people who were involved in the commissioning of services for the NHS.

PPPs have been the subject of criticism by the European Federation of Public Service Unions (EPSU), which noted that PPPs do not necessarily bring savings for the public sector or a transfer of risks to the private sector. EPSU also called for a comparison of PPPs with public sector alternatives (Hall, 2008).

Some of the issues raised by trade unions across Europe include:

- reductions in the number of health professionals after privatisation (Poland, Portugal, Spain);
- reductions in the number of beds (Italy);
- worsening of working conditions (France, Germany, Poland, Portugal, Spain, UK);
- negative impact on the quality of services (France, Italy, Poland, UK);
- failure and negative consequences of private management models (France, Spain);
- negative consequences for the needs and/or equal treatment of patients (Austria, Germany, UK).

4 Main findings of the literature review

This systematic literature review scrutinises the consequences of the involvement of private providers in delivering hospital services in terms of efficiency, quality and accessibility of services compared with public providers.

Although the review was designed on the basis of the guidelines for a systematic review, it had to make concessions on the breadth and/or depth of the process – also referred to as a rapid evidence assessment (REA) (Grant and Booth, 2009). The initial aim was to aggregate the evidence to answer the review question. However, the heterogeneity of the studies under review meant that the synthesis puts more emphasis on providing an overview of the evidence while taking into account the quality of the papers. Moreover, it follows realist review methodology since it does not evaluate a simple intervention, but rather an event which is embedded in a complex system. Hence, the ambition is to unravel how it works, for whom it works, under which circumstances and to what extent (Pawson et al, 2005). This means that the aim of this REA was not to seek a dichotomous answer, but to acknowledge that complex systems require complex answers.

This systematic review follows the definitions provided in Chapter 1 and looks at the three healthcare indicators (efficiency, accessibility and quality of care) and the various types of private hospitals (for-profit, private non-profit and PPPs). Accessibility and quality of care cover many different aspects of healthcare that cannot be easily be defined. Throughout the selection process, a broad interpretation of the two concepts was upheld to ensure that important and relevant papers were not excluded from the review.

The methodology of the systematic aggregation and appraisal is outlined in the Annex.

Prior research: Systematic reviews

Many researchers have carried out systematic reviews on the impact of private players in the healthcare sector. This systematic literature review is – to the best of the authors' knowledge – the first that specifically reviews the delivery of healthcare in terms of accessibility, quality of care and efficiency by comparing public and private hospital services within the European Union.

This section provides a brief (non-exhaustive) summary of the systematic reviews published in peer-reviewed literature.

North America

Although this review adopts the tradition of Eggleston et al (2008), their study focused only on the USA and on quality of care using mortality rates and other patient outcomes (such as surgical complications and medical errors) as indicators. Their final assessment was that for-profit and public hospitals have a weaker performance than non-profit hospitals. However, they emphasised that the direction of the effect depends on the data source, region and time.

In an earlier study, Devereaux et al (2002) conducted a similar exercise with a systematic review and meta-analysis in the USA, comparing the mortality rates of for-profit and non-profit hospitals. They found that for-profit hospitals had significantly higher mortality rates of. Devereaux et al (2004) continued their review approach and found that for-profit hospitals charged higher payments for their services than non-profit hospitals. One of the acknowledged reasons was that for-profit hospitals have to generate revenues for their stakeholder and this might drive up costs. Furthermore, they argued that it is likely they had underestimated the results because they had not controlled for case-mix differences and thus 'upcoding'¹⁹ practices might not have been captured in the analysis.²⁰

International

Most systematic reviews and studies focusing specifically on hospitals and ownership come from the USA. Nonetheless, the systematic reviews discussed in this section try to look beyond existing US research papers, although none of them looks only at the EU.

One international systematic review provided an overview of other systematic reviews, focusing on ownership structures and the performance of for-profit, non-profit and public healthcare providers (Herrera et al, 2014). It concluded that for-profit providers underperform in relation to mortality rates and payments compared with non-profit healthcare providers. But regarding further quality indicators, no absolute answer on the differences could be given. Likewise for the comparison between non-profit and for-profit with the public sector, no conclusive answer was given.

Another systematic review examined five performance measures; efficiency, quality of care, innovation, trust and value driven (Heins et al, 2010). For quality of care and trust, the results were more favourable for non-profit than for for-profit healthcare services, whereas it was unclear for efficiency and innovation. Yet more is written about efficiency.

19 This means that patients are misclassified in the DRG system in order to maximise the profit per patient.

20 Note that the other (well-known) systematic reviews are excluded from this description because they only compare for-profit and non-profit institutions.

The majority of the systematic reviews come to the conclusion that the findings are inconsistent, meaning that the direction/significance of efficiency of private hospitals differs between the papers included in the review.

Hollingsworth (2003) reviewed evidence on efficiency between different providers in the healthcare sector. This review included a specific section on the provision of hospital services and incorporates the following specific note in its findings:

The results, both that public provision seems in general more efficient, and that European hospitals have higher average efficiency, may reflect many confounding factors, including methodological differences between studies, differences in models [...] or sample sizes [...] impacting upon robustness and validity. Results are conditional upon basic differences in study design and samples, rather than any real variation in efficiency, meaning it is difficult to compare results beyond looking at generalities.

(Hollingsworth, 2003, p. 1113)

This argument is in line with Sibbel and Nagarajah (2012), who argue in their systematic review which focuses on Germany and the USA, that methodological issues were partly the reason why different results had been found.

A similar review that focuses primarily on Germany, but includes Italian and US articles as well, argues that no straightforward conclusion can be made that for-profit and non-profit hospitals are more (cost and technical) efficient than public hospitals (Tiemann et al, 2012). In addition, contrasting findings were found for Germany, partly attributed to the differences in research design; some of the stronger and more current papers found that public hospitals are more efficient than their counterparts.

Synthesis

The objective of this synthesis is to identify and explain the consequences of private delivery of services compared with public hospitals. The topic on efficiency can be synthesised in a more aggregative fashion,²¹ meaning that it tries to add up the findings while still following the realist approach and trying to avoid extrapolation from the context. The articles on quality of care and accessibility are synthesised in an interpretive (configurative) manner, aiming to provide different perspectives and insights on the broader picture (Booth et al, 2012). The goal is to map the various indicators used to examine accessibility and quality of care, rather than to add them up to extract one answer.

Efficiency

The results are diverse. No clear-cut message can be derived from the results, which is in line with the reviews conducted before. However, it seems that the institutional context is of great importance. When the private sector is incentivised to reduce costs (not merely to maximise the profit) in conjunction with an incentive mechanism

for public hospitals to work efficiently, the differences between public and private hospitals related to ownership seem to decrease or even dissolve. Many studies find the kind of reimbursement scheme in place to be one of the main drivers for the diverging findings.

All the efficiency measures use an input-oriented Data Envelopment Analysis (DEA) and/or Stochastic Frontier Analysis (SFA) analysis. The only exception is Barbetta et al (2007), who justified the output orientation because Italy was coping with waiting list problems and this was made a priority.

After introducing the DRG-based payment system in Italy, non-profit hospitals seem to have converged to the same mean level of technical efficiency as the public hospitals (Barbetta et al, 2007). Another study found that for-profit hospitals in Italy (Lazio Regio) suffered from more technical inefficiency than the public and non-profit hospitals, whereas non-profit hospitals were more inefficient than public hospitals (Daidone and D'Amico, 2009). The study's authors argued that for-profit hospitals use their resources less efficiently, which might be because these private hospitals are confronted with regulations that set a limit on their funded admissions and, since this limit fluctuates, private hospitals might face problems in adjusting their input resources accordingly (Daidone and D'Amico, 2009). Berta et al (2010) argued along the same lines by revealing that for-profit hospitals were less efficient than their counterparts but converged towards the same efficiency level over time (1998–2007), while non-profit hospitals were already on the same efficiency level as public hospitals from the beginning of the study period.

Another indicator for efficiency is the practice of upcoding (registering patients with complications that are not present to increase the reimbursement). Vittadini et al (2012) found evidence that non-profit and for-profit hospitals in Italy were engaged in the practice of upcoding before a specific law against it was established in 2007. No such evidence was found against public hospitals. To support this argument, Berta et al (2010) found that for-profit hospitals in Italy had higher upcoding practices than other hospitals during the period 2003–2005.

In Germany, the DRG system was introduced in 2004; this, in principle, incentivises hospitals to reduce the length of stay. Herr et al (2011) found no significant difference between costs or technical efficiency between for-profit and public hospitals after the reform. In 2008, Herr argued that private hospitals were (on average) significantly less costly and technically efficient. The reason for these diverging results lies in a change of the remuneration system that resulted in no incentive to increase the length of stay to raise revenue.

In contradiction of this evidence, three papers found that public hospitals in Germany were more efficient than for-profit hospitals even after 2004 (Tiemann and Schreyögg, 2009; Herwartz and Strumann, 2011; Lindlbauer and Schreyögg, 2014). To add an extra dimension to these

21 There are two ways to approach a systematic review. The first one is aggregation, which means that it adds up the findings, implying a certain homogeneity among the research reviewed. The second one, configuration, is more about arranging the findings and providing an interpretive, conceptual mapping; the findings tend to be more heterogeneous (Gough et al, 2012).

findings, Tiemann and Schreyögg (2009) identified that for-profit hospitals with over 1,000 beds operated more efficiently than their counterparts. Thus, the size of the hospital seems to matter. Furthermore, when quality of care is taken into account, the efficiency differences seemed to decrease (Tiemann and Schreyögg, 2009). Also, non-profit hospitals were found to be less efficient (Tiemann and Schreyögg, 2009; Lindlbauer and Schreyögg, 2014). However, use of the two different measurements (DEA and SFA) by Herwartz and Strumann (2011) seemed to cause inconsistent efficiency results for the non-profit hospitals after 2004.

Looking at the process of privatisation, researchers have derived different conclusions, showing that hospitals that converted to for-profit status increased their efficiency; they were able to obtain efficiency gains by reducing labour inputs and expenditures on supplies. Non-profit hospitals initially show an increase in efficiency but later this advantage dissolves. This might be an indicator that the change of efficiency after privatisation is rather transitory than permanent for non-profit hospitals (Tiemann and Schreyögg, 2012). This study also discovered that, within the DRG payment system, the efficiency gains were significantly lower than when the DRG payment system was not in place (Tiemann and Schreyögg, 2012). Lastly, in the German context, Schwierz (2011) found that the reform in 2004 provided incentives for private hospitals to take over public hospitals even in markets with declining demand. In general, for-profit hospitals were found to be faster in responding to increasing demand than non-profit hospitals and public hospitals.

Austria and Germany both have a DRG system, but in Austria the DRG system (by law) only covers up to 50% of the hospital's costs (in most federal states even less); the other costs are funded by operational deficit coverage which is determined by the local authorities based on

actual results. The remaining costs are left to the hospital. One article found that, in Austria, non-profit hospitals seemed to operate significantly more efficiently than public hospitals (Czypionka et al, 2014). Taking the differences between Germany and Austria into account, a difference in financial risks occurs between the public and private hospitals, because the federal state will cover any remaining costs by the public hospital, whereas the non-profit hospitals need to cover the additional costs themselves. Hence, public and private hospitals are exposed to different risks in the DRG system in Austria, while Germany has a system that treats the different ownership types more equally. This could explain the differences in the results between the two countries.

Lastly, in the case of Portugal, evidence from Barros et al (2013) indicated that private hospitals were more efficient than public hospitals. However, this finding should be interpreted with care due to the relatively small sample size and because no distinction was made between for-profit and non-profit hospitals.

Table 5 provides an overview of the technical and cost efficiency of for-profit and non-profit private hospitals compared with public hospitals.

The findings differ regarding the relationship between ownership and length of stay.²² When various relevant confounders (especially the type and number of diagnoses) are controlled for, the length of stay in private treatment centres²³ in the UK is shorter than in public hospitals (Siciliani et al, 2013). This corresponds with a finding in Italy whereby the length of stay for aortic valve substitution was shorter in private hospitals (Fattore et al, 2014). However, it was found to be longer in inpatient private psychiatric hospitals since they have less coordination with community mental health services than public hospitals (Gigantesco et al, 2009).

Table 5: Comparison of technical and cost efficiency between private and public hospitals

	More efficient	Less efficient	No difference
For-profit	Tiemann and Schreyögg (2012), Germany (after privatisation)	Lindlbauer and Schreyögg (2014), Germany Herwartz and Strumann (2012), Germany Tiemann and Schreyögg (2009), Germany Herr (2008), Germany Daidone and D'Amico (2009), Italy	Herr et al (2011), Germany Berta et al (2010), Italy
Non-profit	Czypionka et al (2014), Austria	Lindlbauer and Schreyögg (2014), Germany Tiemann and Schreyögg (2009), Germany Herr (2008), Germany	Tiemann and Schreyögg (2012), Germany after privatisation Daidone and D'Amico (2009), Italy Barbetta et al (2007), Italy Berta et al (2010), Italy

Source: Authors' elaboration based on the descriptions given above.

²² The length of stay can also be interpreted as a quality measure; based upon expert advice, it is categorised as an efficiency indicator. Also, it is not clear what the optimal length of stay is. For simplification, a relatively shorter length of stay is interpreted as a more efficient organisation.

²³ Treatment centres are smaller hospitals that specialise in a limited number of medical procedures.

In Greece, the adjusted length of stay was higher in private hospitals (Kondilis et al, 2011). This is, to a certain extent, surprising because the authors mention that they would expect longer lengths of stay due to the more complex cases in public hospitals. Nonetheless, they acknowledge that 'international empirical evidence has shown that hospital reimbursement on a daily basis creates incentives for private profit maximising hospitals to increase length of patient stay, longer than medically required' (Kondilis et al, 2011).

All in all, the impact of ownership on the length of stay differs in how far the institutional context incentivises the economic benefit of the length of stay.

Summary: Efficiency

The findings provide mixed results with a number of contrasting findings that go against the widespread economic reasoning that private provision is more efficient than public. Yet, the overarching message from all the papers is that the hospital financing scheme is of importance in how far the private sector outperforms the public sector, or the other way around. Most papers mention that the institutional context might be the limiting factor for private hospitals to be efficient, or that their objectives are not necessarily set to increase efficiency but to increase revenue/profit; other papers assign it to organisational inappropriateness. The results indicate that, with an institutional framework that provides private and public hospitals with equal incentives, the differences in efficiency seem to converge. Table 5 provides a schematic overview of the findings looking at technical efficiency. Finally, the findings suggest that the process of privatisation (at least in the short term for non-profit) is positively related to an increase of technical efficiency, as in the case of Germany.

Accessibility

The selected articles examine different indicators of accessibility.²⁴ Since the outcome variables cannot be aggregated, an overview of the various indicators is given and discussed by country.

Patients' characteristics can be an indicator of differences in accessibility between public and private hospitals. In Greece, monthly family income is positively related to admission to private hospitals. In addition, less complex patients are more likely to use private hospitals (patients who are younger and with better mental health status) (Pappa and Niakas, 2006). Furthermore, for-profit hospitals charge more for users falling under the Greek Social Health Insurance fund who have, on average, a higher payment per discharge, than public hospitals (Kondilis et al, 2011).

Three articles on accessibility come from France. Gusmano et al (2014) used the number of patients whose admission can be prevented with adequate access to

primary healthcare to assess the disparities in accessibility to healthcare, with emphasis on revascularisation procedures. They argued that public hospitals have a higher proportion of people with inadequate access to (primary) healthcare than private hospitals.²⁵ One of the reasons given is that public hospitals generally have a more difficult case-mix, although the authors also highlight that the public and private sectors have different roles in the French healthcare system. Interestingly, the risk of revascularisation is much higher in for-profit hospitals than in public hospitals. They explain that revascularisation procedures can be more or less standardised and most of the treatments are not considered complex (Gusmano et al, 2014).

The second study looked to see if there was a significant difference between hospital types in terms of access to renal (kidney) transplantation (Riffaut et al, 2015). The authors observed that for-profit hospitals were less likely to have someone on the preemptive registration list than (public) academic hospitals. This means that there is an equity issue to access preemptive transplantation related to ownership, while preemptive transplantation is associated with a longer survival of the patient. Hence, the patients in for-profit hospitals are apparently disadvantaged in accessing this treatment.

The third article reflects on the differences in access to expensive drugs between public and private hospitals. Bonastre et al (2014) identified no significant difference between public and private hospitals in France in relation to the use of expensive drugs (anti-cancer drugs) after controlling for case-mix. This finding is related to the introduction of a list containing expensive hospital drugs – an extension of the DRG system – to ensure access to innovation and to harmonise the accessibility of public hospitals to expensive products.

In Italy, the characteristics of patients seem to differ between private and public (psychiatric) hospitals, with fewer young and unemployed citizens making use of private services, as well as fewer complex cases (similar to the findings in Greece). One of the reasons given for the differences is that the private sector is not allowed to admit patients compulsorily and is better tailored to patients requiring long-term supportive services. 'In this respect, the public and private sectors function partially as a mixed-balanced and complementary system' (Prete et al, 2009, p. 493).

Another paper found that more non-resident patients (in the region) are admitted to private hospitals than to public hospitals (Fattore et al, 2014). In other words, patients had a higher chance of being admitted to private hospitals when they could not gain access to care in their own region. The authors point out that this is of concern since those with sufficient financial resources can afford to be more mobile. Furthermore, for-profit hospitals have been

24 The quality of the articles seems to be lower than the articles analysing efficiency, according to the appraisal criteria. Therefore, the decision to include the articles covering accessibility after the appraisal was less strict than for the articles on efficiency.

25 This is measured based on the discharge rates of ambulatory care sensitive conditions; that is, chronic conditions (for example, diabetes and hypertension) for which it is possible to prevent the need for hospital admission by active management such as through vaccination or lifestyle changes (Naylor et al, 2015).

accused of being more involved in the selection of more profitable patients than public or non-profit hospitals (Berta et al, 2010).

Looking at a specific case, Preti et al (2010) detected that private psychiatric facilities were significantly less likely to admit patients who had attempted suicide prior to admission; this might serve as an indicator that a high-risk group is less able to access private psychiatric services.

Finally, in the UK, private clinics (Independent sector treatment centres, ISTCs) treat less complex patients compared with the NHS, such as patients with fewer diagnoses, patients exposed to fewer prior procedures and those less likely to come from deprived residential areas (Mason et al, 2010). The authors argued that a fair reimbursement system should be in place that takes into account these differences. They also called for better reporting quality from the private sector, which was (in general) perceived to be worse than their counterparts. Furthermore, it was reported that public hospital users were (in general) just as satisfied with the accessibility of healthcare as patients in private hospitals (Owusu-Frimpong et al, 2010).

Table 6 provides an overview of the findings on accessibility indicators.

Summary: Accessibility

The outcomes from the articles under review are specific and use different indicators (Table 6). Nevertheless, the majority of the articles raise concerns about the accessibility of private hospitals; most of them highlight this issue by analysing the complexity of the cases and various patients' characteristics. Users from higher socioeconomic classes in particular seem to have better access to private hospitals. For further research, the themes that come up are differences in the characteristics of users (socioeconomic status), cost of medicines, and differences in admission and mobility.

Quality of care

Quality of care encompasses many different aspects of healthcare and the indicators of quality of care have a wide scope, reflected in the variety of outcome variables found in this review.

The indicator of caesarean sections is used in only two papers.²⁶ The rate of caesarean sections might also

Table 6: Overview of accessibility indicators

Country	Type (private)	Impact*	Outcome/indicator
France	For-profit	Negative: For-profit hospitals are less likely to have someone on the preemptive registration list	Access to preemptive registration
Italy	Psychiatric	Negative: Patients who had attempted suicide prior to admission were less likely to be admitted to private psychiatric facilities	Admission
France	Not specified	Negative: Public hospitals have a higher proportion of people with inadequate access to (primary) healthcare than private hospitals	Avoidable hospitalisation
Greece	Not specified	Negative: Monthly family income is positively related to admission to private hospitals	Utilisation by socioeconomic class
UK	ISTCs	Negative: Patients with fewer diagnoses, patients with fewer prior procedures and those less likely to come from deprived residential areas are treated in ISTCs	Patient complexity
Italy	Not specified	Positive: More non-resident patients (in the region) are admitted to private hospitals	Regional physical mobility
Italy	Psychiatric	Negative: Fewer young, complex cases and unemployed citizens make use of private services	Characteristics of patients
France	For-profit	No difference	Mean expenditure and usage of drugs
UK	Not specified	No difference	Perception accessibility
Greece	For-profit	Negative: Lower bed capacity	Bed capacity
Greece	For-profit	Positive: Lower occupancy rate	Occupancy rate
Greece	For-profit	Negative: Higher payment per discharge than public hospitals	Payment per discharge

Source: Authors' elaboration based on the descriptions given above.

Note: * The direction of the effect is standardised to evaluate what kind of impact private hospitals have on the service delivery compared with public hospitals. This assessment does not necessarily correspond to the direction of the outcome variable.

²⁶ It is unclear what the rate of caesarean sections entails: does a high rate indicate better or poor quality of care? However, in the context of developed healthcare systems, caesarean sections are still associated with a higher risk of mortality. An increase in the usage of caesarean sections seems unjustified and inappropriate in some cases and therefore in this synthesis interpreted as poor quality of care if there are more caesarean sections in one hospital than another. Note that this may fall under the topic of efficiency or accessibility as well.

be an indicator of quality of care; two studies in Spain found a higher rate of caesarean sections performed in private maternity units, controlling for at least age and socioeconomic status (Salvador et al, 2009; Río et al, 2010).²⁷ To be more specific, in private hospitals the risk was higher for immigrants, except for east European women, while in the public hospitals, immigrant women had a lower risk, except for Latin American women (Río et al, 2010). The differences between caesarean sections between immigrant and native women could be connected to the fact that immigrant women have, on average, higher perinatal mortality.

Pérotin et al (2013) and Owusu-Frimpong et al (2010) both examine patients' experiences in the UK. The findings of Owusu-Frimpong et al indicate that private users of independent treatment centres have higher satisfaction in terms of service climate factors, such as getting attention from doctors, whereas Pérotin et al did not find significant differences between the reported experiences of patients between the public and private hospitals. The differences found were driven by other variables such as patient characteristics.

In general, this review does not address the effect private hospitals have on employment conditions. However, Kondilis et al (2011) connected it with the quality of care whereby the for-profit hospitals in Greece had lower occupancy rates, lower staffing rates for nurses, and less highly qualified nurses than in the public hospitals. One explanation given for the differences in lower staffing rates for nurses was that for-profit hospitals need to maximise profit and therefore minimise expenditure on nursing staff. Another explanation given is that for-profit hospitals use nursing staff more efficiently than public facilities.

In Germany, the trade-off between quality of care and efficiency was assessed by Tiemann and Schreyögg (2009) by analysing mortality rates. They found evidence that for-profit hospitals were performing better than the public sector by, for example, controlling case-mix differences. One of the potential causes for this finding is that due to hospital reforms which reduced the information asymmetry between the patient and the hospitals, for-profit hospitals are stimulated to put emphasis on the quality of care.

The last four studies discussed in this section come from Italy. In a research project on patients' choice of hospitals between 2005 and 2007, it was found that patients in private hospitals were less likely to be readmitted in 30 days or to die within 30 days of discharge, though the impact of the latter was found to be much less (Moscone et al, 2012). This corresponds, to a certain extent, to the results of a multi-level analysis which found that the risk of dying was significantly less in private hospitals when within hospital variation was taken into account (Berta et al, 2013). Findings from the same study highlighted that non-profit hospitals had the most readmissions, though this might not be a negative thing because it could be that 'patients prefer to move to a hospital with a better reputation [...] if they need a readmission and were previously discharged from a private hospital' (Berta et al, 2010, p. 819). The fourth paper stresses that private psychiatric clinics did not collaborate with the community system as well the public hospital psychiatric department did (Preti et al, 2009). However, there was a higher likelihood that patients in private clinics would receive follow-up treatment (such as rehabilitation and psychotherapy) than patients attending public hospitals.

Table 7 provides an overview of the findings of quality of care indicators.

Table 7: Overview of quality of care indicators

Country	Number of studies	Type (private)	Impact	Outcome/indicator
Spain	2	Not specified	Negative: Higher rates in private maternity units	Caesarean section rates
Italy	1	Psychiatric	Negative: Poorer collaboration with the community system and higher likelihood for follow-up treatment by private psychiatric care	Patterns of care and discharges
UK	1	ISTC	No difference	Patients' experiences
UK	1	Not specified	Positive: Higher satisfaction regarding service climate factors	Patients' experiences
Germany, Italy	2	Non-profit and for-profit	Positive: Lower mortality rate and lower risk of dying	Mortality
Italy	1	Not specified	Positive: Less likely to be readmitted within 30 days	Readmission
Greece	1	For-profit	Negative: Lower staffing rate	Nursing staff rate

Source: Authors' elaboration based on the descriptions given above.

27 Salvador et al (2009) has one important confounder – birth weight, and it is very context-specific to Madrid. However, together with the article by Río et al (2010), the article has sufficient credibility and legitimacy to be included in the synthesis.

Summary: Quality of care

The overall outcome was relatively mixed, with no consistent relationship found (Table 7). The results differ between finding a negative relationship (four articles), a positive relationship (four articles) and no significant relationship (one article).

Discussion

This REA attempted to fill a knowledge gap by providing a descriptive synthesis of the literature on private hospital services available in the EU Member States. The intention was to make it as objective and inclusive as possible.

Special attention should be given to the measurement of efficiency, as technical efficiency and cost efficiency are of major interest in this review. The most applied measures are SFA and DEA. SFA assumes an existing productivity function and the error term reflects inefficiency and random factors; DEA is derived from deviations from the best practice frontier and the random term solely reflects the inefficiency, but does not assume a productivity function. There is academic debate on the correct methodology (for example, Skinner, 1994). Because there is no consensus on this matter, both measurements are considered eligible. This approach was also adopted by Hollingsworth (2003), Tiemann et al (2012), and Varabyova and Schreyögg (2013) who all include both DEA and SFA methods in their overview and systematic review.

The general assessment, particularly with the research on the concepts of accessibility and quality of care, is that a wide range of indicators were used and the methodologies varied substantially. The methodology and the data were not without their weaknesses and this makes it problematic to extrapolate or generalise

the findings. Most of the findings of the two concepts were very context, disease and/or indicator specific. The articles covering efficiency showed considerably more consistency in their use of indicators and methodology. Nevertheless, the findings were inconsistent and specific to the methodology or context. Schlesinger and Gray (2006) mention a very valid criticism that 'much apparent inconsistencies in the effect of ownership emerge when scholars carelessly combine findings based on different health services or performance measures' (Schlesinger and Gray, 2006, p. 289).

Another concern is that the countries represented in the studies include only a limited number of EU Member States, with the majority of the research being conducted in Germany and Italy. Therefore, including articles that were not written in English would be the next step to identify potential alternative research on this matter. Furthermore, for some indicators, such as LOS, readmission and caesarean sections, it is difficult to assess what is meant in relation to the appropriateness of care. Also, publication bias and the sensitivity of the search string could (potentially) exclude research that might have been relevant for this REA. However, there is evidence against the existence of publication bias, at least in relation to mortality rates and payments for hospital services (Devereaux et al, 2002, 2004; Eggleston et al, 2008).

Having noted the challenges and caveats, all the articles selected for this review proved valuable in collecting information about the different puzzle pieces in order to obtain a better overview of what the role of the private sector is providing in hospital services in the EU. This knowledge can be used as the basis to design an institutional framework that regulates and incentivises the hospital sector in the most effective manner.

5 Evidence from the country case studies

This chapter presents the information gathered through desk research and semi-structured interviews about the situation of private hospitals in Austria, Germany, Ireland, Italy, Romania and the UK. The information focuses on the delivery of medical services in private hospitals, including information about two private hospitals in each country. The main themes that emerge from the case studies are synthesised by comparing the situation across the countries.

Efficiency

While interviewees were asked about both technical and cost efficiency, most of the replies focused on the latter and on issues related to efficiency. Interviews and desk research focused on LOS given that this was one of the areas identified in the REA as pertinent for hospital ownership.

Cost efficiency

A straightforward calculation of the 'value for money' of healthcare services purchased by the public sector or by private insurers is, in some cases, not possible because data about the price paid are commercially confidential so as not to affect negotiations (House of Commons Health Committee, 2006; Irish Medical Times, 2011). These data were not available from private hospitals in the Austrian, Irish and UK case studies. Some studies managed to provide estimates that overcome this lack of data.

A study analysing hip replacements in English hospitals (Appleby et al, 2013) measured their cost-effectiveness by looking at the cost per quality-adjusted life year (QALY), with one QALY equating to one year in perfect health. Hospital level costs for hip procedures from the National Reference Costs dataset were used to calculate the hospital's cost per QALY, which was found to be at an average of £2,100 (€2,395 as at 17 November 2016) for public hospitals. As private hospitals do not make information on the actual cost per patient/treatment public, the average price paid by the NHS to private hospitals per operation was used to determine a 'cost' per QALY value at approximately £1,900 (€2,210). Given the for-profit nature of the private sector, it is likely that the actual cost is lower than the price per treatment paid by the NHS (and hence that actual cost per QALY is lower), which may indicate that hip operations in private hospitals are carried out with greater efficiency. Regarding ISTCs, the Department of Health in England has stated that during the first phase of their establishment it paid an average premium of 11% above the NHS tariff due, in part, to high setup costs. This price constitutes a drop compared with previous spot purchases, but according to the House of

Commons Health Committee, it did not necessarily provide better value for money than establishing more NHS treatment centres, using the existing ones for additional hours, or establishing partnership arrangements (House of Commons Health Committee, 2006).

In Ireland, an audit of cost control reviewed the prices of contracts with public and private hospitals to establish the average price for seven common procedures. The audit concluded that most procedures purchased in Ireland from private hospitals cost less than the case-mix adjusted benchmark cost²⁸ (Government of Ireland, 2009). While the contracted prices in public hospitals were approximately 25% lower than in private ones, the prices paid did not include staff remuneration (as they receive a public salary), making direct comparison difficult. The audit also pointed out that public hospital prices are not commercially sustainable. Rather than use the prices that private hospitals would charge, the Health Service Executive looked at activity-based funding and found that, for day cases, the prices in the public and private sector were broadly comparable (Interview with Health Service Executive manager).

Voluntary health insurance in Ireland can be used to obtain private care within public hospitals. The average cost per 2012 admission for private insurance is similar in public and private hospitals, around €2,250 (McLoughlin, 2014). The interviewee in the non-profit hospital included in this research stated that state organisations charge health insurers €1,500 per day/per bed, which is more than twice what they would charge to their insurers.

Length of stay

Data about the length of stay in public and private hospitals can be difficult to compare. For example, in Ireland, the Health Research Board publishes length of stay data for public hospitals in length categories, so there is no continuity in the data and it is difficult to make comparisons with private hospitals. Furthermore, public hospitals take out of the database those patients who stay more than six months, which also complicates comparisons. In other countries (for example, Austria), there are no data publicly available about the length of stay in for-profit hospitals. There are also comparability issues across countries: in some DRGs systems, a stay and a readmission or follow-up are considered as one stay, whereas in others it would be counted as two stays.

Overall, the length of stay in for-profit hospitals in the countries analysed in the case studies is shorter than in public hospitals for some categories of patients (see Box 3).

28 In this audit, average prices were a percentage of a benchmark price derived from the national hospitals case-mix standard cost index.

Box 3: Summary of the length of stay in for-profit hospitals

Austria: There are no publicly available data about the length of stay in for-profit hospitals. The average length of stay in hospitals funded by the provincial health funds has decreased continuously over the past few years and was 5.7 days in 2006 (BMGFJ, 2008).

Germany: The average length of stay (7.1 days in 2012 in all types of hospitals) is fairly high compared with other OECD countries, even though it has decreased considerably since the introduction of DRGs. The incentives and checks associated with DRGs have made the length of stay of different types of hospitals converge (Deutsche Krankenhaus Gesellschaft, 2014).

Romania: An analysis of publicly available indicators for clinical efficiency reported by the National School of Public Health, Management and Professional Development in Bucharest showed that private hospitals tend to have better efficiency ratios than public hospitals, with the average hospital length of stay being generally lower.

Ireland: The average length of stay in public hospitals in 2012 was longer than in private ones (3.2 days versus 2.2 days) (McLoughlin, 2014). Private psychiatric units and hospitals have longer lengths of stay than general hospital psychiatric units (McLoughlin, 2013). This is also the perception of the interviewees, who also mentioned the need to make comparisons according to specialty (in some of them the average length of stay would be more or less the same).

Italy: In 2011, the average length of acute hospital stays was 7.2 days in public hospitals and 5.6 days in private ones. The average length of non-acute²⁹ hospital stays was 27.8 days in public hospitals and 26.5 days in private ones (Aiop and Ermeneia, 2014).

UK: A study by Siciliani et al (2013) found that the overall length of stay in ISTCs and other private centres was shorter (by 18% and 40% respectively) than in NHS hospitals, even after controlling for differences in the health status of patients. This would indicate that such differences can be attributed to efficiency as opposed to the selection of less complex patients.

Issues linked to efficiency

Types of services provided

Since most private hospitals (particularly those of small or medium size) tend to specialise in a limited number of procedures, this allows them to standardise care pathways according to best practice. This helps to achieve higher technical efficiency than bigger hospitals (usually public ones) that provide more types of treatments. Even though private hospitals have started to treat more complex cases, the complexity of most procedures tends to be lower than in public hospitals, which accounts (to a great extent) for the differences in length of stay. Focusing on elective surgery such as hip replacement, orthopaedic care and radiology also means that there is a lower risk of complications and that treatment can be scheduled. Furthermore, public hospitals provide medical education and research services, which is not the case in private hospitals; the PPP hospital in Italy is one of the few private university hospitals in the EU.

By not treating the more complex and less profitable cases, gains in efficiency are achieved at the expense of accessibility for patients with complications. While it can be expected that private hospitals may not provide some types of services, this may entail a referral to public hospitals. For example, the Privatklinik Graz Ragnitz in Austria does not offer some services (such as computerised axial tomography scanning) at the weekend. Patients who need this service at the weekend are referred to a public hospital.

Role of managers

The importance of management in running a hospital efficiently was highlighted by several interviewees. The role, their experience and the duties of managers can differ in public and private hospitals. In Romania, for example, public hospitals are usually managed by doctors who also see patients, whereas in private hospitals managers carry out their duties full-time and have previous managerial experience, although not necessarily in a healthcare setting. Even though managers of public hospitals in Romania felt that this role should be carried out by staff with previous experience in management, interviewees in other countries identified some of the challenges associated with having managers without training in medicine. Staff transferred from the NHS to the ISTCs in the UK reported that managers were disengaged from clinicians, often making comparisons with productivity initiatives in other sectors, rarely participating in team meetings and offering little support (Waring and Bishop, 2011, 2012). Having managers with a background in other sectors has led to the adoption of new management practices which, in some cases, have been transferred to the public sector. In private hospitals in Germany, the equipment is chosen by management, whereas in public university hospitals it tends to be chosen by staff (German case study).

Hospitals and policymakers

Interviewees in Germany felt that political influence led to decisions in public hospitals that did not necessarily have efficiency as an intended goal and that this political

29 Includes residual mental health facilities, spinal care units, functional recovery and rehabilitation, long-stay care patients and neurological rehabilitation.

influence should be minimised if municipal hospitals are to perform at the same level as private hospitals (Tissen, 2005). This resonated with the CEO of a private for-profit hospital in Ireland, who stated that public hospitals are political entities and that, in case of poor performance, they are less likely to be closed as they are often the main employer in their area and their closure would also have political repercussions.

Profitability, reimbursement mechanisms and incentives

Interviewees had different views regarding the influence of seeking profitability on the length of stay. Overall, the marketisation of hospital services has led to an identification of efficiency with profitability (Papouschek, 2011). While one of the ‘think tanks’ in Germany thought that cost efficiency had a negative impact on the length of stay of patients; one of the CEOs interviewed in a for-profit hospital explained that cutting stays short can have a negative impact on the reputation of a hospital and its staff. Moreover, hospitals do not get reimbursed for readmissions. However, the Privatlinik Graz in Austria does not accept patients who may need more than two days of intensive care, as this is the maximum length of stay that will be reimbursed by private health insurance. Public hospitals do not have this upper limit of reimbursement for intensive care. In Austria, not all private for-profit hospitals receive all the costs funded by the public sector, which gives a greater incentive to be efficient and achieve savings (Czypionka et al, 2012).

As stated in Chapter 4, the type of reimbursement mechanism has a major influence on the efficiency of hospitals, regardless of their ownership. In Germany, the introduction of the DRG system in 2004 in all types of hospitals led to a decrease and convergence in the length of stay (Augurzky et al, 2015). It also provides incentives that cause inefficiencies in the healthcare system as a whole, since everyone wants to treat more patients, which could cause overcapacity and over hospitalisation. It also provides an incentive to provide the most profitable type of treatment among all the possible options. The CEO of another private hospital in Germany noted that, while DRGs gave an incentive to reduce stays in hospitals; this is in line with the patient’s interest because patients do not want to stay in the hospital for an inappropriately long time.

However, patients can have different attitudes towards the length of their stay or their treatment according to the type of hospital and personal incentives. In Romania, private health insurance is not widespread, constituting only 0.7% of private spending on health. Therefore, the out-of-pocket payments incurred for staying in a private hospital deters patients from wanting to stay longer. A service director in a non-profit hospital in Ireland, where 47% of the population has supplementary health insurance, the third highest population coverage in Europe (Sagan and Thomson, 2016), had experienced the opposite situation, with some patients whose treatment is covered by their insurance prolonging their stay in order to make the most of their entitlement.

Staff

Interviewees in Germany pointed out that private hospitals are more cost efficient, partly because they have cut personnel costs. Furthermore, the CEO of one hospital pointed out that the private sector seems to invest more in healthcare staff, while public hospitals seem to have a relatively large administrative department. Operating teams in ISTCs have more repeat exposure, which leads to greater efficiency.

Being part of a group or chain

Savings and gains in efficiency have been the rationale for the merger in Austria of small (public and private) hospitals in hospital groups or chains (Papouschek, 2011). Being a member of a private group that owns several hospitals gives an advantage in terms of economies of scale, coordinating care and being able to spread loans over the entire organisation (Schulten, 2006). It also enables greater bargaining power when purchasing large quantities of equipment, so that operating costs can be reduced. Furthermore, there are fewer restrictions regarding tendering procedures. For example, the PPP in Austria contracted out the building of a new hospital wing and was able to choose the offer that best represented value for money, rather than the cheapest one. Public hospitals are also grouped together in other countries, but in Ireland for example, the hospital groups established in 2015 do not purchase care themselves.

Physical facilities

Private hospitals in Germany benefit from having an infrastructure that enables them to work more efficiently; for instance, having all the departments under one roof instead of different buildings scattered around different places. Having admission and recovery areas close to theatre has been identified as a best practice that improved productivity in ISTCs in the UK (House of Commons Health Committee, 2006).

Work organisation and processes

Overall, managers in private hospitals have more room for manoeuvre to hire and fire staff, and to restructure and streamline processes. Private hospitals in Italy have managed to increase the case-mix and the average weight³⁰ of patients (in the context of decreased funding) to a greater extent than their public counterparts. This suggests that they may be more flexible in adapting to changes. At the Privatlinik Graz Ragnitz, interviewees felt that decisions to address changes can be made more quickly than in public hospitals, as there are less bureaucratic processes that need to be adhered to before a decision can be taken.

An interviewee from the Krankenhaus Oberndorf in Austria stated that it was able to achieve high technical efficiency when a hospital extension and its private rehabilitation facility were brought into full service, as this led to an optimal use of synergies between the surgical and rehabilitation treatment of orthopaedic patients.

30 Average weight is an indicator of complexity of illness/cases treated, assigning relative weights to each group of patients according to their discharge numbers.

Interviewees in private hospitals in Ireland and the UK have stated that having more efficient patient pathways (in which outliers can be identified) is behind their efficiency results. In the UK, it was reported that private organisations have innovated more in organisational and working practices (process innovation), while the NHS has greater resources to drive innovation in clinical practice (that is, product innovation). One of the effective work processes identified by the Department of Health in ISTCs includes minimising bed transfers and the time spent by patients on the operating table, for example through local rather than general anaesthesia. Speeding up recovery to reduce bed time, increasing the facility's productivity and enhancing the patient experience, was achieved by the use of chair-based post-operative recovery and a discharge lounge. The Department of Health (2006) also pointed out that many of these changes were also piloted and implemented in NHS settings at the time and, as such, were not exclusive to the private sector.

Administration processes can also have an impact on efficiency. The private hospitals in Italy had put in place measures such as a reduction of administrative processes to minimise the patient transfer time to the rehabilitation ward, so that rehabilitation could start immediately after surgery and the length of stay can stay below the DRG threshold. Performing all analyses and checks before surgery had also enabled the length of stay to be reduced.

Maximising the usage of operating theatres also leads to greater efficiency. In ISTCs in the UK, theatres are open 12 hours a day, 6 days a week. In Irish private hospitals, theatres have longer opening hours than in public hospitals. Differences in the continuity of care also have an impact on efficiency. Interviewees in public and private hospitals in Romania pointed out that for-profit hospitals are better equipped for pre- and post-treatment procedures.

Differences between public and private hospitals in relation to discharge also have an impact on the length of stay. Unlike in public hospitals, 'bed blocking' due to lack of home care or a place in a nursing home is not an issue in Irish private hospitals, since patients are asked to organise their convalescence before they start their treatment. On the other hand, it may be that private hospitals tend to be less well connected to the wider network of healthcare providers.

Monitoring by third parties

The incentives to extend the stay of patients or to provide treatments that are more costly or have higher reimbursement rates are minimised by the checks and balances exerted by third parties. In Ireland, private hospitals negotiate an average length of stay with each health insurer and insurers can query why patients stay longer than the average. This reduces the likelihood of hospitals prolonging the stay of patients in order to get a larger reimbursement, as there is a risk of a financial penalty – or of not being reimbursed at all. However, negotiations with private insurers can have a negative impact on efficiency as they require time and resources.

With regard to the practice of upcoding, the appropriateness of DRG allocation (based on the patient's records) is checked in audits carried out by the regional authorities in Austria and Italy. Krankenhaus Oberndorf stated that the regional health authority which funds them tests a random sample of 1.5% of cases for correct coding in the hospitals it finances each year. For 2013 and 2014, the results showed similar or better results compared with the other fund hospitals in the region, indicating that most cases were coded correctly. In cases where the coding was incorrect, the reimbursement of incorrect codes did not lead to higher compensation. In the UK, clinical coding has been in place since 2007.

Accessibility

Types of services provided to patients

The differences in service provision outlined in the previous section are also relevant for accessibility. While the reimbursement system affects the choice of services in all types of hospitals and the provision of certain services may be a strategic choice rather than just seeking profits (for example, the PPP hospital in Austria), the search for profitability in private hospitals leads to differences in the choice of services offered. Services that are profitable and that can be standardised are favoured over others. In Germany, for example, private for-profit hospitals have approximately 16% of the total number of hospital patients, but they provide treatment for 46.4% of varicose diseases (Böhm, 2015).

The privatisation of small hospitals in rural areas of Germany has led to the closure of a number of emergency departments and other labour-intensive departments, such as paediatric wards. This can also be seen in other countries where few private hospitals have accident and emergency departments. These differences in the types of services provided in public and private hospitals have an impact on waiting times: those hospitals that do not have accident and emergency departments do not have as many unscheduled patients as those that have this department.

Concerns about the exclusion of patients who require more complex interventions or less profitable treatments were raised in several countries. Focusing on treatments that are more profitable and are more appealing for patients with voluntary health insurance, can be considered as a way of selecting patients with fewer health problems or providing higher reimbursements for treatments. In Austria, private non-profit hospitals receiving public funding have a legal duty to treat every patient who seeks admission. In practice, these hospitals tend to provide less outpatient treatments and are less likely to have accident and emergency departments than public hospitals. As there are no non-profit university hospitals, and only a few of them are tertiary hospitals, patients with complex conditions are not referred to them. In Ireland, the Health Service Executive contracted out inpatient services in 2015. People with chronic illnesses (such as diabetes and rheumatism) were initially accepted by the private sector, but it was then found that private hospitals could not meet their needs adequately.

This also has an effect on public hospitals. In the UK, ISTCs were set up specifically to treat low-risk, elective patients rather than high-risk, high-cost patients. Each ISTC had its own list of exclusion criteria, which typically included demographic factors such as age, social factors (for example, availability of a carer at discharge), and clinical factors (such as health status) (Mason et al, 2008). Since ISTCs accept only 'healthier' patients for treatment, with less severe conditions (Chard et al, 2011), this leaves the more complex cases to the NHS. For the top 30 Health Resource Groups, patients treated by the NHS were significantly less healthy, underwent more procedures and were more likely to come from deprived areas compared with patients treated by private providers. Public hospitals exposed to the nearby entry of ISTCs were found to experience nearly 50% deterioration in average patient health status (Cooper et al, 2014). Other studies, however, have pointed out that the difference in the severity of symptoms before surgery was small; concluding that there was little evidence that ISTCs 'cherry-pick' healthier patients (Chard et al, 2011).

Waiting times and lists

As stated in Chapter 3, waiting lists in public hospitals are one of the drivers for private provision. Private hospitals can take additional work from public hospitals that struggle to meet waiting time targets. The ISTC in Nottingham, UK, for example, was able to do so by holding additional clinic sessions at weekends.

In many cases, the public sector has commissioned services from private hospitals for which there is a long waiting list in public hospitals. This can help to reduce waiting lists but, in some cases, at considerable cost for the public sector. Furthermore, the geographical mismatch between needs and space capacity, the reluctance of doctors to refer, and patients to be referred to private providers, can lead to a lack of use of capacity. This has been the case of ISTCs in the UK, whose capacity was not used at a time when the 18-week limit was breached at NHS hospitals (Financial Times, 2016). In the UK, it is unclear whether the introduction of ISTCs has helped to decrease waiting lists or not, as the number of procedures they perform constitutes a small fraction of the total and during their introduction, NHS funding focused on reducing waiting lists (House of Commons Health Committee, 2006; Bartlett et al, 2011).

An important issue in Austria and Ireland (in relation to waiting lists) is the situation of privately insured patients in public hospitals, with both countries having a high take-up of supplementary health insurance.

In Austria, patients who have supplementary private health insurance can choose to be treated in fund (public) hospitals. It used to be the case that patients with private insurance would be put on waiting lists ahead of patients with only statutory health insurance, although this was prohibited by law. A change in legislation in 2012 was supposed to make waiting lists more transparent, but failed to do so.

In Ireland, patients who can pay privately have a shorter wait to receive treatment than public patients. One study also pointed out that private inpatients used more bed days that were available to them more often (14.1%) than public ones (12.6%) (O'Reilly and Wiley, 2010). Since 2014, there has been a move towards full economic costing of private activity in public hospitals, which can charge the full price of a hospital bed. This measure was criticised by the Private Hospital Association, as this could result in an increase in private insurance premiums and, therefore, fewer clients for private hospitals (thejournal.ie, 2013).

Cost as a barrier

With the exception of Germany,³¹ in all the countries included in the case studies, treatments are more expensive in private hospitals that are not publicly financed than in public hospitals, or private hospitals financed publicly. When comparing costs, it is important to take into account that, in some countries, informal payments may be more widespread in some types of hospitals than others.

Low remuneration of staff in the public sector has been identified as one of the main risk factors for soliciting or accepting informal payments (European Commission, 2013c). In Romania, widespread informal payments reduce the access to healthcare for people with low incomes (European Commission, 2016b). It is estimated that nearly half of the population in Romania makes informal payments for hospital admission (ASSPRO CEE 2007, 2013). One of the private hospitals in Romania employs its staff full-time so that they cannot refer patients to their practice in a public hospital, where informal payments are more common.

Some private hospitals offer price discounts for care packages and exemptions for those patients who cannot afford treatments. This was the case in the private hospitals included in the Irish and Romanian case studies, which cooperated with credit unions and organised charity activities offering treatments for free. One of the hospitals in Ireland has a clinical finance group linking clinical and financial operations, assessing the referrals of patients that cannot afford their services. One of the interviewees at a Romanian hospital stated that as long as the amounts reimbursed by the public sector do not cover the real costs of performing surgery, they are not in a position to broaden access by lowering fees.

Physical accessibility

Disparities in the geographical spread of public and private hospitals have been reported in several countries. In Germany, private hospitals are less present in the eastern part of the country. Private hospitals are more present in urban areas of Romania than in rural areas, where they are more accessible because they are closer to the main roads than public hospitals. In contrast, public hospitals in Austria (which are usually larger than private ones) tend to be located in urban areas.

31 Patients pay the same price in any hospital included in the national hospital plan.

In England, the growth of private sector providers had been inhibited in more deprived areas as the demands of the patients were more extensive. For example, the health company Circle Health decided to locate a new hospital in Bath, because a large proportion of residents were covered by private medical insurance and the area scores above the England average on nearly all indicators of affluence and health, and below average on unemployment rates (CMA, 2014).

Policies assuring the coordination of public and private hospitals by having one adjacent to the other (for example, the co-location policy in Ireland in the past decade) deepen these geographical disparities. ISTCs in the UK that were established in phase 2 of the programme were generally operated over several sites and were frequently co-located with existing private hospitals (Naylor and Gregory, 2009; Cooper et al, 2014).

Known accessibility

Regarding the direct access to facilities, all hospitals in Italy must make available online the Public Services Charter (*Carta dei Servizi*). This gives relevant information on:

- how to access the facility;
- the opening time of offices and ambulatory facilities;
- how to access hospitalisation services;
- reservation procedures.

Hospitals are increasingly offering web services to make contact and access to healthcare services easier. Investment in web services also aims to give better-quality services to citizens and to improve the sharing of health and clinical data (for example, the provision of electronic health records by the NHS). One common type of information found on the website of healthcare providers is procedural waiting times, which informs citizens in choosing appropriate hospitals for their treatments.

Issues linked to accessibility

Follow-up/continuity of care

Public and private hospitals face different challenges when it comes to ensuring continuity and follow-up in the care they provide. Access to beds in public hospitals can be delayed by patients who cannot be discharged because they do not have a place in a nursing home or cannot avail themselves of home care services. Although delayed discharges can lead to the cancellation of many procedures in public hospitals, this is not an issue in private hospitals because patients are asked to arrange their convalescence prior to admission. Some private hospitals have developed their own community clinics but, overall, private hospitals are not as well connected to other healthcare services (like community care) as their public counterparts. In Ireland, patients who develop complications after care in a private hospital often need to go back to their general practitioner (GP) to get a referral, which leads to affordability issues (interview with academic expert in Ireland).

Staff shortages

Shortages of staff in certain specialities contribute towards long waiting times in Irish public hospitals. For example, having lower pay levels than in other English speaking countries deters theatre nurses from working in Ireland, which makes recruitment difficult. Private hospitals face similar shortage challenges, but their remuneration is not constrained by civil service pay levels. Overall, there is a mismatch between the budget available and the existing human resources (interview with head of public sector department).

Private for-profit hospitals in Austria and Romania generally have fewer specialised medical staff available on a permanent basis than public hospitals. For this reason, high-risk patients are often referred to hospitals funded by the public sector. These hospitals have a better infrastructure to handle any complications and emergencies that may arise.

Quality and monitoring

Obtaining data about any dimension of quality from private hospitals proved to be difficult in all the countries included in the case studies, as they may consider such data to be commercially sensitive and provide it only about the areas of quality where they excel. Problems with care may only be made public if they are uncovered by the media or if patients are referred to public hospitals.

Furthermore, data gathered through user satisfaction surveys tend to focus on non-medical aspects (such as food and accommodation) and provide inconclusive findings regarding the importance of hospital ownership, with replies being influenced by the gender and age of the respondent rather than by the type of hospital.

Comparing quality outcomes from public and private hospitals is also difficult given the differences in treatments and patients and the fact that, in some cases, patients with complications are transferred from private to public hospitals.³²

The lack of data makes it difficult or impossible to evaluate the outcomes of care contracted out or initiatives like the ISTC programme. A recent report concluded that the lack of transparency and comparable data prevented an assessment of the level of safety in private hospitals in the UK (Leys and Toft, 2014). However, the need for better data is being addressed – to some degree. In 2014, the Private Healthcare Information Network (PHIN), an independent non-profit organisation, was given a legal mandate to collect and make available data from all private healthcare facilities and on all patients (private and NHS-funded). The data will be benchmarked against NHS data wherever possible and will enable publication of performance measures by procedure at both hospital and consultant level. Hospitals were required to start collecting data from January 2016, which PHIN will start to make public via its website from April 2017.

Outcomes

32 These transfers delay the provision of care and therefore have a negative effect on health outcomes.

In Germany, information from patient surveys shows a decline over the years in satisfaction with private services and an increase (particularly strong in private clinics) of the number of patients who feel they were discharged too early. Satisfaction with how patients are treated is also lower in private hospitals than in public hospitals (Schulten and Böhlke, 2009).

In Ireland, patient experience surveys show that patients have, overall, found the care purchased in private hospitals satisfactory. The information available in the UK shows that ISTCs have had similar outcomes to the NHS, with some ISTCs reaching top scores in their respective areas of specialisation (for example, hip replacement) (NHS Partners Network, 2013).

The UK is, by far, the country included in the case studies where most studies were found to be looking at differences between public and private hospitals in terms of quality outcomes. Several studies have shown that health outcomes for patients treated in ISTCs is equal to, or slightly better than for patients treated in NHS hospitals. A study comparing patients treated in six ISTCs with patients treated by 20 NHS providers during 2006–2007 found that patients reported similar health improvements following hernia repair, varicose vein surgery and knee replacement surgery (Browne et al, 2008). Improvements after cataract surgery and hip replacement were slightly greater for patients treated in ISTCs; patients also reported slightly greater health gains for hip operations conducted in private facilities (Appleby, 2015). A survey of patients from 21 NHS providers and 9 ISTCs (2008–2009) showed that patients undergoing hip and knee replacements in ISTCs had better outcomes in terms of severity of symptoms, health-related quality of life and post-operative complications (Chard et al, 2011). However, overall, these differences were small and their clinical relevance minor. The authors noted that they could be attributable to differences in patient characteristics that were not fully taken into account.

Issues linked to quality

Staff

Despite the lack of data, one could expect to see differences in process quality due to the differences in the staff employed in public and private hospitals.

In Austrian private for-profit hospitals, the ratio of nurses to beds tended to be equal to or better than that of public and private non-profit hospitals, with 1 out of 8 private for-profit hospitals with a ratio of 1 paediatric nurse for more than 20 beds during the night, compared with 10 out of 17 public hospitals. For physicians, the opposite is the case. This is because all public and private non-profit hospitals had at least one gynaecologist and one anaesthesiologist on duty, whereas in several private for-profit hospitals these specialised physicians were only available on call. This is due to the setup of private hospitals (as noted above) which provide the infrastructure where independent physicians can book to treat their own patients (Konsument, 2005).

In Germany, interviewees noted that public hospitals tended to employ more clerical staff than private ones,

which had proportionately more healthcare staff. Overall, however, private hospitals tended to have fewer doctors per hospital bed than public hospitals (and more nurses per hospital bed). Data show that the number of cases for all types of employees is higher in for-profit hospitals, followed by not-for-profit and then public (Augurzky et al, 2015). In Ireland, it has also been reported that non-specialist doctors in public hospitals tend to have less experience than their counterparts in private hospitals. This has been linked to several of the complaints received in public hospitals about the quality of care. The opposite situation can be found in the UK, where post-operative care is provided by a team of specialists in the NHS, whereas in private hospitals, on-site medical care (including post-operative care) is often provided by a single agency-provided resident medical officer (RMO) (Leys and Toft, 2015, p. 7). These tend to be junior doctors with only a few years' experience and are responsible for as many as 30–40 overnight patients. Due to the lack of data, however, it is difficult to determine if this staffing practice has a negative effect on safety. The regulatory body in England (the Care Quality Commission) has not raised concerns about staffing levels in private hospitals. As one interviewee put it: 'It's all fine [in a private hospital] as long as everything goes exactly to plan'.

Equipment and physical facilities

The newer the hospital infrastructure is, the lower the risk of infections. In Ireland and Romania, interviewees noted that private hospitals tend to have more modern facilities; most public hospital buildings in Romania date from before the 1990s. In addition, public hospitals carry out relatively few general disinfection procedures, repainting and refurbishment. Furthermore, public hospitals have to follow public purchasing rules, which usually impose the 'lowest price rule' as the selection criterion. In private hospitals, medical devices (including the disinfectants used in operating rooms and within the entire hospital) can be selected on the basis of cost-benefit analyses and on a longer term perspective.

Quality monitoring mechanisms

A survey looking at the application of quality improvement strategies in 389 public and private hospitals in 8 countries (Belgium, Czech Republic, France, Ireland, Netherlands, Poland, Spain and the UK) found that external assessment was the most widespread (88%) quality improvement strategy among the hospitals surveyed (Lombarts et al, 2009). This external assessment can take the form of accreditation, certification, licensing or inspection. Inspection was the most widespread form of external assessment, with 66% of the hospitals participating in the survey having been subject to one.

In terms of how this external assessment takes place, an EU wide study found that 19 countries had accreditation, certification and/or licensing systems in place or under discussion, with voluntary rather than compulsory frameworks appearing to be the norm (de Walque et al, 2008). However, this external assessment may be applied to public and private hospitals differently. In England, the Care Quality Commission (the independent regulator of health and adult social care) initiated a new inspection

regime for private hospitals in November 2014. Historically, independent healthcare was not formally subject to either national or local government health policy to the same extent as the NHS; for example, participation in national audits was voluntary rather than mandatory. In October 2014, new regulations on quality and safety were introduced,³³ whereby all providers are expected to register with the Care Quality Commission. This includes inspections of private hospitals by teams of inspectors with a much greater range of expertise than before, and gathering equivalent information about performance to that received from NHS hospitals.

In Italy, accreditation divides private hospitals in two categories: Private hospitals that can provide performance equivalent to public hospitals recognised as ‘accredited hospitals’ that receive a fee for their services directly from the regions and the national health service, and non-accredited private hospitals that are only authorised to carry out certain healthcare activities, paid for directly by citizens.

In those countries without accreditation systems for private hospitals (Austria, Bulgaria, Ireland and Portugal), certification can be obtained from other bodies. In Austria, for example, the quality of services in private hospitals can be certified annually by an external State-approved and independent institute, which provides a certificate geared towards health tourism. In Ireland, to become members of the Private Hospitals Association, hospitals need to be accredited by an internationally recognised accreditation body such as the Joint Commission International. In both these countries, some private hospitals have voluntarily applied standards initially devised only for public hospitals (for example, the HIQA Standards for Safer Better Healthcare in Ireland).

Another way to monitor performance is by getting the views of patients which, according to the MARQuIS study,³⁴ is usually done through the analysis of patient complaints

(85.7% of hospitals consulted) or by monitoring their views or by carrying out patient surveys. The complaints procedure can differ greatly depending on the type of hospital ownership. In Ireland, for example, patients in public hospitals can raise complaints to the Ombudsman and the Health Service Executive, but these options are not available to patients in private hospitals.³⁵

In Romania, private hospitals have reporting systems used for tracking operational and financial data, as well as overall employee and patient satisfaction; public hospitals are only just starting to use such systems for tracking purposes. The availability of these systems makes it easier to identify areas needing improvement, which private hospitals then target to increase efficiency. Since 2015, there has been a legal requirement for all public hospitals to implement patient feedback (including whether they were asked for informal payments) mechanisms, which should be monitored by hospitals on a regular basis to allow an evaluation of the quality of medical services. Moreover, a website launched in late 2015 allows patients to rate the care received in public or private hospitals.

At the individual hospital level, the Nottingham NHS Treatment Centre analysed feedback and monitored themes to change practice accordingly, along with a quarterly quality scorecard to aid in this process. Patients were called 28 days after surgery to monitor clinical outcome data that included surgical site infections, while an online incident reporting system enabled staff to report all actual incidents and near misses where patient safety may have been compromised.

Table 8 describes the quality improvement and monitoring mechanisms used in the country case studies.

Cross-cutting issues

Competition

33 The Health and Social Care Act 2008 (Regulated Activities) Regulations 2014.

34 Multi-Centre Medication Reconciliation Quality Improvement Study.

35 It was felt by one of the interviewees in the for-profit hospital that there is currently too much focus by the public sector on encouraging patients to complain and that this can undermine the trust issue that doctors and patients must have, sending out a wrong image. The previous government had plans to establish a National Patient Safety Office and a patient advocacy service to provide advice and to detect patient safety trends in healthcare (Department of Health, 2015).

Table 8. Quality monitoring and improvement mechanisms in the country case studies

Austria	Quality measurement and improvement in Austria is based on the use of the Austrian Inpatient Quality Indicators (A-IQI) system. This system, first introduced in 2011, collects data for hospitals financed by health funds in Austria, and some private-for-profit hospitals (such as the one included in this case study). The indicators contained within the A-IQI are based on documentation relating to diagnoses and services. Hospitals ‘underperforming’, in comparison to benchmark figures, must submit explanations of the reasons for this. The results are published for the whole of Austria, as well as disaggregated by regions. Information about individual hospitals is available internally but not published.
Germany	Since 1996, regulation requires hospitals to publish an annual quality report and to establish a certified internal quality management system. The Institute for Quality and Transparency in HealthCare (IQTIG) was established in 2015 and since 2016 is responsible for the development of quality indicators that are comparable across hospitals. It publishes a yearly report for all hospitals and liaises with those hospitals that have quality outcomes below the average. It is expected that this information will allow patients to compare and select hospitals.
Ireland	There are plans to extend the remit of the Irish Health Information and Quality Authority (HIQA) to inspect and, in the long term, to license all types of hospitals (Irish Times, 2015). In the case of mental health hospitals (both public and private), inspections are carried out by the Mental Health Commission, set up in 2002. Their inspections cover several areas of care and service provision.
Italy	In Italy, the Ministry of Health is responsible for continuously monitoring the outcomes at individual hospitals and has recently implemented a National Outcomes Program. The Centro Ortopedico di Quadrante uses a balanced scorecard system.
Romania	The National Authority for Quality Management in Healthcare evaluates all types of hospitals. In addition, all public hospitals in Romania have been mandated to implement a patient feedback mechanism. While hospitals must internally monitor and report on feedback, there is no centralised database of results. In private hospitals the process is to request written feedback from patients upon discharge, but this is only analysed internally. There are plans to accredit all hospitals (public and private) into four categories by 2020: Accredited; high confidence; low confidence, and not accredited. All hospitals not accredited by 2020 will be closed. This includes an evaluation of all private hospitals by the National Authority for Quality Management in Healthcare (ANMCS) on a range of dimensions including strategic and operational management, human resources management, environmental management, quality management services, patient rights and communication, patient data management, health care management, and prevention and risk management.
UK	Quality improvement mechanisms in the UK are based around the Care Quality Commission’s (CQC), the independent regulator for health and social care services, inspection regime. The CQC inspects and rates both publicly-funded and private hospitals. In addition to the CQC regime, hospitals should have their own quality improvement mechanisms to ensure that the quality of services is monitored on an ongoing basis, and necessary improvements implemented (such as clinical outcomes data).

Source: Case studies and Bublitz (2016)

Interviewees from the public sector in Germany felt that competition between public and private hospitals enables both to learn and improve their performance. This was also the case in public hospitals in England, which have replicated efficiency measures implemented in ISTCs (Bartlett et al, 2011). A study showed that after an ISTC opened in the area, the time from admission – to hospital – to start of surgery at a local NHS hospital was shown to improve by nearly 70%, which in turn translated into a 24% increase in the percentage of patients treated on the day of admission (Cooper et al, 2014). It has also been reported that the threat of competition from ISTCs was used by managers of some NHS trusts to drive change (Turner et al, 2011). However, the overall impact of competition on efficiency and cost in the NHS is unclear, as summarised in a recent review (BMA, 2014). While some studies found that competition was potentially useful to stimulate better quality in terms of management practices, other effects were detrimental such as greater costs due to the need to establish and manage competition between multiple providers, and monitoring providers. It is worth noting that the ISTC programme also had a significant effect on private healthcare sector fees which, as a result, fell by as much

as 50% for some operations (House of Commons Health Committee, 2006).

While competition can increase productivity in the short term, the dynamics of markets can also lead to concentration in large clinical groups, with the subsequent decrease in productivity (André and Hermann, 2009). This concentration of private provision has taken place in Italy, where public funding of private hospitals has decreased since the beginning of the financial crisis. This had a negative effect on non-profit hospitals and led to increased takeover of activities from private providers and groups aiming to consolidate their position on the market in order to achieve scale.

There are other factors that influence competition between public and private hospitals. For example, in Ireland, public hospitals receive a fixed daily payment (equivalent to approximately half of the actual treatment cost) for every private patient in a private bed. This subsidy for private care in public hospitals places private hospitals at a competitive disadvantage (O’Reilly and Wiley, 2010). It also gives an incentive to private insurance providers to have patients treated in public hospitals, where the costs are lower.

Transfers of patients to public hospitals

Transfers of patients in private hospitals tend to happen when complications arise. Even though private hospitals are starting to treat more complex cases (and some of them have their own accident and emergency departments), the expansion of private provision is done on the basis of making use of the accident and emergency departments in public hospitals as a safety net that reduces risks and costs. Patients are also transferred when the care received at private hospitals does not suit their needs or when affordability issues arise. The latter has

been experienced in private hospitals in Romania, where patients often cannot afford unscheduled treatments or prolonged stays, and therefore they are transferred to public hospitals so that they do not incur further debt.

As a consequence of these transfers, public hospitals have to deal with unscheduled complex cases and patients may feel that their condition worsens due to the delay in receiving care. The problems associated with unscheduled complex cases have been reduced (in some cases) by having agreements between public and private hospitals.

6 | Conclusions

This chapter summarises the main lessons learnt from the overview, the case studies and the literature review and presents the policy pointers based on these lessons.

The data available from Eurostat and OECD show an increase in private for-profit provision of hospital services over the past decade. This increase took place within a context of closure, privatisation and a reduction in the capacity of public and non-profit private provision. This does not necessarily mean, however, that private for-profit hospitals are taking over the role of public hospitals. There seems to be a trend towards having more and smaller private hospitals owned – not only by doctors – but also by long-term investors.

On the basis of the information available, it seems that private providers complement the services provided by the public sector rather than replace them, particularly in areas such as diagnostics and elective surgery. In several Member States, private provision has expanded while using public hospitals (particularly their accident and emergency departments) as a safety net when complex issues arise. Focusing more on technology and being connected with other healthcare providers will be critical in the future, as the ageing of population increases the possibility of multimorbidity (the presence of two or more chronic medical conditions in an individual). It is not yet clear whether the relationship between the public and private sectors will be marked by increased competition or cooperation.

Over the past few years, there has also been an increase in private investment in hospital services. In many countries, private provision has been used to reduce waiting times at public hospitals and to contain costs in public budgets. But even though PPPs can be advantageous as they do not require upfront capital expenditure, countries like Austria, France and Portugal have experienced cases of delays and exceeded budgets. Comparing the costs incurred by contracting out hospital services or providing them in public hospitals can be challenging due to the differences in the budgets allocated.

In addition to ongoing reforms, it is very likely that the role of the generalist doctor and specialised nurse will become more prominent given their increased capacity to provide diagnostic services. Furthermore, it is foreseeable that patients will also be better informed, be able to self-assess their health better through wearable devices and have more virtual contact with care providers. This has implications for the length of stay in hospitals; if self-health is done correctly, the length of stay will decrease. Technological developments may also increase the complexity of the treatments offered by private hospitals.

The evidence on the impact of private provision on the efficiency, accessibility and quality of services provides different results depending on the context, with factors outside of hospitals having more influence on service delivery than whether they are public or private. This influence of external factors makes it difficult to draw

general conclusions. Moreover, disentangling the outcomes due to the type of ownership from other confounding factors is a challenge.

The type of payment system used influences all aspects of service delivery. Diagnostic Related Groups (DRGs) have an impact on service delivery because they have the potential to be used as a tool to improve efficiency and to treat as many patients as possible. However, DRGs have been criticised in France by the employer organisation representing public hospitals for not taking into account the more complex nature of the interventions and services provided in the public sector. DRGs can also have a negative impact on efficiency since they increase the administrative work in hospitals. The use of DRGs also gives incentives for upcoding (André and Hermann, 2009; Jürges and Köberlein, 2013). They also have an impact on the quality of the services delivered, which can be positive (for example, better coordination between care providers to reduce costs) or negative, given that they provide an incentive to reduce the cost per stay (irrespective of outcomes) or to overprovide certain services (Or and Häkkinen, 2011).

Efficiency

The studies found in the literature review highlight the influence of funding mechanisms on the efficiency of all types of hospitals. In the case of DRGs, these take different forms across Europe and information about their effects is partial and difficult to compare, with no consensus on the best way to design them (Geissler et al, 2015). Some of the drawbacks of this reimbursement mechanism described in the European overview and the case studies include:

- producing overcapacity;
- a focus on volume over quality (Germany);
- a poor link between the prices and actual costs of complex treatments (Bulgaria, France, Hungary and Romania).

Two studies identified upcoding as an issue in Italian private hospitals (before legislation was put in place to tackle it). It was also identified as a problem in the implementation of DRGs in Bulgaria and seems to be an increasing problem in the Netherlands (European Commission, 2013c). In the regions where those hospitals chosen in the Austrian and Italian case studies are situated, upcoding does not seem to be more prevalent in private hospitals.

Other factors causing differences in the technical efficiency of public and private hospitals highlighted in the case studies and the literature review are staffing (including salaries) and work processes. Studies focusing on private hospitals in Italy show that overstaffing and problems to adjust input resources due to regulations have a negative impact on the efficiency of private hospitals (Daidone and D'Amico, 2009; Matranga and Sapienza, 2015). Differences

in salaries (which may be higher in private hospitals) have also had an impact on cost efficiency. The German case study shows that cutting personnel costs has helped private hospitals to be cost efficient.

While one of the main drivers for increased private provision in many countries is that the private sector is more cost efficient, no conclusive evidence was found in this research. Only one study on the topic (Herr, 2008) was considered rigorous enough to be included in the literature review. The two studies included in the case studies (Government of Ireland, 2009; Appleby et al, 2013) are based on estimates due to the lack of data and illustrate the comparability issues.

Although the length of stay in for-profit hospitals in the countries analysed in the case studies was shorter than in public hospitals (for some categories of patients), the link between hospital ownership and length of stay was less clear in the studies selected in the literature review. One of the factors influencing the length of stay referred to in both the literature review and the case studies is the extent to which care is available during the convalescence period after the hospital stay. Daily reimbursement mechanisms appear to be a strong incentive to extend the stay of patients, although interviewees at private hospitals in Ireland pointed out that private insurance companies can monitor costs.

Accessibility

Surveys in France and Poland showed that public hospitals are perceived to ensure equal access to services better than private ones. Patients in public hospitals in the UK seemed to be more satisfied with the accessibility of services than patients in private hospitals (Owusu-Frimpong et al, 2010). Rejecting patients who require more complex treatments and who are therefore less profitable is a common criticism of private hospitals. This research found evidence of this in two Italian studies (Berta et al, 2010; Preti et al, 2010), with other studies reporting differences in age, socioeconomic status and insurance coverage between patients in public and private hospitals. Another study found that private hospitals had more patients from outside the catchment area, indicating that patients with enough resources could be more mobile (Fattore et al, 2014). The case studies showed that not offering less profitable types of services (for example, accident and emergency departments) was an indirect form of 'cream skimming', with public hospitals being left with patients with more severe conditions.

In addition to a lack of profitability incentives, staff shortages can also limit the types of services provided. Offering a more attractive workplace and better remuneration was mentioned in the Romanian case studies as reasons for the 'brain drain' that the public sector had been experiencing towards the private sector. In other countries, such as Ireland, both public and private hospitals have experienced shortages in specialised staff, and specific posts such as operating theatre nurses. Furthermore, the standardisation of care in private hospitals can lead to knowledge gaps and the need for additional training. Access to job rotation schemes and

training funds have proved useful in some countries to retain staff.

According to Eurofound (2013), areas of concern regarding the working conditions of healthcare workers include:

- atypical and irregular working hours;
- job strain (high levels of work intensity coupled with low levels of job autonomy);
- significant levels of risk to health because of work affecting health negatively.

A study looking at the recruitment and retention strategies of the health workforce in Europe (European Commission, 2015) includes examples how to recruit nurses through:

- extending the practice and development of advanced roles;
- providing good working environments through professional autonomy and worker participation;
- making the hospital workplace more attractive by improving family-friendly practices.

The studies conducted in some of the countries where care has been purchased from private hospitals with the aim of reducing waiting lists in public hospitals (Ireland, UK), suggest that it is not entirely clear whether this strategy has effectively led to a reduction or whether it is a more cost-effective strategy than investing in the capacity of public hospitals. This research has also identified the reluctance of doctors to refer and patients to be referred to private hospitals as barriers to using care purchased by the public sector from private hospitals.

The availability and coordination with other healthcare and social care services is another factor influencing the accessibility of hospitals. The case studies show that private hospitals can be less well connected to other healthcare providers, whereas beds in public hospitals are more likely to be unavailable because the convalescence of current patients has not been arranged.

Quality

The studies included in the literature review did not find a clear relationship between hospital ownership and the quality of care provided. Access to data about the performance and accessibility of private hospitals is a prerequisite to reforming reimbursement methods, carrying out quality assurance and evaluating the services delivered. Gaps in the data available from private hospitals is a recurring theme in the case studies and is also one of the reasons for the lack of evaluations or studies comparing service delivery in public and private hospitals.

While data reporting requirements are different for public and private hospitals in many countries (for example, Austria, Ireland and Romania), the drivers for higher quality may be common to all types of hospitals. According to one of the interviewees in Austria, higher patient expectations have led to all types of hospitals having facilities with a similar level of comfort and quality.

Furthermore, there is the issue of comparability of data across countries which have very different healthcare arrangements and where private healthcare can take many different forms. A study comparing the quality and safety of hospitals in five different countries found differences in the indicators, data collection requirements and oversight, levels of aggregation and public access to data (Burnett et al, 2013).

Most of the information about quality found in this research comes from patient experience surveys, with mixed outcomes. Some of the factors influencing quality found in several case studies were the qualifications and experience of staff, the staff to patient ratio, and the equipment and facilities at the hospital.

Policy pointers

- A recurrent issue in the case studies is the transfer of patients from private to public hospitals when complications arise. If delays take place, this can lead to a worsening of medical conditions. Reticence to cooperate has led, on some occasions in Ireland, to patients being discharged from private hospitals and then being given an appointment in a public hospital rather than a direct referral and admission. Moreover, unscheduled cases create complications for public sector hospitals that may have to deal with complex cases at a short notice. A solution to this in some countries is to co-locate private hospitals next to or within public hospitals and to have agreements in place for these types of referrals. Another possible solution is to promote the treatment of whole episodes of care when commissioning care from private providers.
- A more structured type of partnership – rather than on-the-spot contracting – could help to build trust and reduce the selection of patients with fewer health problems, leading to a decrease in disruptive referrals of unscheduled complex cases to public hospitals. It could also make better use of the capacity available in private hospitals. One way to do this is to tackle the duplication of services, with each provider playing to their strengths. This could include the designation of private hospitals as national centres of expertise or services for specific treatments or diagnosis for which a critical mass of patients is necessary. However, this requires consultation with policymakers about the ability to meet needs that involve the private sector and overcoming the reticence from staff in the public sector to have private providers offering certain treatments.
- Coordinating a more diversified provision entails greater sharing of information about patients or staff. Here, the public sector can act as a broker, perhaps establishing a repository of information, complaints and good practices.

Efficiency

- There needs to be an improvement in payment mechanisms in order to reflect the actual costs incurred by hospitals. However, collating more

refined information would increase administrative costs. Exchanges at the European level of experiences with different payment mechanisms could be useful to assess the problems associated with different payment systems. This could be done in the framework of the European Semester, where there is considerable emphasis on the cost efficiency of healthcare.

- DRGs are a first step towards linking payments with performance. When adapting DRG systems used in other countries, particular attention should be paid to this and to the incentives that the system may provide to create overcapacity, prioritise quantity over quality of care and incentivise upcoding.
- The length of stay and the accessibility of hospitals can be optimised by improving coordination with other levels of care. The availability of home and residential care services is particularly relevant to reduce the number of hospital beds occupied.
- Comparing cost efficiency in public and private hospitals is an area where more robust research is needed.

Accessibility

- Purchasing care from private hospitals to reduce waiting lists in public hospitals should be done following a cost-benefit analysis and followed by an evaluation of the outcomes. The underuse of care purchased from private hospitals can be avoided by changing attitudes to referrals. Charity activities, patient financial reviews and care package discounts are all useful ways of mitigating affordability issues in private hospitals. Tackling informal payments should be part of strategies aiming to make hospital care more affordable.
- ❖ Physical accessibility has been identified as an issue in several case studies, with private hospitals mostly located in affluent areas. This should be taken into consideration when coordinating public and private service provision and/or purchasing care from private hospitals.
- Overall, there is a need for more robust research comparing the accessibility of public and private services.

Quality

- The differences between countries in the development and implementation of quality management strategies raises the question of the role that the EU can play in fostering quality assurance. Developing European standards in healthcare services through the European Committee for Standardisation was part of the EU 2015 programme for European standardisation (European Commission, 2014). This has been opposed by the European Social Insurance Platform on the grounds of the diversity of the situation at national level and the subsidiarity principle (ESIP and AIM, 2016). Standardisation similar to ISO 9000 has been rejected by the European Hospital and Healthcare Employers' Association (HOSPEEM),

which advocates the development of indicators in collaboration with healthcare professionals. The development of a quality framework similar to that developed at EU level for social services has also not been recommended by the MARQuIS project, which concluded that it may be best to establish specific quality requirements at EU level for which directives already exist (for example, in the field of radiology, blood and tissues) (Groene et al, 2009). The MARQuIS project also highlighted the variation within countries of quality management strategies in hospitals, for which a guide with quality management indexes for hospitals has been developed as part of an EU project (Groene et al, 2014).

- Outsourcing care to private hospitals should not be a substitute to finding solutions to issues in public hospitals and it needs to be compared with other options. The European Commission's EU Expert Panel on Effective Ways of Investing in Health highlighted the need to clearly define what is to be commissioned and to decide how to monitor costs and effects, as well as the need for strong commissioning bodies and processes. It also pointed out the need for additional information and regulation in order to engage private providers in service provision. Contracts and payment systems need to provide incentives for quality, cost-effectiveness and control of costs (European Commission, 2016c).
- Inspectorates in many countries do not currently have the capacity or the legal remit to inspect private hospitals. Given the increase in private provision, it is important to have a level playing field in terms of inspection.
- Diversified provision also increases the importance of auditing and increases the necessity to tackle corruption in procurement. Some initiatives that are effective at tackling corruption in procurement include: increasing the independence of the police and the public prosecutor; the inclusion of the healthcare sector in strict state procurement regulation, and centralising the maximum price of pharmaceuticals (European Commission, 2013c).
- There is a serious lack of data about quality processes and outcomes disaggregated by ownership, although nowadays there is more information provided by service users rating hospitals in similar ways that they rate other services. The lack of data about the quality of care in private hospitals has implications for the provision of cross-border care, therefore it is important to address these dimensions in the EU Joint Assessment Framework for Health and the OECD Health Care Quality Indicators.

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Annex: REA methodology

Search strategy

The REA (rapid evidence assessment) was primarily conducted in mid-August, September and the beginning of October 2015, although snowball sampling was carried out in December 2015 and January 2016. For this review, all the articles were made accessible in case the full text was needed. To safeguard quality and limit selection bias, a second opinion was given by a second researcher about the articles classed as disputable at the full text stage. Data management was performed using Mendeley and Microsoft® Excel.

Database

Three potentially important databases were identified for this research question: Scopus, EconLit and SocINDEX. Scopus is crucial since it is one of the biggest peer-reviewed multidisciplinary databases, with a complete coverage of MEDLINE® articles. EconLit is included because it contains all the research conducted in the field of economics, which is especially relevant to find articles on efficiency. SocINDEX was included to gain access to literature that might include the perspective of users. Grey literature or publications only in paper form were excluded from the literature review.

Search terms

The search terms were determined by exploring the research field (Table A1).

As a result of the process outlined in Table A1, two different search strategies were employed for the three different databases due to the high number of hits within Scopus. Scopus search string also includes keywords mentioning the outcome variables of interest. To justify this approach, different search terms were tested before the actual selection of the articles to provide reassurance on the quality and relevance of the hits.³⁶ The search string included standardised Medical Subject Headings (MeSH) for PubMed articles. For the EconLit and SocINDEX databases, the search terms covered only the intervention.

Only research since 2000 and articles written in English were included, which could lead to the exclusion of relevant studies from non-English speaking countries but, due to the nature of the REA, concessions had to be made in this regard. However, the language bias is limited because most peer-reviewed articles in high ranking journals are written in English as the English language is perceived to be the universal language of science.

The search string excluded the term 'United States' before 2008 since this review was only interested in papers related to EU Member States. This review accepts that this search term might be relevant for cross-country comparison studies, but the study of Eggleston et al (2008) – identified as one of the key systematic reviews conducted in this field in the USA – justifies the exclusion of the literature before this paper was written. Furthermore, in order to limit the number of hits, the review excludes all the studies with less than two citations before 2008³⁷ on the grounds that it can be assumed that these papers did not make a substantial contribution to the academic debate.

Table A1: Defining search terms

Phase 1	Phase 2	Phase 3	Phase 4
Review of potential literature (including grey literature) and identification of important systematic literature reviews on the topic.	Identification of relevant keywords for the search strategy based on literature found on the topic as well as standard keyword used by the databases.	Trial run in the three databases with various keywords. Assessment of which keywords provide useful hits and which do not.	Final search with the defined research terms.

Source: Authors' elaboration based on the descriptions given above.

36 Other search terms that were analysed were: 'commercial', 'outsource', 'contracting out', 'waiting time', 'clinical outcome', 'equity' and 'marketisation'. These search terms were deemed unfit, mainly because the articles found with those terms were unsuitable for this systematic review (for example, 'equity' primarily gave articles from developing countries).

37 Citations according to the databases where the articles are identified, thus Scopus, EconLit or SocINDEX.

Review process

A flow chart (also referred to as a PRISMA flow diagram) of the review process is shown in Figure A1. It provides a clear overview of how many articles were excluded for review, at which stage and why. A description of the different stages is provided below.

Title and abstract stage: Context

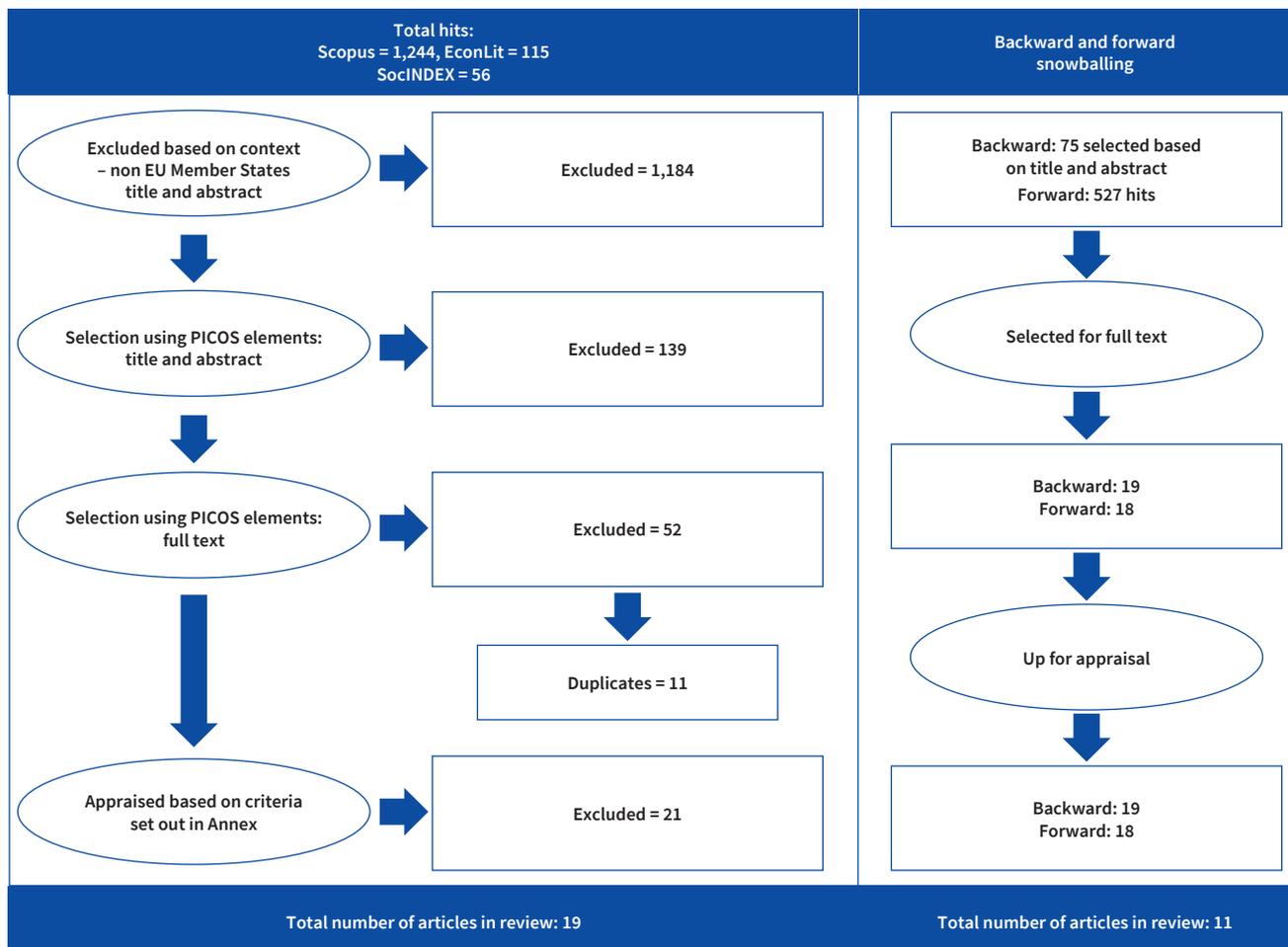
This stage deviates slightly from the strict path of a standard systematic review, which one should start by screening the literature by title and then move on to the abstract (Booth et al, 2012). To make the first substantial reduction in all the papers (especially because of the number of hits in Scopus), the first exclusion was based on one geographical area. In terms of the PICOS elements (Booth et al, 2012, p. 56), it is the ‘context’ that is excluded (the countries). Thus all the papers conducted in all non-

EU countries were refused based on title or abstract; if uncertainty remained, the decision was made based on the affiliation of the researcher(s) or on keywords such as Medicare or US veterans. Papers that only executed economic modelling without using any data from a specific context where also excluded.

Title and abstract stage: PICOS criteria

For the second stage, papers were excluded by matching them with the design (PICOS) criteria, looking solely at the title and abstract of the articles. PICOS was preferred over PICO (population, intervention, comparators and outcomes) because it was undesirable to include those articles that were clearly not empirical, for example, a descriptive analysis of policy reforms. In addition, articles that had an abstract in English but the body of the article was written in a different language were excluded at this stage.

Figure A1: PRISMA flow diagram



Notes: Percentages calculated over the total included in the previous stage.
 PICOS = Population, Intervention, Comparators, Outcomes and Study
Source: Authors' elaboration based on the descriptions given above.

Table A2: Exclusion criteria for the second phase

Population	The population is private hospitals, which could be non-profit, for-profit or public–private partnership (PPP) hospital. Papers that include private hospitals as a control variable are also considered to be eligible.
Intervention/exposure	Exposure refers to patients' exposure to the service delivery of private hospitals; an assessment should also be made on their delivery of healthcare. Privatisation is interpreted as an intervention.
Comparison	A comparison should be made with a public hospital(s) or national/regional average.
Outcome	At least one of the following elements should be covered: efficiency, quality of healthcare and accessibility. It is important to note that articles that include employment effects are not considered unless there is a direct link with efficiency, accessibility and quality of care.
Study design	The focus of this study is on empirical research, so no descriptive papers or economic modelling are included.

Source: Authors' elaboration based on the descriptions given above.

Full text stage: PICOS criteria

This stage is similar to the previous one. The only difference being that the full text of the article is utilised to determine whether the sources really fulfil the criteria outlined in Table A2. The majority of the papers were from France, Germany, Italy and the UK. At this stage, articles that based their research on datasets before 2000 were excluded for further review,³⁸ since more recent findings are more likely to be relevant for the contemporary context. Articles that were disputable were discussed between the two researchers and based on consensus they were either included or excluded for the appraisal stage.

Critical appraisal stage

In the appraisal stage, 40 articles were assessed using a standard format to appraise the quality of the studies, with 19 articles found to be suitable for the synthesis. The review follows realistic review rationale that a strict hierarchical approach (for example, the Maryland Scientific Methods Scale) is not suitable in this regard. The majority of articles were from France, Germany, Italy and the UK.

The criteria for exclusion in the appraisal stage were:

- clear signs of conflict of interest, for example, when the author was affiliated to one of the hospitals where the study was carried out;
- research designs considered to be (extremely) weak;
- evidence that uses robustness checks, such as a 'bootstrapping' procedure by data envelopment analysis (DEA), outlier detection and/or or included case-mix weights, are perceived to be high quality studies. For the efficiency measure, DEA should

include a two stage analysis; no comparison with public hospitals (articles that compared non-profit hospitals with for-profit hospitals were therefore considered ineligible);

- poor reporting on the dataset and methodology in so far that no critical appraisal was possible.

Snowballing stage + expert referral

A snowballing technique was carried out to include more relevant articles. Both forward snowballing³⁹ and backward snowballing⁴⁰ of the 19 articles selected in the systematic search were carried out. In addition, the literature selected in other systematic reviews covering the EU (Hollingsworth, 2003; Hanratty et al, 2007; Sibbel and Nagarajah, 2012; Tiemann et al, 2012; Torchia et al, 2013) were considered.

The snowballing methodology has been used previously – under Cochrane Review standards (Hayes et al, 2012) – and the technique has been assessed as a successful addition to a systematic review by Greenhalgh and Peacock (2005) as well as by advocates for realist reviews (Pawson et al, 2005).

The articles considered to be useful, based on the PICOS criteria, were appraised using the same process as the articles identified using the search string. A total of 10 articles were selected throughout this process.

After an expert workshop held in November 2015, a request was issued to refer relevant articles that might have been missed in the review process. Only one of the articles submitted was deemed suitable for inclusion (Pappa and Niakas, 2006), giving a total of 11 from processes other than the systematic search.

38 When longitudinal data were used, articles were excluded when the last wave was older than the year 1999.

39 Forward snowballing identifies articles that refer to the selected articles in the REA. This was done with Google Scholar since it includes a broad scope of articles from the different databases that cited the article.

40 Backward snowballing means that the articles referred to in the selected articles in the review are identified.

In the past 10 years there has been a substantial increase in the number of for-profit private hospitals, while the number of public hospitals decreases. This has been heightened by the recent economic and financial crisis where hospital closures have created new opportunities for private providers. What are the consequences of higher private sector involvement for the quality, accessibility and efficiency of services? This report examines the role and contribution of private provision of hospital services in the European Union. It maps the extent of private provision across Europe, examines the drivers for increased private provision, describes how it takes place, and presents the views of different stakeholders. The report also analyses the implications of private provision for the public sector and for the efficiency, accessibility and quality of the services delivered.

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is a tripartite European Union Agency, whose role is to provide knowledge in the area of social, employment and work-related policies. Eurofound was established in 1975 by Council Regulation (EEC) No. 1365/75, to contribute to the planning and design of better living and working conditions in Europe.