Study

Trends in European health care

How to create value in a dynamic environment

Roland Berger
Strategy Consultants

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Contents

Preface

Dear reader,

It seems that everybody is talking about health these days. Whether it is in private domains or in the industry: Health care is in all minds. A view on the figures explains, why: Health care is big business. In most European economies health care is the biggest industry sector. And this is just the beginning and offers new opportunities for growth for businesses and economies in general.

Roland Berger Strategy Consultants has been busy in the field of health care consulting for many years. So we know the major players and we know the recent trends. When we were discussing the idea of an European health care study within the health care team of Roland Berger we found it most useful to bring recent trends together and to show success stories across Europe.

We wish you an enjoyable time while reading this study and we welcome your thoughts and ideas in future discussions.

Roland Berger Strategy Consultants

Management summary

Health care has always been an issue of great significance. But never before has it been more important than today: With economies shifting from an industrial to a more service-orientated approach, this sector is allocated a very high percentage of Gross Domestic Product (GDP). Health care also has a huge impact on employment, due to the fact that most related activities are provided by people.

Yet the industry and its players are facing a multitude of obstacles. Macro-economic factors, such as aging populations or insufficient public funding, are challenging both payors and providers. Consequently, anyone wishing to succeed in this new market environment must redefine and adapt their business models accordingly. In this study, Roland Berger Strategy Consultants will discuss key trends, and point to possible solutions. We will provide you with a road-map which will help you and your company to develop and implement the necessary moves.

This study starts by presenting you with an overview of selected European health care systems, and explain their respective similarities and differences. One of the similarities is that most countries spend between 9 and 12% of their GDP on health care alone – and in those countries, this sector is growing considerably faster than GDP itself. Another similarity is that in most countries, public bodies still provide the biggest part of funding. However, the individual hospital structures differ greatly.

Among the key trends are:

- **Management Excellence:** Performance is no longer measured by cost indicators alone. Instead, companies should focus on balancing quality & cost.

- **From product to services:** By offering more integrated services, companies no longer function as pure product suppliers, thereby they should offer more value to their clients (patients).

- **Taking good care of yourself:** A growing part of the population is willing to pay for health care out of their own pockets. As a result, a "secondary health care market" is developing.

- **The rise of the specialist:** Increasing scientific knowledge makes the health care industry more and more complex. Specialization is needed to enable the right quality & cost balance.

- **Pay for Performance:** Since performance indicators on quality are becoming more and more available, health insurance companies have begun to issue both targets and financial incentives to their service and product providers.

- **From institution to brand:** In an effort to win over increasingly well-informed patients, health care players should develop a "brand" which allows them to distinguish themselves.

- **Going private:** The public deficit and costs are growing, provoking a trend towards privatization.

- **The new virtual value chain:** New providers are pushing into the market, and have entered into innovative forms of cooperation with the traditional players.

- **Moving beyond boundaries:** In search of better treatments or job opportunities, patients, health care workers and hospitals are becoming increasingly mobile.

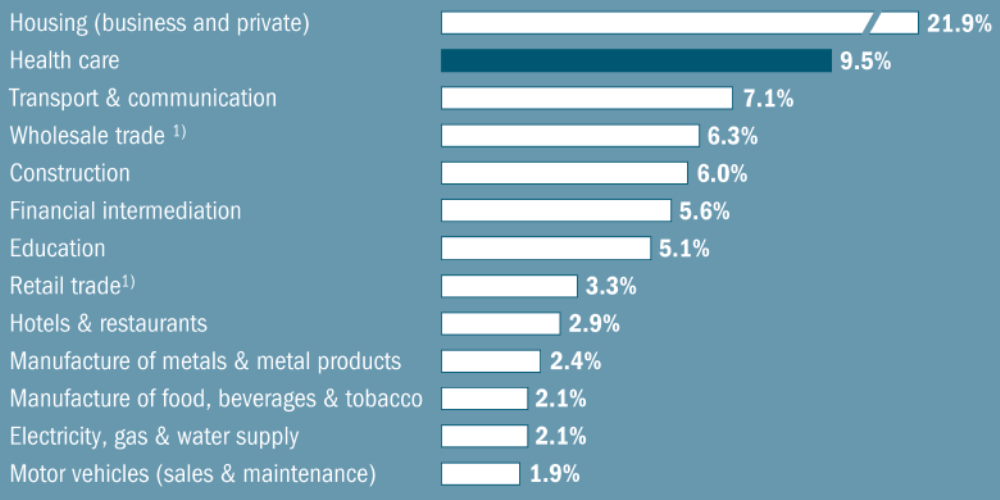
This study concludes by discussing the impact of these trends on Belgium, France, Germany, the Netherlands and Switzerland. We will point out relevant success stories of both providers and payors – and show you how Roland Berger can assist you in these challenging times.

1. Embracing the challenges

In any economy that has evolved from an industrial economy into a more service-oriented one, the health care sector is paramount.

As can be seen from figure 1, health care has a huge economic relevance and is allocated a higher percentage of Gross Domestic Product (GDP) than most other sectors, such as transport and communication, construction or education. Firstly, since most related activities are provided by people, health care has an enormous impact on employment. Moreover, an effective and efficient health care system is a fundamental "soft" location factor for competing economies. Hence, many stakeholders are eager to establish themselves in this field – payors such as governments and insurance companies, as well as general practitioners or hospitals, which function as providers.

Figure 1: **GDP by industry for EU 27 (2005)**



1) Excluding sales and maintenance of motor vehicles
Source: Euromonitor, Eurostat, Roland Berger

However, at the current time, providers and other players are facing a multitude of challenges. The following macro-economic factors are among the key determinants which will reshape the health care markets of the future:

Demographic change
Most industrial countries are facing substantial changes in their demographics, with a growing number and share of aged citizens within their population. Since the level of health care services claimed is proportionate to the age of an individual, overall demand and expenditure for the population as a whole can be expected to rise in the years to come.

Medical innovation
Due to changes in preferences and technical capabilities, advances in medicine are accelerating. Although generally, such developments reduce costs, there is evidence to suggest that the opposite is true in this particular case. Patients – who also function as voters and customers – exert pressure on both politicians and insurance companies to turn new medical innovations into standardized benefits, which in fact leads to additional expenditure.

Privatization
In the past, the public sector was the main provider of health care services, even in countries with a limited share of public activities, e.g. Great Britain. However, due to the decrease in the financial leeway, a growing number of public bodies are retreating from this sector, while private suppliers are moving into the market.

Focus on quality
With detailed information technology available, the quality of health care services has become measurable, accessible and transparent. In the future, Roland Berger expects an ever-increasing number of patients to consult rankings, when choosing the hospital which best fits their needs. More general practitioners will refer to quality and performance indicators when advising their patients, and insurance companies will focus on both the cost as well as the quality when selecting their service providers.

Insufficient public financing
It is unlikely that the existing pay-as-you-go system of public financing will be able to maintain the level of health care to which the public has grown accustomed. Thus, additional private sources of funding will be required to continue to be able to fund health care in future.

To sum up, the health care market is experiencing dramatic changes. Consequently, those players wishing to succeed must adapt their business models and redefine their value chains accordingly. Roland Berger has identified a number of trends within the industry, which we will present in detail on the following pages.

We also aim to provide a clear-cut route map for the required strategic approach within the Western European context. This study provides suggestions, points out key success factors and discusses innovative business models for Belgium, France, Germany, the Netherlands and Switzerland.

In order to provide our readers with an overview of the increasingly complex Western European health care sector, we will begin by discussing the individual national systems in chapter 2. The trends which are reshaping the industry will be described in more detail in chapter 3, whereas chapter 4 will highlight some of the implications which these trends will have for each of the countries observed. Chapter 5 will present examples of companies which have already successfully embraced the defining trends.

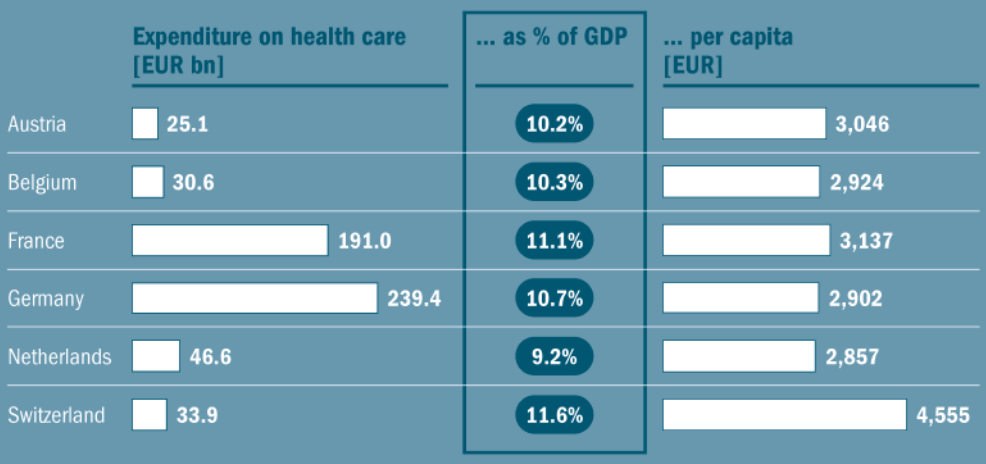
Taking into account the wide range of projects that Roland Berger has completed in the past, we will conclude this study by illustrating how the combination of our in-depth market knowledge and our consulting expertise can help your company maintain and enhance its position in this challenging environment.

2. At a glance: Selected European health care systems

2.1. The rapid growth of health care expenditure

As can be seen in figure 2, societies in Western Europe spend a substantial amount of their GDP on health care. From the countries we observed for this study, even the lowest ranking – the Netherlands – achieved a rate of 9.2%, which amounts to an annual spend of circa EUR 2,900 per capita. Switzerland has the highest expenditure, in both relative and absolute terms, with 11.6% and an average of more than EUR 4,500 a year.

Figure 2: **Expenditure on health care**[1)]

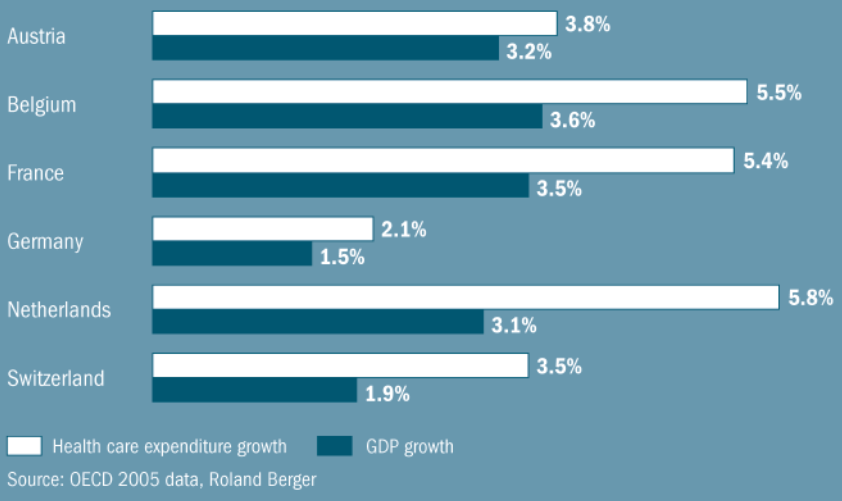


1) Excludes mental care and social care

Source: OECD 2005 data, Roland Berger

Furthermore, for all of the countries under discussion, the health care sector grew considerably faster than GDP between the years 2000 to 2005. In this context, it is especially noteworthy that the health care sector in both Belgium and France grew an impressive 1.9% faster than GDP. The difference in the Netherlands was as high as 2.7%.

Figure 3: **Health care expenditure growth compared to GDP growth [CAGR, 2000-2005]**

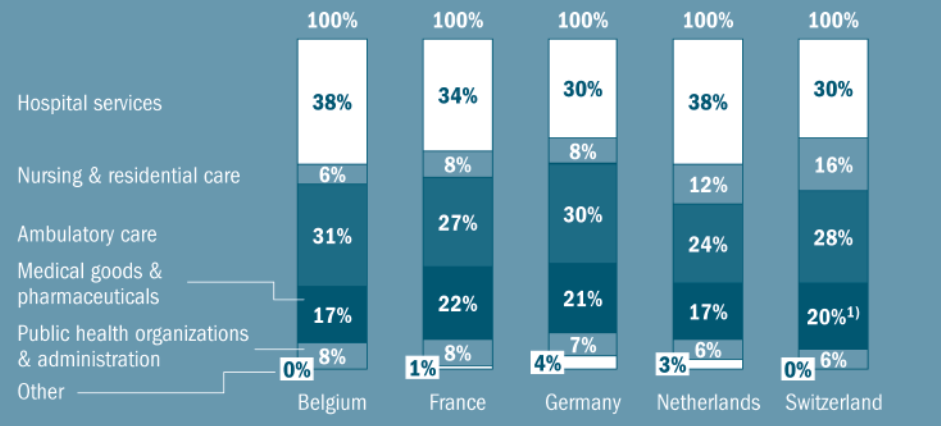


Source: OECD 2005 data, Roland Berger

However, although governments are cracking down on expenditure and growth in this sector tends to be slowing, expenditure is still impressive. Therefore it can prove insightful to analyze which segments these large amounts are being spent on.

As a rule of thumb, a third comprises of hospital services and another quarter of ambulatory care. Medical goods and pharmaceuticals amount to 20%, whereas 10% is directed towards nursing and residential care; public health organizations and administration receive 7%.

Figure 4: **Health care expenditure by segment [as % of total health care expenditure]**



1) Roland Berger estimate – Source data included Swiss figures on medical goods & pharmaceuticals in other categories

Source: OECD 2005 data, Roland Berger

Divergences can be observed in relative expenditure for nursing and residential care – a field in which the Netherlands and Switzerland demonstrate a significantly higher share of expenditure than other countries. These findings can be traced back to a number of reasons: For instance, that it is more common to move to a retirement home at a certain age in these countries.

Another difference can be seen in the ratio of how much is being spent on hospital services, relative to ambulatory care.

Figure 5: **Expenditure on hospital services as % of ambulatory care [%]**

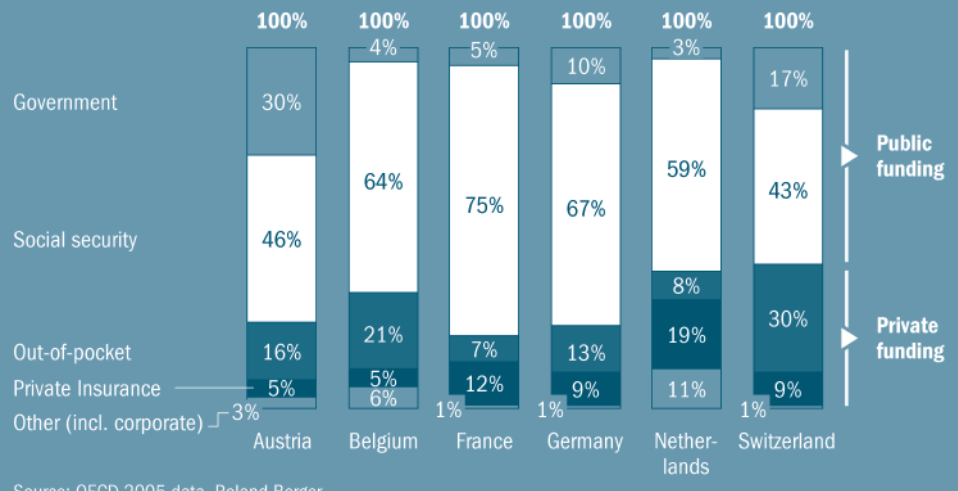
Source: OECD 2005 data, Roland Berger

The larger-than-average size of hospitals in the Netherlands (see chapter 2.3) means that a significant amount is spent on this area, whereas the Germans spend less than the average population in other countries. It should be noted that a proportionally high expenditure on hospital services – in relation to ambulatory care – indicates a greater focus on "generalization", as opposed to "customized services". This trend is expected to change in the future. However, another explanation for these findings could be that countries such as Germany or Switzerland demonstrate a higher degree of resident specialists, e.g. oncologists.

2.2. The importance of public funding

At a first glance, the segmentation of health care spending appears to be similar in all the countries we analyzed for this study. However, the funding actually differs greatly, due to the individual national systems. As shown in figure 6, public funding – paid for by social insurances or governments – varies between 60 and 80%, hence still representing the predominant means of funding.

Figure 6: **Funding of health care expenditure [as % of total health care expenditure]**



Source: OECD 2005 data, Roland Berger

A few remarks related to this figure can be made: For instance in 2006, the Dutch government abolished the difference between public and private health insurance. Every citizen has to take out compul-sory insurance. However, additional policies are available which reimburse the patient for a number of non-acute treatments.

The remarkably high percentage of "out-of-pocket payments" in Switzerland is a result of the national funding system: The Swiss have to cover a basic amount ("franchise") of their health care expenditure, and a certain per-centage thereafter. Furthermore, the Swiss can opt for a higher franchise threshold, thus increasing out-of-pocket payments – and reducing their insurance premiums.

However, looking at the years between 2000 and 2005, it appears that this picture is set to change in the future. The share of private funding remained stable only in France. In Belgium, Germany and the Netherlands, it in-creased, while the relative significance of private funding deteriorated in both Austria and Switzerland.

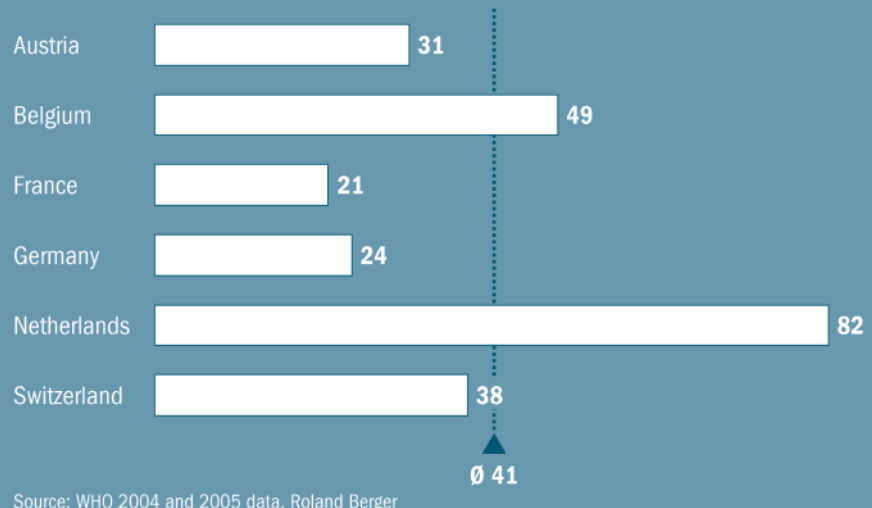
In Germany, the relative level of out-of-pocket payments lags behind that of Switzerland, Belgium and Austria. However, this form of funding can be expected to become more important in the near future, as innovative treatments and preventive measures are largely financed privately. Furthermore, as a recent study conducted by Roland Berger revealed, most people would be prepared to spend even more money on their health: According to our findings, the willingness to pay for such goods and services is currently higher than the volume of those available.

2.3. Small is beautiful – and effective

As we noted in chapter 2.1, hospitals amount for a third of total health care expenditure. Thus, it is worth while to analyze this segment in more depth.

Figure 7 shows the average number of patients per hospital, with the Dutch clearly leading the field. This indicates that hospitals are relatively large in the Netherlands, followed by Belgium. France and Germany on the other hand apparently operate relatively small hospitals.

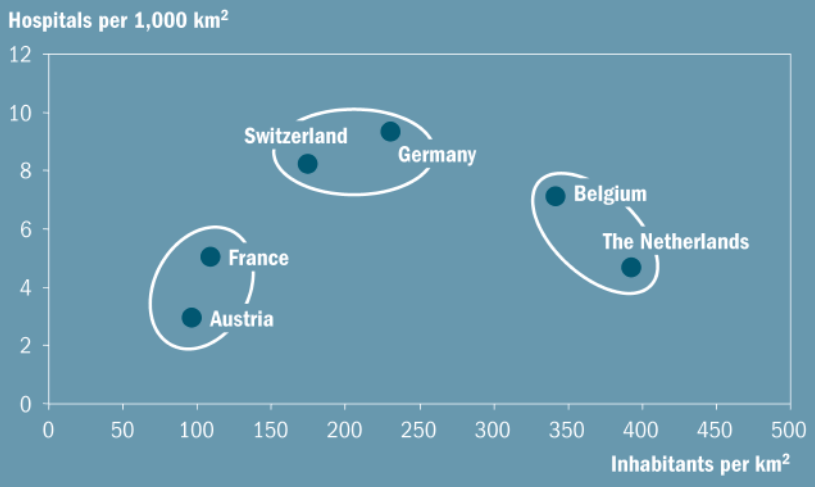
Figure 7: **Average number of inhabitants per hospital ['000]**



Source: WHO 2004 and 2005 data, Roland Berger

One would assume that the larger the hospital, the more services it can provide. Therefore, the rest of this chapter will analyze whether this theory applies, and whether large hospitals really benefit from the economies of scale.

Figure 8: **Hospital density compared to population density**

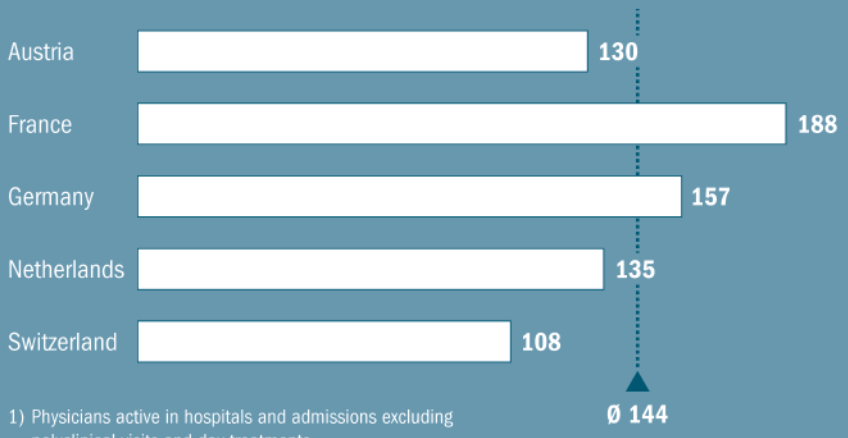


Source: WHO 2004 and 2005 data, Roland Berger

Figure 8 compares the density of hospitals per country to that of their population. Three groups can be distinguished: Belgium and the Netherlands are among those countries which operate the largest hospitals, while at the same time scoring a high population density. The second group consists of France and Austria, with both countries displaying a low population density and operating relatively small hospitals. However, Germany and Switzerland are the exception to the rule: Although the density of the population in these countries rates average, the hospitals are actually relatively small.

However, it should be noted that in a number of countries the hospital market is currently undergoing consolidation. Austria is a good example, with the number of institutions decreasing by 4% every year.

Figure 9: **Average admissions per physician**[1)]



1) Physicians active in hospitals and admissions excluding polyclinical visits and day treatments

Source: WHO 2004 and 2005 data, Roland Berger

One of the ways to measure a hopital's economies of scale, is the number of admissions per physician. It is astonishing that – despite having the smallest hospitals – France and Germany demonstrate the most admissions per physician. Surprisingly, the Netherlands, with its large hospitals, scores only below average. It seems, therefore, that small hospitals are actually performing better.

We observed this trend before, in our study "Steering the Right Course. Dutch hospitals 2006 – Key developments and trends". We believe that this can be explained by the fact that large hospitals employ more physicians, who offer a wide range of specialisms. This requires a higher level of coordination, which is resource-intensive. On the other hand, doctors in small hospitals have a stronger bond with their institution and its performance.

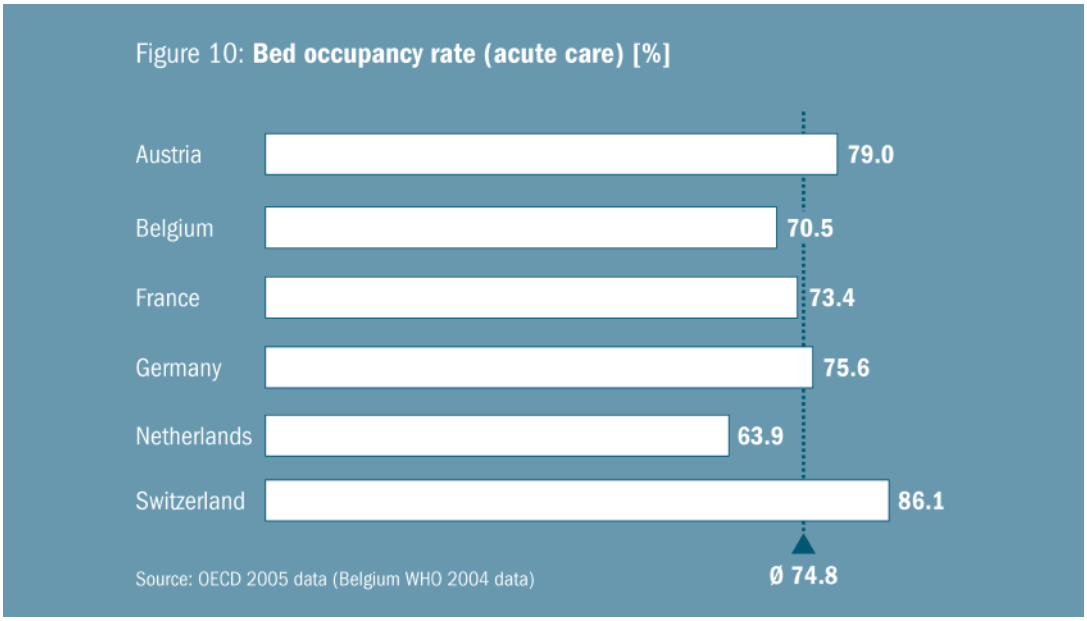
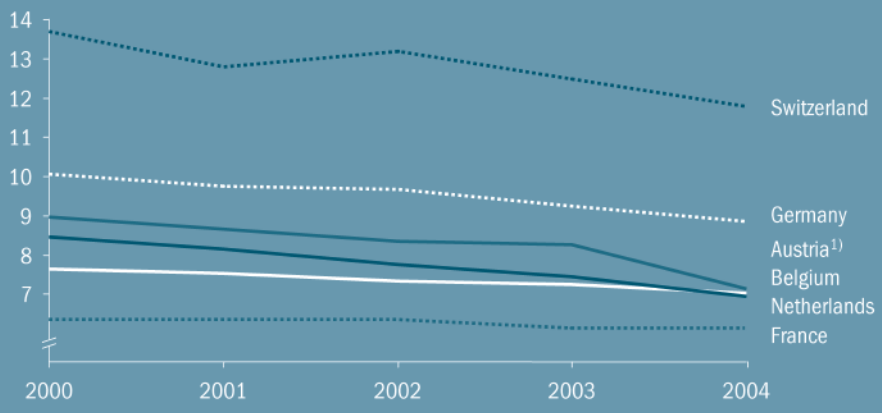


Figure 10 shows the average number of days on which any hospital bed was occupied. One would assume that the larger the hospital, the easier it would be to match the supply (i.e. the number of beds) to the demand. Yet again, this assumption cannot be verified by our data. With the Netherlands and Belgium scoring below average, it seems that large hospitals do not profit from the effect of scale. They need, therefore, to plan more carefully.

Switzerland managed the best occupancy rates. These figures can be explained by comparing the average length of stay in the different countries. The Swiss average of 11.8 days provokes some interesting conclusions: On the one hand, if patients stay longer, it is obviously easier to plan. On the other hand, perhaps patients are able to stay longer because the beds have been kept available for them, as the result of a national, case-based tariff which is independent of length of stay.

Figure 11: **Average length of stay (all causes) [days]**

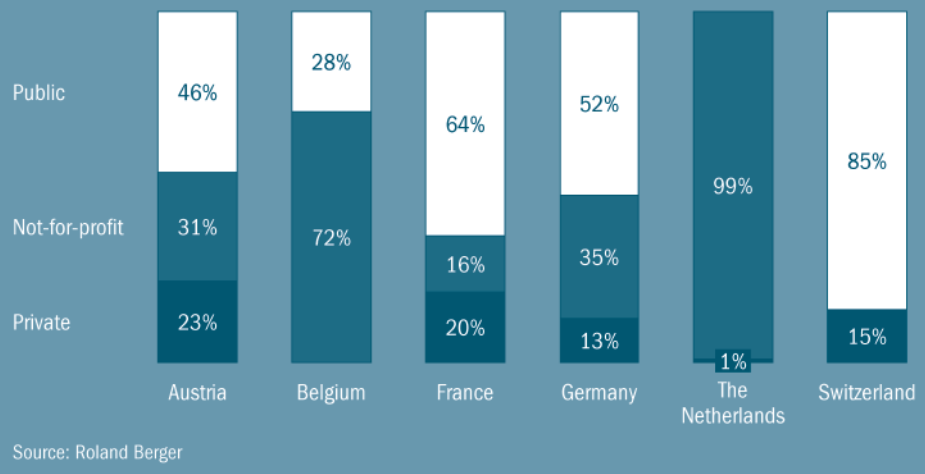


1) Break in data in 2003

Source: OECD 2000-2004 data

On a more general note, the average length of stay of patients is getting shorter in all countries: duration of treatments is being cut, or transformed into outpatient treatments. We believe that the combination of case-based tariffs, which are divorced from length of stay (e.g. the German Diagnosis Related Groups, DRGs or the Dutch Diagnosis Treatment Combination, DBCs) and innovations such as telecare will promote this trend even further. We anticipate that this development will eventually shorten the average length of stay in European hospitals, bringing it closer to the figures which can be observed in the United States or Australia today.

Figure 12: **Ownership structure of hospitals [% of market share]**



Source: Roland Berger

We will conclude this chapter by discussing the ownership structure of hospitals. Figure 12 shows the market shares which public, not-for-profit and private hospitals currently have. Once again, Belgium and the Netherlands show many similarities: The presence of not-for-profit hospitals in both countries can be explained by the fact that, in the past, church institutions provided hospital care.

However, the market is evolving quite drastically. Generally speaking, although private hospitals are currently in a minority, their share is increasing. For instance, in Germany, the private hospital sector has grown from 8.9% in 2002 to 12.5% in 2005, mainly at the expense of public hospitals.

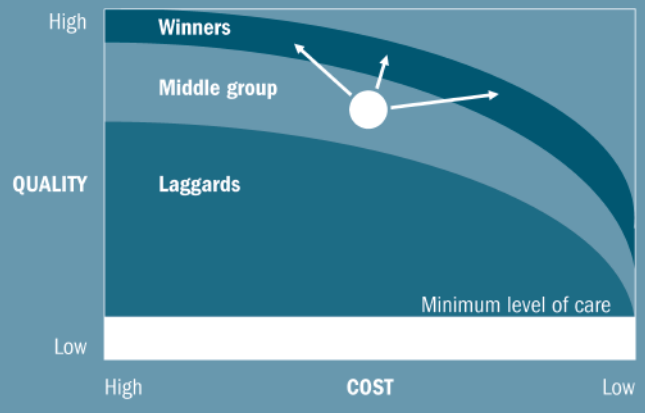
3. Understanding the forces

In order to fully comprehend the changes which the health care systems are experiencing, it is necessary to discuss the driving forces in more detail. In this chapter, we have outlined the most important trends which Roland Berger believes will reshape the sector as we know it and which will continue to challenge both traditional and emerging players in the nearer and more distant future.

3.1. Management Excellence

Whereas in the past, health care suppliers focused solely on quality, the KPI-set has now shifted towards balancing quality and cost (see figure 13). Companies can either increase quality and price levels, in order to fulfill the already existing customer demand, or reduce cost and their level of quality – and meet the demands of a different customer segment. Obviously, a minimum level of care should always be guaranteed.

Figure 13: **Positioning of health care suppliers (balancing quality and cost)**



Choices to be made

QUALITY
> Supply of care
> Accessibility (e.g. locations)
> Service levels

COST
> Cost of treatments/services/ products
> Cost of additional services

Source: Roland Berger

As illustrated in the figure above by the white dot: As long as companies are not positioned on the frontier, they are able to optimize on both quality and cost. Management excellence should therefore aim to move health care players towards the frontier, thus creating winners. It should, however, be noted that since innovation may shift the frontier, even winning companies should invest in further improvement.

The Dutch cure and care provider Orbis has demonstrated such management excellence: In cooperation with various insurance companies it offers patients who are in need of knee- and hip surgery a premium program. Patients can stay in a three- or five-star hotel, and be accompanied by a family member or friend acting as a personal coach. Not only is the treatment (including rehabilitation) shortened to one week, but it is also more agreeable for the patient. Whereas the insurance company covers the costs for the three-star hotel, the patient is required to pay an extra cost for the five-star hotel. This model is a prime case study for correctly anticipating existing patient demand, daring to choose higher quality and finding the right partnerships. Success proves Orbis right: They are currently expanding their product range in this segment.

3.2. From product to services

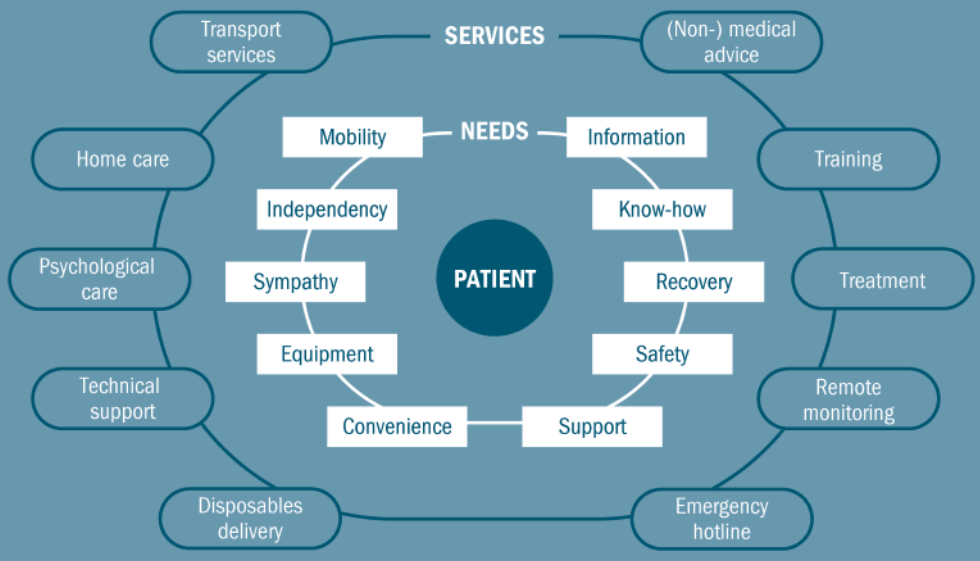
In the recent past, suppliers of traditional health care products have begun to offer services which address the needs of patients within a specific therapeutic area. Furthermore, companies are focusing more on creating integrated systems.

For instance, B. Braun, one of the world's leading suppliers of health care products, wants to "develop an integrated model of care that extends far beyond the supply of products". Hence, Braun's TransCare is a service which accompanies patients on their transition from stationary to ambulatory treatment, thus enabling the company to benefit from the trend towards shorter hospital stays.

Baxter, a leading manufacturer of products for peritoneal dialysis – a home therapy for people with end-stage renal disease – also offers a set of complementary services. Not only does it provide training to patients and care providers, the company also home-delivers its products and offers helplines. The health care provider Fresenius has vertically integrated into this market segment, by acquiring several service providers. We will discuss this success story in more depth in Chapter 5.

Roland Berger believes that by offering services linked to the product portfolio of a certain therapeutic area, health care product suppliers can reach more customers and achieve top line growth. Beyond seizing new business opportunities, service delivery implies direct and intimate contact with customers, allowing continuous observation and adaptation of their ever-changing needs.

Figure 14: **Providing services for the patient's needs**



Source: Roland Berger

3.3. Taking good care of yourself

In recent years, health has become a topic of growing significance across the population, regardless of age or income. Health is developing into more of an integral part in all aspects of our lives: probiotic yogurt, non-irritable clothing or health care tourism have been added to the traditional extras, such as homeopathy or voluntary preventive medical checkups.

Yet the question remains: Who should pay for all those services? For insurance companies, prevention costs increase expenditure and lead to higher contributions from payors.

Therefore, a new health care market is called for, a "secondary health care market", as opposed to the primary market of statutory health insurance. In Germany, the secondary health care market has already achieved an annual volume of EUR 60 billion – or 2.5% of the German GDP – and demonstrated continual annual growth of 6% since the year 2000. At the present time, every German adult spends approximately EUR 900 a year on medical checkups, alternative medicine, wellness, sports and health food.

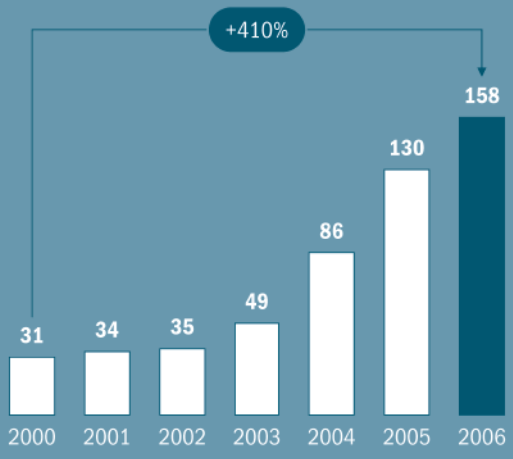
The secondary health care market offers very interesting business opportunities, even for the traditional players. For instance, several hospitals have opened specialized units for preventative diagnostics and alternative medicine – products not covered by statutory or private health insurance, and paid for out of people's own pockets. A recent study by Roland Berger demonstrated that people are willing to spend even more money on their health: According to our survey, patients and non-patients would be willing to raise their private health care spending by up to 25%, if their demand were met by the right products and offerings.

3.4. The rise of the specialist

With a growing amount of scientific knowledge on health issues available, the industry is becoming more complex – and the generalist approach of the past is evolving into a more specialized one. For instance, whereas in the past, general medicines covered several diseases, each specific illness now requires its own treatment. In addition, pharmaceutical companies are focusing their research and expanding their product portfolio by acquiring licenses.

One example is the Dutch ZBC, an independent treatment center. A ZBC is specialized in standard procedures, yet independent from hospitals. In order to compete, the centers must therefore offer higher quality or lower cost. The ZBCs have proven to be a success: Although – unlike common hospitals – the centers have to cover their real estate expenses, they have succeeded in offering their standardized treatments at prices which are 22% lower.

Figure 15: **Number of licenses for independent treatment centers (ZBC) in the Netherlands**[1)]



Characteristics of ZBCs

QUALITATIVE
> ZBCs are independent treatment centers
> They provide standard treatments, which are funded by basic insurance, e.g. varicose veins or cataract
> ZBCs can also provide uninsured cure
> Cure is not urgent
> Patients usually spend less than 24 hours in the ZBC

QUANTITATIVE
> Total market share is less than 1%
> Cost of ZBCs are 22% below normal hospitals
> In the Netherlands, there are 95 hospitals (academic, general and top clinic)

The number of licenses is an indication for the number of ZBCs in the Netherlands. In 2006, 96 ZBCs were active

Source: NZa

The Rotterdam eye hospital, which performs 11,500 operations per year, is another successful example of a specialized independent hospital. It was cited as an example of best practice by the Dutch Ministry of Health, Welfare and Sport for implementing efficient innovations from other industries, such as planning systems from the airline industry.

Paradoxically, the trend for specialization drives – at least for the short-term – an oversupply in certain areas. Roland Berger expects this development to normalize in the years to come, until supply and demand are in balance.

3.5. Pay for Performance

Is "Pay For Performance" (P4P) simply a new buzzword – or is it a trend that suppliers in the health care business should be taking very seriously?

To begin with, P4P-programs were driven mainly by British and American health insurance companies.

In a move away from the traditional form of service payments, they began issuing contracts and financial incentives to their providers, defining targets and criteria, such as:

> clinical quality or efficiency
> patient satisfaction (e.g. measured in the number of references given to friends)
> administrative excellence (e.g. IT support)
> cost management (e.g. the number of emergency treatments per patient)

National Health Systems soon followed suit: In April 2004, the British NHS introduced their "Quality and Outcomes Framework" (QOF), which used a total of 146 indicators to judge a general practitioner's performance. More recently, in Germany, if a patient has to return to hospital because the quality of the first round of treatment was deficient, the national health insurance company will only cover the lump sum for the initial procedure.

So far, the experiences in Great Britain and the US have been positive. Taking into account the increasing number of direct contracts between hospitals, insurance companies and other players of the health care industry, Roland Berger believes that P4P-elements will become a more important part of health care reforms in the future.

3.6. From institution to brand

In the past, health issues were dealt with in a very clear-cut way: If you fell sick, you headed for the nearest hospital. Period.

Nowadays, with a wide field of information technology available, health care providers are dealing with increasingly well-informed patients. Therefore, this sector is being confronted with a challenge which the pharmaceutical and the medical devices industry have already grown accustomed to: Hospitals are being forced to position themselves among their competitors, and develop a "brand image".

One of the earliest initiatives in this field came from the private German clinic chain "Asklepios", which started to design its brand image as early as 1984. Inspired by its symbol – the bar of Aesculap, which in the Greek mythology is linked to the God of Medicine –, the brand is built around humanity (patients and employees), medicine (innovation and prevention) and responsibility (ecology and integrity). Another example is the Charité Universitätsmedizin Berlin, which evolved from the merger of the "old"

Charité and the University Hospital Benjamin Franklin. In Germany and beyond, "Charité" is now a well-known brand name, and it is associated with medical innovation, experience and tradition.

While building a corresponding image, management needs a clear-cut understanding of what the brand consists of. It is crucial that executives ask themselves: Are we aiming at local residents and/or foreign nationalities? Do we provide premium or standard services? Furthermore, it is essential to define what the product mix consists of: The possibilities range from elective to non-elective, and from full service to focus on a single area of treatment.

In order to make branding effective, the chosen marketing mix needs to be consistent with the expectations and potentials of the target consumers. Despite the detailed information available to them, the majority of patients are still unable to correctly assess the perceived or expected quality of their medical treatment. This underlines the importance of a strong brand: Hospitals can make their mark in terms of perceived quality, the number of patients treated and financial aspects, such as the cost of the treatment.

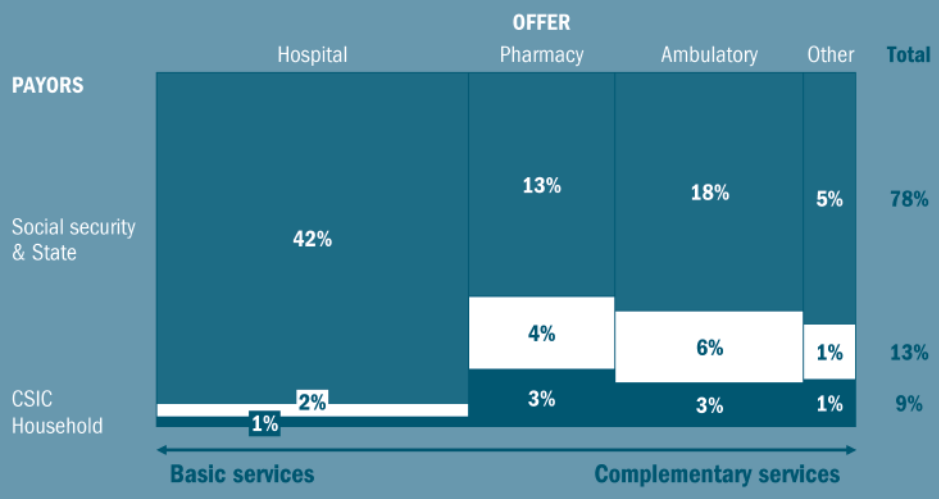
3.7. Going private

In these days of public deficit containment and rising costs, the funding of health care is becoming more challenging. This has prompted a trend towards privatization, among both payors and providers.

Whereas the expenditure for health care in the individual National Health Systems (NHS) is driven dramatically by the cost of innovation, funding is essentially based upon the contribution from both employers and employees (i.e. through tax), which is growing at a slower pace than the cost of health care. Therefore, with the NHS cutting back their reimbursement, alternative means of funding – through individual or collective insurance contracts – has become crucial.

France is a prime example of this development. As can be seen in figure 16, the French State and Social Security System continue to be the main payors in the national health system. Since the 1990s, their contribution has remained at a constant level of circa 78%. Furthermore, they still insure those fields of the health care system which carry the highest risk, which account for 93% of hospital expenditure.

Figure 16: **French health care expenditure and funding**



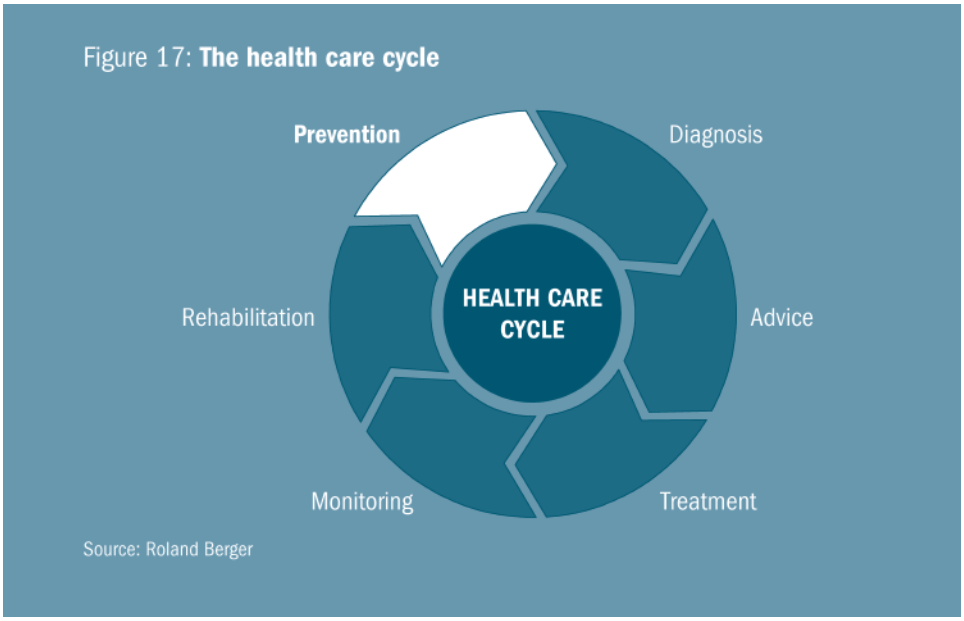
Source: DREES, Comptes nationaux de la santé, Roland Berger

Nevertheless, Complementary Sickness Insurance Companies (CSIC), which can be either private insurers or not-for-profit collective organizations, focus on the less risky sectors of the health care system, such as ambulatory care and pharmacy, "comfort care" or non-urgent care. Although their total share in the market remained stable over the past years, the CSIC are benefiting from growing margins, underlining rising premiums paid by their customers.

Consequently, not only are more private payors emerging, but they are also offering new products. These range from traditional insurance contracts to new forms of health care funding, including consumer credit dedicated to health care (SwissLife), which can be viewed as a French adaption of the American Healthcare Saving Accounts (HSA).

Private providers on the other hand have been experiencing higher growth than public hospitals. This development is fueled by the fact that these have already experienced stronger constraints by the NHS on their funding. Combined with a trend towards consolidation within the industry, this has forced private hospitals to optimize costs, increase their level of activity, as well as their marketing efforts. In 2006, while the public hospitals in France accounted for the majority of the cost of stationary care, private hospitals performed better in terms of turnover growth, profitability, quality of positioning and services.

3.8. The new virtual value chain



Due to amounting cost pressure, hospitals across Europe have already outsourced many of their non-core activities, such as catering, sterilization and laboratory services, to specialist providers. In the recent past, this trend has further spread to their core-activities. For instance, due to long waiting lists, the National Health Service (NHS) in Great Britain outsourced 240,000 surgical procedures to privately owned hospitals in 2006. In 2007, this figure is expected to reach 390,000, representing about 5% of the NHS' total procedures.

If you consider the health care value chain to be a cycle, here are some examples for new providers, who are cooperating with traditional health care providers.

Diagnosis and advice
Teleconsultation call centers hand out advice and refer patients, e.g. to the specialist or to the emergency unit. In some countries, the call centers are even allowed to formulate a diagnosis and to prescribe drugs. The trend towards web-based self-diagnosis and a growing range of drugs with Over-The-Counter status will result in further growth of the self-care sector.

Treatment
In the United States, specialized companies such as Nighthawk provide radiology services to hospitals, clinics and imaging centers: a trend which Roland Berger expects to be copied in Europe in the very near future.

Monitoring
Emerging telemedicine solutions which allow the continuous monitoring of both patients and non-patients will contribute to the disintegration of the traditional value chain.

Rehabilitation
Given the trend to shorter hospital stays, an increasing number of surgical procedures are performed in ambulatory centers, triggering strong growth of the home care services market in many European countries.

3.9. Moving beyond boundaries

Traditionally, pharmaceutical and medtech companies have operated internationally. Recently, other stakeholders, such as patients, health care workers, hospitals and centers, have followed their example – and moved beyond boundaries.

For one, **patients** are seeking more medical treatment outside their home country. According to Treatment Abroad, a website promoting medical tourism, up to 50,000 medical tourists traveled from the United Kingdom to India, Hungary, Turkey and other countries in 2006, with their major motive being a better cost-benefit ratio. However, other important reasons include specialist expertise, different methods, legal framework, long waiting lists or potentially lethal hospital infections in their home country. Medical tourism is by no means a one-way story: European hospitals are attracting wealthy foreign patients, for instance from Russia and Arab countries.

Additionally, **health care workers** are moving abroad for better job opportunities. While more than 12,000 German doctors are now working in the US, Great Britain, Switzerland and Scandinavia, more than 1,000 Polish medical doctors are registered in neighboring Germany. Furthermore, doctors from abroad migrate to European countries, seeking both a better salary as well as improved working and living conditions.

Not only are the individual doctors moving abroad: The French **hospital chain** Générale de Santé has announced that by 2011, it wants to become a market leader in three quarters of all EU countries. The Swedish health care group Capio operates hospitals in eight European countries, whilst the German Asklepios group maintains four centers in the US.

Figure 18: **International movements in the health care sector**

"Medical tourists" seek best quality/ price relation	> Hungary for dentistry > Thailand for cosmetic surgery > Switzerland for orthopedics > Belgium, South Africa, and others for infertility
Health care workers migrate for better jobs	> Polish doctors to Germany > German doctors to Switzerland > African doctors to UK > Philippine nurses to the US
Health care providers operate internationally	> French chain Générale de Santé with ambitions in entire Europe > Swedish health care group Capio with operations in 8 European countries > German Asklepios in United States

Source: Press research, Roland Berger

European governments support this trend: The German Department of Education has started a "Health Care Export" project to develop standards for international health care service design and marketing. In 2006, the European Court of Justice ruled that patients who have to wait for treatment in their home country were allowed to seek help abroad. The European Commission intends to facilitate free choice of physicians and hospitals across the European Union and is currently preparing corresponding proposals.

4. Different countries, different challenges

Although the countries which Roland Berger observed for this study are all witnessing similar developments, unfortunately, there is no one-size-fits-all solution. Quite the contrary: Due to the structure of a certain health care system, or even because of seemingly unrelated factors such as a nation's history or culture, the reactions vary – and sometimes quite drastically.

On the following pages, you will find a brief overview over the individual countries. Please note that for obvious reasons, this study can only present a short summary. However, our experienced consultants in the respective countries would be happy to provide a more detailed insight.

Belgium

Encouraging creativity

In order to increase their service, Belgian hospitals are developing innovative ideas. For instance, the rooms of the Sint-Augustinus Maternity Unit resemble those of a hotel, while other hospitals offer manager check-ups, which – for a fixed fee – allow busy professionals to receive a complete check-up and to speak to two specialist doctors of their choice.

Changing the system

Payment in Belgium is mainly fee-for-service. However, the beginnings of P4P can be observed. Such programs are mainly related to the treatment of diabetes or chronic heart failure, which focus on improving quality and longer-term outcome. Another important aspect is patient safety, which includes progress on the issue of infections which can be acquired during treatment, as well as improving the quality of medicine. Additionally, if a patient has to "overstay" the national average, the hospital is not reimbursed for the additional days.

Cultivating relationships

In Belgium, for-profit hospitals cannot participate in the compulsory insurance program, which means that patients are discouraged from seeking treatment there. Although hospitals are allowed to generate profit, it has to be reinvested within the institution. It cannot, therefore, be paid out to "shareholders". Thus, care is provided by either a private non-profit organization or public hospitals.

However, since the patient and the referring physician are free to choose, hospitals invest heavily in their relationships with the general practitioners. Furthermore, the public university and city hospitals have been granted an autonomous structure in the last few years: These organizations are therefore no longer run by local governments, but by an independent management. Therefore they are free to compete for the custom of general practitioners and patients.

Reaping the benefits

Hospitals seeking to create a "win-win" situation for themselves are concentrating on the important construct of networking. On a horizontal level, this enables the institutions to better deal with capacity problems, and they gain negotiating power over suppliers and can invest in common interests, such as IT. However, on a vertical level, the efforts to create virtual value chains are at an early stage in Belgium – and so far, only intentions have been expressed. The manufacturers seem to be the most reluctant in this process: They obviously fear that they could be taken over by other service providers, e.g. from the logistics or warehousing sector, in which case they run the risk of losing direct access to their customers.

Seeking opportunities abroad

Belgium is currently dealing with the emigration of their medical staff. Doctors go to the Netherlands because they can expect higher salaries and more agreeable working hours. Well-educated nurses seek employment in Switzerland, the Netherlands, Austria and Germany.

France

Containing the cost

For years, the French authorities have desperately tried to contain the soaring public health care deficit. Over the course of the past 25 years, the expenditure has grown with a rate which exceeded that of GDP by 1.9 points. In 2004, a set of drastic reforms had to be implemented, which temporarily reduced the deficit by EUR 6 billion in 2006.

However, more work is required: On average, every French citizen costs the national health system EUR 2,500 a year, out of which EUR 1,500 are devoted to stationary care. By 2015, the NHS spending in France is expected to top EUR 210 billion, which would mean an additional EUR 70 billion, compared to 2006.

Preventing chronic diseases

As in a number of other industrial countries, two trends can be observed in France: Firstly, the population enjoys a higher life expectancy. Secondly, the number of overweight or obese people is on the rise.

In combination, these two factors can be expected to trigger a growing number of chronic diseases, which would lead to an increase in NHS patients suffering long-term affections. As a pro-active measure, prevention and medical screenings should be promoted, and support programs for chronic diseases developed.

Improving efficiency

The overall efficiency of the French health care system needs to be improved – i.e. the expenditure needs to be reduced without limiting the level of quality. For instance, one approach could be to improve the matching of patients needs with the existing health care supply.

Promoting alternative funding

The French population needs to be made more aware of the expenditure the national health system is facing. For instance, authorities should not shy away from shifting the funding towards the most critical needs. This would raise the patients' awareness, and provoke accountability for the growing burden.

Among the possible options would be to establish co-payments or offer cheaper, generic products. Additionally, as employers and employees will probably need to increase their share in the financing of the system, alternative payors, such as insurance companies, should be called upon to finance "non-urgent" health care and possibly contribute to funding some of the critical health care.

Germany

Public funding in Germany is limited, and as a result, an increasing number of market-driven elements have been introduced, which has lead to a more intense involvement of private players and their business models.

Improving the value chain

The German health care providers – such as acute care hospitals or rehabilitation clinics – have been forced to review their value chains. This had led then to form partnerships with players who focus solely on business and the cost-benefit ratio. Examples include the management of operating rooms by external partners or the co-operation with facility management specialists. This structure proves advantageous in a multitude of ways: The traditional players can offer complex services instead of just individual products (see the example of B. Braun in chapter 3.2), and – due to longer-term contracts – continue to participate economically. In addition, these "integrated care networks" enhance efficiency and quality. If a patient has to change their provider, he or she can be offered a cost-efficient alternative with a comparable standard of quality.

Building a secondary health care market

The amount the Germans are willing to spend on private health care has soared in the recent past. Since preventative measures are only partly covered by the health insurance schemes, this provides dynamic business opportunities for both established and new players.

Adapting private sector management methods

Almost half of the beds in German acute care hospitals are still owned by the respective federal state. Although this traditional structure frees the owners from any responsibility for the economic situation, it is not expected to change soon: The privatization trend of the recent years has ground to a halt, in part because of the requirements placed upon private companies by the Antitrust Agency. However, tight federal budgets have not been able to finance all mandatory investments. Thus, Public Private Partnership (PPP) or bank-financed models have grown very popular. Although these schemes require higher interest rates, the costs can be off-set against an improved infrastructure and an optimized medical process.

Marketing and Branding

In order to attract potential patients and clients more easily, German health care providers are discovering the value of building a brand. A prime example for a successful implementation is the German Charité hospital, which we will discuss in more detail in chapter 5. Private hospital chains have already undergone great efforts, and public and not-for-profit players are now following suit.

The Netherlands

Finding the right balance between quality and cost

In an effort to reform the funding of hospital care, the Dutch government has recently begun to implement new laws. Gradually, the budget system will be replaced by a model in which a share of the hospital's revenues (the so-called "B-segment") will be generated by price negotiations with the insurance companies. The other contribution will be established on the basis of a benchmarking exercise among all Dutch hospitals.

In 2005, the B-segment contributed 10% of all hospital funding. Amongst other factors, both the insurance companies and the hospitals can cite quality aspects in their negotiations. For instance, a hospital may ask for higher prices, if their patients do not need to return to the hospital after their treatment. On the other hand, insurance companies may wish to deal only with hospitals who can deliver satisfying quality. The B-segment experienced a very significant growth in 2006, and is expected to reach a share of 20% by the year 2008. More details on this development can be found in Roland Berger's study "Exploring New Territories. Dutch Hospitals 2007 – Key developments and trends".

The main focus of the benchmarking exercise will be expenditure. Since their budget will be capped if they underperform, hospitals will be forced to become more efficient.

Shifting from stationary to ambulatory cure

As mentioned previously in chapter 3, hospitals in the Netherlands are relatively large. Therefore, due to the trend towards specialization and privatization, Roland Berger predicts an increasing fragmentation of the market, i.e. through ZBCs. Moreover, patients prefer a more personalized treatment, and since ambulatory care can provide this (e.g. homecare), we believe that stationary care and cure will be increasingly replaced.

Making a mark through prevention and service

In 2005, a new insurance system was implemented in the Netherlands. Since then, every citizen has to choose a private health insurance company. However, since they are given the opportunity annually to change to a competitor, the insurance companies are forced to campaign, in order to retain and gain new policy holders.

Since the products and their cost are similar among all companies, they try to make a mark for themselves by providing unique services. For instance, they lay focus on prevention and create awareness of the possibility of diseases, e.g. obesity. In chapter 6, we will discuss this issue in more depth, for example by describing how the Dutch insurance company Achmea stands out by offering teleservices to chronic patients.

Switzerland

Personalizing health care

In terms of voluntary medical check-ups and personalized medicine, Switzerland is trying to catch up: Private institutions, such as the Hirslanden group, offer employee check-ups to individuals and corporations, which are typically paid for out of the patient's own pocket. The start-up Avalis offers technology which enables chronically ill patients and their care providers to manage the disease more independently. The company wants to become the leading supplier in this field, their first significant client is the German insurance company DKV.

Reforming the compensation system

In a first national step towards P4P, a lump-sum compensation system will be implemented in Swiss hospitals as of 2009. Patients will be classified into Diagnosis Related Groups (DRG), which defines the amount of compensation the health care providers are entitled to. This performance-based tariff structure for stationary hospital stays is expected to start in 2010.

Keeping it public

At this moment in time, 40% of all Swiss hospitals are in private hands, and they account for a market share of approximately 15%. As opposed to other countries, this situation is not expected to change within the near future, due to the stagnation of elective private insurance holders. Moreover, the cantons continue to maintain a large part of the publicly owned health care institutions. They are supported by the bulk of the Swiss population which has forced out a number of overly aggressive capacity pruning and privatization attempts.

Promoting cost-saving innovations

In 2006, a Roland Berger study on procurement in hospitals revealed that certain medical products in Switzerland are 40% more expensive than in Germany. This indicates a massive saving potential, which is provoking new business models. 4.3 million insurants have access to the free-of-charge teleconsultation of Medi24 and Medgate, two major Swiss medical call centers. According to Medgate, half of the patients treated by phone no longer need to consult a physician. This reduces health care expenditure by 21%.

Paving the road for international health care

Due to the high quality of the health care, and the good coverage by the insurance companies, not many Swiss feel the need to travel abroad for medical treatment. However, certain treatments which are not fully covered in the basic insurance plan – e.g. dentistry – can provoke such movements. The Swiss health care minister is currently reviewing a law which prohibits insurance companies from paying for treatments abroad which are covered in the basic insurance plan. However, the trend works both ways: Foreign patients who seek medical treatment in Switzerland generate annual revenues of more than CHF 1 billion – almost 2% of Swiss health care expenditure. In August 2007, the South African Medi-Clinic was the first foreign hospital group to enter the Swiss market, by acquiring the largest private hospital group Hirslanden for CHF 2.8 billion from the private equity firm BC Partners.

5. Success stories across Europe

Although the health care market is facing some challenging times, there are companies who have already adapted to the new drivers. Providers such as Charité or Fresenius Medical Care have established themselves as a brand, or have completed the transition from offering products to offering services. Payors, such as Axa Santé or Santéclair on the other hand, have taken some measures to contain cost, while at the same time guaranteeing the quality of their service. Last but not least, Philips & Achmea are a prime example for an innovative form of cooperation between a provider and a payor.

5.1. Charité

In many European countries, hospitals are obliged to publish data on the quality of their medical care, using standardized criteria. While this measure is intended to enable patients to find the hospital which best fits their needs, the majority actually requires further support and guidance.

This opens up the possibility for hospitals to establish themselves as a brand, promoting values such as quality, innovation and state-of-the-art medicine. One of the first European health care institutions to act upon this realization was "Charité Universitätsmedizin Berlin", based in the German capital.

Founded in the year 1710, Charité looks back on a long tradition in health care, medical research and teaching. Home to well-known names like Robert Koch or Christoph Hufeland, Charité has close connections to fourteen winners of the Nobel Prize. After the merger of the "old" Charité in Eastern Berlin with the university hospital in West Berlin, a new logo was created: Realizing that a strong brand is the prerequisite of attracting and retaining patients, the hospital – coming up to its 300-year-anniversary in 2010 – has undertaken great efforts to strengthen its name. For instance, the public relations department was enlarged and a Charité foundation was established. Today, the brand "Charité" is known throughout Germany and abroad, which enables the hospital to position itself in an increasingly competitive health care market.

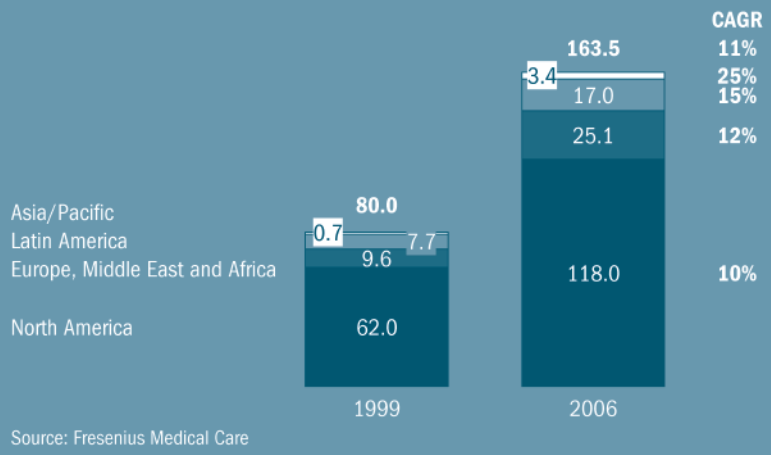
5.2. Fresenius Medical Care

Fresenius Medical Care (FMC) is the world's largest integrated provider of products and services for patients suffering from chronic kidney failure. It is a prime example for a successful transition from offering products to establishing itself as a service provider.

Today, FMC operates more than 2100 clinics in North America, Europe, Asia, Latin America and Africa, which serve a total of 163 500 patients and markets a wide range of products in more than 100 countries. Fresenius, the current parent of FMC, was founded as a pharmaceutical company in 1912. In 1966, FMC was created and began distributing devices needed for dialysis and launched its own products eight years later. Following the merger with National Medical Care in 1996, FMC moved from being a pure product supplier to the leading dialysis service provider.

FMC's success can be tracked down to a number of key factors: For one, the company established a **global footprint** very early on. As soon as 1996, the majority of patients were served outside Europe. By 2006, FMC had strengthened its position around the world, and achieved strong growth in all regions.

Figure 19: **Number of patients at Fresenius Medical Care ['000]**



Source: Fresenius Medical Care

FMC also pursued a number of **mergers & acquisitions**, which not only pushed the vertical integration, but was also key in achieving strong growth and market leadership. In 2006, the company generated USD 8.5 billion (EUR 11.1), resulting in a compound annual growth rate of 11% since 1996. FMC is aiming at generating revenues of USD 11.5 billion (EUR 15.0) by 2010, and increasing its market share from currently 15% to 18% in the same period of time.

Although products contribute to only 25% of total sales, FMC focuses on the **research & development of new technologies**. "We can beat the market only if our engineers, biologists and technical specialists thoroughly understand what improvements patients and doctors wish for", says Dr. Ben Lipps, the CEO of Fresenius Medical Care. Thus, the company has already begun to expand its portfolio by offering renal drugs. And since 10% of all dialysis patients perform their treatment at home, FMC wants to strengthen its position among home care systems.

5.3. Complementary Sickness Insurance Companies (CSIC)

Complementary Sickness Insurance Companies (CSIC) – which can be either private insurance companies or not-for-profit collective organizations – have been faced with two major challenges: containing their expenditure, while at the same time further enhancing the quality of their service.

In order to **contain the level of costs**, the CSIC simultaneously had to nudge their customers into making less expensive choices and encourage them to improve their own health. Among the best practices to achieve this goal is the promotion of preventative health care. As an example, insurance companies can establish 24/7 call centers, or publish focused media. The customers of the French insurer Prévadiès, for example, are able to obtain advice through the monthly newspaper "Essentiel Santé Magazine" or the corresponding website "essentielsante.net". Axa Santé on the other hand promotes prophylactic "health care coaching" services.

Moreover, the companies can publish "preferred supplier lists" of providers with whom they have negotiated fees and prices or established specific baskets of goods, even for those not reimbursed by the NHS. Santéclair is among those insurance companies which have already successfully implemented such a health care platform: It currently compromises of 1,300 opticians, 3,000 dentists and 500 pharmacies.

For any insurance company wanting to **increase the value of their services**, establishing a good relationship with their customers is a key factor for success. However, accomplishing the shift from being "merely" a payor to offering an added-value service can be challenging. In this context, Axa Santé launched a number of new products: The "Primodial" series, for example, will cover a child's education in the event of an insured parent's death. At the other end of the spectrum, "Formule Autonomie" products offer a wide range of services for the elderly.

The French April Group, which functions both as an insurance company and a broker, focuses on the relationship with the customer and contract

management: Although new products are created, marketed and labeled through the April Group, they are actually insured with other companies. The group also uses innovative distribution channels, which are totally externalized and based on partnerships.

One of their most recent co-operations includes the collaboration with the consumer credit commercial player Assurtis (LaSer Group), with whom they seek to create the commercial network "Assurtis", which April sees as a starting point for future outlets dedicated to health care, owned and managed by the group.

5.4. Philips & Achmea

Three players from the Netherlands – the electronics company Philips, the insurance company Achmea and the academic hospital Erasmus MC Rotterdam – have shown how providers and payors can cooperate in an effective and innovative way.

In the so-called "Hartmotief" project, which was introduced in 2005, the two companies presented a new service which addresses the needs of patients with chronic heart failure. As a provider of medical devices, Philips put forth the expertise on electronics, while Achmea, which serves more than three million customers, added its knowledge on patients and health care issues. The specialists at Erasmus MC Rotterdam provided their medical expertise.

The pilot used telemedicine, which enables care providers to advise patients from a distance. By means of their existing communication channels, e.g. TV, the patients are connected to a service center via a broadband connection. The center informs them about issues such as medication or diet, while also serving as a virtual coach, for example by delivering reminders. Additionally, vital functions, such as blood pressure and weight, are checked regularly.

This method provides a multitude of advantages: Instead of spending hours waiting for a doctor's consultation, the patient can stay at home. It can prevent serious incidents and enhance the patient's quality of life. Furthermore, this technology aims at decreasing the number of hospital admissions as well as the length of the average stay. Experts from Achmea estimate that due to telemonitoring, the cost of hospital nursing days can be reduced by EUR 16 million. The results of the pilot, which involved more than 200 patients in eight hospitals, are currently being analyzed. If the pilot shows that this method does indeed reduce cost, while increasing the quality of the treatment, it could be extended to patients suffering from other chronic diseases, like diabetes.

Taking the necessary steps

As illustrated in this study, the health care industry is experiencing challenging times. Macro-economic factors, such as demographics or the continuous trend towards privatization, are posing obstacles and forcing the players in the pharmaceutical and health care sector to adapt accordingly.

Roland Berger Strategy Consultants can help you in this process. We offer 40 years of experience in virtually all manufacturing and service industries. 1,700 people work in 33 offices in 23 countries, in order to help our clients achieve a measurable competitive advantage. With our in-depth expertise of the industry and our wide array of experience, we will walk you through the realization of all three critical success factors, namely

> Diagnosing the present
> Imagining the future
> Executing for impact

We arm our clients with customized approaches which take into account their specific business model. For, as we demonstrated in this study, there is no simple or universal approach to the trends and developments which can be observed within the health care sector today.

Roland Berger is following the developing trends closely, with the aim of assisting your business with bespoke solutions rather than off-the-peg remedies. Our consultants deliver more than mere ideas on paper. We work hand in hand with our clients to implement intelligent solutions to master complex challenges. Furthermore, we do not stop at concepts – we help you to integrate them successfully.

Health care
We advise private and public players in the health care market and provide solutions to the demands set by a rapidly changing market. We work for federal and state ministries, reform commissions, private and statutory health insurance companies, hospitals, care centers for the elderly and welfare organizations.

Pharmaceuticals
We support our clients in discovering new opportunities in emerging markets, finding suitable partners and managing cooperative ventures. We provide a fresh perspective by aligning our clients' operations with the entire value chain: improving R&D performance, launching blockbuster products efficiently, increasing the performance of the clients' sales force as well as implementing new supply chain capabilities.

Medical devices
Innovative medical equipment and procedures can considerably improve diagnostics and shorten treatment cycles. We assist our clients with studies that highlight the overall economic benefit of innovations. Quality marketing, targeted branding and customized service can also help providers raise their game against the competition. We would be glad to show you how.

Service providers
Our integrated and customized approach provides specific advice to distributors and logistics providers, CROs, IT and CT providers, as well as associations, institutions and financial services companies.

Who to contact at Roland Berger Strategy Consultants

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Mireille van Reenen
is Consultant at Roland Berger's Amsterdam office. Over the past years, Mireille has advised companies in complex industries (e.g. the utility sector) on how to deal with changing market situations, and managed several implementation programs. Furthermore, she has been involved in the analysis of trends and developments in the Dutch health care market.

Special thanks goes to Kai Balder

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Dr. Joachim Kartte
is Partner at Roland Berger Strategy Consultants and head of the global competence center Pharma & Healthcare. Having joined Roland Berger in 1996, Joachim has over 10 years of consulting experience. He advises both governments and governmental departments in health care policy related issues (e.g. German Rürup-committee, eHealth-Card, Integrated Care). Health insurance companies and players in compulsory health insurance are also among the clients he supports with regard to organization, processes, marketing & sales. He also advises hospitals across the care spectrum (basic, regular, maximum, university) and forms of operation (public, NPO, private) to optimize value chains, joint ventures, marketing and sales.

Oliver Rong
is Principal at Roland Berger Strategy Consultants and leads the German provider business. Oliver joined Roland Berger in 1997 and chose to specialize in Pharma & Healthcare in 2001. He advises acute care institutions at all levels (basic, regular, maximum, university), focusing on maximum/university and all forms of operative care (public, NPO, private). He is also active in advising care institutions for the elderly, rehabilitation clinics and health care related organizations. His expertise lies in pre- and post-merger integration, value chain optimization (e.g. make or buy medical, non-medical services, administration), concentration of medical departments, cooperation/integrated care and marketing and sales/branding.

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The Belgian section of this study was compiled in collaboration with Dr Michel Legrand from HICT. HICT focuses on health care consulting, application development and integration services: Thus enabling a higher level of service and quality of care for the patients and their relations, while optimizing the resources of the health care providers.

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