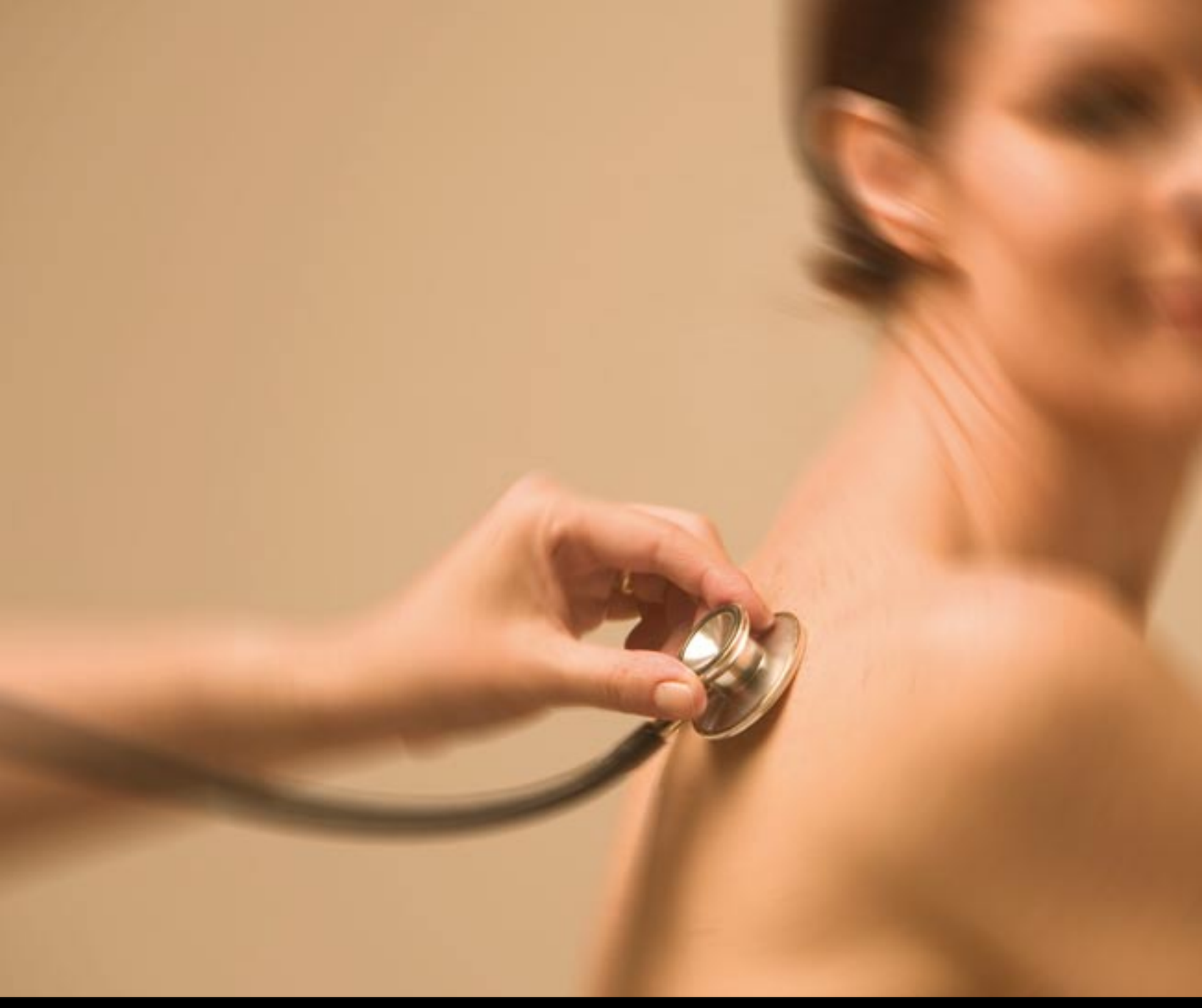

Section 2

Summary of Key Findings

Public health and healthcare are matters of the highest importance to the general public. That is why hospitals operate in highly regulated markets. Every country has its own specific legislation resulting in differences between countries. Within that framework, every hospital has its own organisation leading to even more differences. However, many similarities in trends are shared across borders.

Rising Healthcare Costs

Public health in the countries we researched has improved remarkably over the past decades. This success has led to rising costs, as an ageing population is generally in greater need of healthcare. Additionally, a lot of contemporary afflictions are related either to tobacco use or obesity. In the last years we have witnessed yearly growth rates of total healthcare expenditure between 2 percent and 8 percent. Health expenditure per capita in 2003 was highest in the United States at USD 5,600. In the European countries, expenditures ranged from USD 2,200 in Italy to USD 3,800 in Norway.

'Increased liberalisation and competition have enabled patients, the insured population and customers to be more independent.' *Prof. Dr. Henke Technischen Universität Berlin*

Chronic conditions are also changing the way care is delivered to patients. Other factors contributing to rising costs in the healthcare sector are the inclusion of home care in the total healthcare costs and consumers who are better informed and more demanding. Although better-informed patients may lead to higher healthcare costs at first, some argue that these patients make better choices, which ultimately leads to lower costs.
As developments in biopharma and medical devices continue, and promising new types of treatments, drugs and technology are introduced, the trend of rising healthcare costs is not anticipated to wane.

Financing Healthcare

Faced with increasing healthcare costs, governments have implemented several measures. Governments are trying to adjust healthcare funding, most notably by privatising the health funding system and increasing out-of-pocket payments. In the United States, 56 percent of total health expenditure was privately financed in 2003. In the Netherlands and Switzerland this percentage was around 40 percent (including private insurance funds), whereas in the other European countries the privately financed portion of health expenditure varied from 15 percent to 30 percent.

As a result of privatisation, the role of health insurance companies has increased in the process of bringing together supply and demand in the healthcare sector. In negotiations with healthcare providers insurance companies focus on quality and quantity requirements – or risk losing customers because they are uncompetitive. It is anticipated that these health insurance companies will, for instance, push for more generic (and thus, cheaper) drugs. Additionally, out-of-pocket payments (requiring consumers to pay a small fee for healthcare services) will provide an impetus for consumers to be more particular with their healthcare purchases. However, for hospitals this poses additional risk, as higher out-of-pocket payments lead to more bad debts and more consumers opting out of insurance.

'We have evidently not yet developed the practical means for successfully communicating the advantages achieved by health expenditures.' *Dr. Christiane Roth, UniversitätsSpital Zürich*

Private Hospital Ownership

Governments have also turned to privatisation of hospital ownership in order to increase quality and efficiency, as well as reduce their exposure to losses. Most of today's hospital systems consist of both publicly- and privately-owned hospitals. Although privately-owned, most hospitals are still not-for-profit. Most notably in Germany, private hospital chains are acquiring and restructuring public hospitals to turn them into profit-making companies.

'The government plays an important role in stimulating privatisation.'

Onno Buruma, Leids Universitair Medisch Centrum

This trend brings about new challenges for healthcare policy, as fair competition between private and public institutions can be distorted by unfair subsidising. In some countries, there is concern that private institutions choose to perform only the most lucrative operations (called cherry picking), with less-profitable activities remaining for unspecialised public hospitals. Additionally, privatisation can lead to unnecessary competition for resources (for example, physicians) and redundant infrastructure. These are some of the reasons why several governments dismiss the idea of privatisation.

Diagnostic-Related Groups: Quality, Cost Efficiency and Performance

In order to create more transparency and comparability in hospital activities, diagnosis-related groups (DRGs) have been introduced in all countries. By introducing a fixed normative reimbursement for certain hospital activities, governments are aiming to increase efficiency. International research has shown, for instance, that the rate of hospitalisation decreases (fewer days in a hospital bed per treatment) in the countries that have implemented DRGs. It turns out that a lot of this decline can be attributed to the increased number of day treatments. In order to cut costs and enhance capacity, patients are sent home as quickly as possible. However, the introduction of DRG or DRG-related systems (most recently in Germany and the Netherlands) has invariably been accompanied with difficulty in estimating the exact costs of hospital activities and acquiring suitable information technology (IT) systems or processes. The CEOs we interviewed claim that the DRG systems provide a number of advantages, most notably a better understanding of the cost of treatments, the possibility of benchmarking in terms of quality and efficiency and follow-up of best practices. However, due to national differences in data collection, international comparability is currently still limited.

'The focus should be on developing a DRG system that is updated faster in accordance with changes in treatment types and medication costs.' *Roar Arntzen (former CEO), St. Olavs/Trondheim University Hospital*

Internationalisation of Hospital Healthcare

Considering the possibility of forming international (most notably, Pan European) hospital chains, a majority of the CEOs interviewed see national regulation as the main barrier for international takeovers. Johnny Van der Straeten of the Universitair Ziekenhuis Antwerpen points out the advantages of a European harmonisation that could lead to specialisation and better quality, even though Belgian regulation currently doesn't allow private international hospital chains. In Norway, a Swedish hospital chain is already operating. Roar Arntzen, former CEO of St. Olavs/ Trondheim University Hospital, expects that these international chains will eventually

dominate the private healthcare market. A few other private hospital chains are actively engaged in international expansion, for instance Danish and French private hospitals trying to enter the Italian market. It is anticipated that this trend will continue.

'For many older people in Western Europe, care is only affordable if the caregivers are brought in from neighbouring east European countries.'
Dr. Maximilian Koblmüller, Oö. Gesundheits- und Spitals-AG

Health and Hospital Information Systems

In addition to cost efficiency measures, many hospitals are adopting quality enhancement measures, since there is a public demand for better healthcare quality. Especially in the field of patient safety, many new initiatives are being developed. Quality enhancement and cost efficiency measures have a significant impact on the hospitals' IT systems and organisations. That is why hospitals are facing extra IT investments and restructuring costs.

'Investment in IT is vital for the long-term good of our business – for efficiency, quality and the support it gives to research and development.' *Johnny Van der Straeten, Universitair Ziekenhuis Antwerpen*

The (albeit slow) shift from paper-based to electronic patient records is an example of this. Currently, one of the biggest challenges for many countries and hospitals is further integration of the varied hospital information systems into a national health information system. However, national and international (for instance, Pan European) interoperability is still largely absent.

Corporate Healthcare Governance

The increasing complexity of medical treatments, hospital finance and regulation has made corporate governance codes more important for hospitals. The call for professional management, independent supervision and greater transparency is heard in every country. Although improving, the average levels of corporate healthcare governance in most countries are still insufficient.

'Our managerial and clinical organisations are not based on DRGs because we want to avoid the occurrence of adverse selection in our institution.' *Luciano Ravera, Istituto Clinico Humanitas*

Patient Safety

In several countries initiatives have been developed to co-ordinate patient safety activities on a national level. In these national programs, several similar needs were identified: to adapt legislation to allow blame-free incident reporting (protecting the 'whistleblower' from prosecution); to develop a reliable (voluntary or mandatory, national or local) reporting and registration system and to co-ordinate and manage all the activities.

'I see a wide field of elements where hospital management has to continue proving that patient safety ranks very high.' *Dr. Christiane Roth, UniversitätsSpital Zürich*

In 2006, a new health system was introduced in the Netherlands.

Onno Buruma is chief executive officer (CEO) of the Leids Universitair Medisch Centrum in the Netherlands. Recently, he discussed the complex choices ahead for Dutch healthcare providers with Jules Verhagen, partner, and Rob Molenaar, senior manager, of Ernst & Young's Amsterdam office.

Financing healthcare: It is becoming more and more difficult to finance the healthcare system, especially in periods of less favourable economic circumstances. In the Netherlands, healthcare costs are lower than in many other countries, approximately 10 percent of GNP. Because of rapid technological developments we may have to accept that we will be spending still more on healthcare in the future.

There is a difference between the political agenda and the choices I would like to make concerning healthcare. For certain, we must change the fixed-budget financing model. In the past, we have seen hospital production reduced during the last months of the year because of this system. As a result, the pressure on waiting lists continued.

Currently, the government is introducing a DRG-based tariff system and a new healthcare insurance system at the same time, which should lead to regulated market competition. As a result, private financing of the system should increase. Today, that amount is only a few percent (internationally this figure is 10 percent to 15 percent, excluding private insurance funds).

The healthcare system needs to be more patient-oriented, providing easier access and higher quality. A stronger position for private healthcare and market competition will force hospitals to improve their quality. Larger, complex organisations will have to consider how they can operate more efficiently and effectively.

To finance healthcare in the Netherlands in the future, it is expected that not all new treatments and drugs will be included in the basic health insurance package. Consumers will have to make a conscious choice for any additional insurance geared to specific needs. Consequently, they will need to better understand their healthcare and insurance systems and be aware of how their lifestyle impacts their health.
We need to reconsider traditional patient treatment – include more day treatments, fewer clinical procedures and shorter hospital stays. And we need to stop absurd surgeries: What is the value of an extra year of life that may be full of high healthcare needs and very limited quality of life?

Finally, we need to address how introducing more 24-hour hospital services could increase hospital utilisation. Expensive capacity and equipment currently sit unused for most of the day.

Privatisation: Not all treatments – such as acute care, tertiary care and last resort functions – can form part of the more market-like system. However, over time, a lot of tertiary care treatment will become standard and then market competition can be further realised.

Entrepreneurship is back in the discussion. Privately provided healthcare focuses on standard treatments. As stated, not all products can be privatised. The government plays an important role in stimulating privatisation. They should pick the low-hanging fruit and take an important step forward.

European integration: After the outcome of the French and Dutch referenda [on the EU Constitution], expectations about European healthcare integration are lower within Europe. Countries are more focused on their own positions and problems rather than on the European agenda.

The healthcare system in each country reflects its social systems. On the other hand, privatisation could lead to open markets. Some politicians in the Netherlands have already announced that they welcome the introduction of privately-held hospitals paying dividends (like in Germany), probably after 2010.

DRG implementation: Implementation of diagnosis-related groups (DRGs) was both ambitious and complex in the Netherlands. We have around 40,000 diagnosis and treatment combinations, called DBCs in the Netherlands. The approach is much broader than the typical DRG system. The Dutch system includes the complete process of health delivery, from the first consultation of a specialist, through the final outpatient visit. See Appendix I for a full explanation, p. 70) At the moment, for 90 percent the government still determines the price. In the new system the doctors have to spend a lot of time on administrative procedures; the software was insufficient and not available in time. As a result, the momentum is gone.

For the next two years the number of DBCs with negotiated prices (between health insurance companies and hospitals) will remain at 10 percent. In addition, there is no longer a strong focus on optimising current procedures. It is expected that the system will be simplified considerably. After that, the implementation of the DBC system could have a further boost, with negotiated prices between 30 percent and 50 percent.

At the same time, the insurance companies' positions are becoming stronger. Although the market regulators (*Nederlandse Mededingingsautoriteit* or *NMa* and the *Zorgautoriteit*) supervise the market, there is no real competition as yet, given the position of doctors, hospitals and insurance companies. Recently the basic health insurance premium was introduced. Most insurance companies have more or less the same pricing. The number of people who will change their insurance provider was expected to be low (10 percent), but it turned out to be 25 percent, so something might be happening, after all.

It has been only a short time since the DBC system was introduced. Most hospitals have calculated standard prices for treatments where prices are negotiable (10 percent of total). In most cases, no analysis of actual costs compared to standard costs is available.

Patient safety: Patient safety forms an integral part of the quality systems of hospitals, as well as for pharmaceutical companies. The government will not license a facility without patient safety procedures in place. In recent years, the public has paid more attention to patient safety. As a result, more information is shared publicly, for instance, about incidents, complaints and performance indicators such as infections. In the Netherlands, an incident reporting system for hospitals has existed for many years. The performance indicator system of the national health inspection includes patient safety information. Quality systems are becoming more professional. In addition, quality reviews by independent organisations like the Dutch Institute for Accreditation of Hospitals *(Nederlands Instituut voor Accreditatie van Ziekenhuizen)* form the foundations for quality standards within individual hospitals.

Evidence-based standards: I am very critical of the future perspective of evidence-based standards. In medicine only approximately 10 percent of procedures are now really evidence-based. That means 90 percent are not. Apart from this, treatment standards are aimed at average patients. When a medicine is used, it could be that the medicine has a positive impact for 30 percent of the patients, for 40 percent the condition is unchanged, and 30 percent react negatively. Pharmacogenetics will, by predicting responses or adverse effects, in due time completely change the scene in this respect. For some procedures evidence-based standards can be introduced further, but we have to be selective.

Biopharma: Biopharma has a big impact on certain treatments. These treatments are expensive as a result of high research and development costs. On the other hand, effectiveness increases, which means hospitals spend less on complications after surgery and treatment.

Information technology (IT): Investments in IT have been significant and have to stay significant in the coming years. Hospitals cannot afford to have systems fail. In my opinion, hospitals have to work another 10 to 20 years on IT before a mature level is reached. Many dedicated applications have to be improved to make them accessible for other departments within the hospital. For example, a comprehensive electronic patient file is not yet broadly available, either internally or to external healthcare providers.

Research activities: Technology transfer stimulates researchers. Academic institutions with a lot of entrepreneurial activity are able to attract the more dynamic researchers.

In recent years there has been a lot of pressure on researchers to start their own businesses. It has been difficult to make this a commercial success. An increase in the number of start-up companies does not necessarily increase the number of success stories. In addition, knowledge that is developed is published too late because of commercial implications. If this knowledge is not publicly available, researchers around the world cannot follow up on it. So we should be a bit critical of this issue.

Knowledge that has commercial value, however, should be developed further. It is important that University Medical Centres stimulate technology transfer.

The Leids Universitair Medisch Centrum comprises the Leiden University Hospital and the Faculty of Medicine of Leiden University.

The level of healthcare spending in Germany is still among the highest in the world.

Prof. Dr. Henke is professor of Finance and Health Economics at the Centre for Innovative Health Technology at the Technischen Universität Berlin in Germany. Here he talks with Stefan Viering, partner, in Ernst & Young's Stuttgart office about the present and future challenges for German healthcare providers.

Financing healthcare: In order to continue to finance healthcare, we need to address the permanent challenge of mobilising our efficiency reserves: We need to restructure the organisation of healthcare into new networks surrounding specific diseases. There needs to be more competition in providing healthcare services, as well as more co-payments and out-of-pocket expenditures.

Privatisation: The existing mixture between private, not-for-profit, and public hospitals is changing. Due to lack of capital in the public sector, more and more public hospitals are being sold. At the same time, the pharmaceutical industry is investing in hospitals, as well. Although I do not see any specific threats to healthcare, in general, because of the trends towards privatisation, parts of the population still think that making a profit in healthcare is unethical. Private hospitals are some of the major economic drivers of the system.

DRG implementation: I believe the introduction of diagnosis-related groups (DRGs) is a good development. In the long run, DRGs will allow more activities to be performed. They allow hospitals to manage quality, making benchmarking possible and helping to showcase best practices. With respect to elective surgery, quality management programmes are an important source of information. Quality will probably be the most important factor when it comes to competition in healthcare. Patients will be better informed and, depending on their health insurance system, make decisions about healthcare more and more according to quality information.

Implementation of DRGs is complicated. Generally, in Germany DRGs apply to every in-patient service except psychiatric and psychosomatic services and medical services carried out in so-called special institutions. Germany introduced its DRG system in 2002; it will be completed in 2007. The AN-DRG system (Australian National Diagnosis-Related Groups Classification) was used as a starting point. For the current year (2006), the German DRG system includes some 954 DRGs and 83 additional fees *(Zusatzentgelte).* At the beginning of 2005 the phase of convergence *(Konvergenzphase)* started, implying that the DRG system has replaced traditional hospital budgeting and that it has already started to become economically effective. Until the end of 2008, a number of steps will adjust the hospital-specific remuneration to a uniform state level. From 2009 onwards, sickness funds will pay uniform prices within each respective state for a certain medical service.

Patient safety: Increased liberalisation and competition have enabled patients, the insured population and customers to be more independent. This has been accomplished by providing agencies, hotlines and other types of information. In addition, the German Coalition for Patient Safety *(Aktionsbündnis Patientensicherheit)* was founded in 2005 as a forum for coordination and discussion of issues concerning patient safety. In the area of quality management, quality reports are now mandatory for hospitals and the National Association of Statutory Health Insurance Physicians (KBV) has developed a new system for managing patient safety. The introduction of an electronic health card is currently being tested and will be implemented in 2006. Also, the German health ministry is supporting projects aiming at increasing the participation of patients in the treatment process.

Evidence-based standards: Evidence-based medicine is more than just a buzzword in health policy; its importance is increasing in the German healthcare system. Generally, I believe decisions regarding admission and reimbursement of pharmaceuticals, medical

devices, and medical treatments should be evidence-based. However, from an economic perspective, the benefits of administering medical innovations are limited, since the information-spreading function of the health market also encourages the development of new products and processes. In Germany, in 2004, the so-called Federal Joint Committee *(Gemeinsamer Bundesausschuss)* replaced five former self-governing committees in the health sector. This joint committee has wider competencies than its predecessors, especially in the field of admissions and reimbursement. It can also enact directives for statutory health insurance, physicians, hospitals, sickness funds and insured populations, as well as give recommendations on a variety of issues. Furthermore, in 2004 the Federal Joint Committee founded the Institute for Quality and Efficiency in Healthcare *(Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen)*, which is responsible for the assessment of medical benefits, quality, new services, guidelines, pharmaceuticals, and so forth, according to evidence-based criteria.

Biopharma: From my point of view, the prospects of the pharmaceutical industry are good, but not outstanding. Its success will depend largely on its ability to receive authorisations and patents for new product innovations. In contrast to that, the outlook for the medical device industry seems more attractive, due to the demographic development of the population.

Research activities: In Germany, we need a new approach to healthcare research. The sickness funds are not allowed to finance research and the government only provides selective support, with no consistent strategy.

The Centre for Innovative Health Technology at the Technischen Universität Berlin brings together engeneers and economists with the medical professions.