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How Germany is reining in health care costs

An interview with Franz Knieps

A senior executive in the German Ministry of Health describes approaches the country is using to control health care costs.

Germany, like most countries, has been challenged by ever-rising health care costs, which now consume 10.4 percent of the country's GDP. But it has been more proactive than most countries in seeking new ways to rein in those costs.

Germany's cost-control efforts reflect its firm commitment to two goals: to ensure that all its citizens receive the same level of high-quality care and to keep health care spending in line with the health system's revenues. Achieving those goals is becoming increasingly difficult, however, given mounting cost pressures and Germany's changing demographics. Population growth is stagnant, and the population is aging rapidly. The health system is funded on a pay-as-you-go basis, and unless spending is kept under control, contributions from the dwindling number of active workers could soon be insufficient to cover the cost of care for retirees. (For more, see sidebar "Fast facts about the German health care system," p. 7.)

To find out more about the approaches Germany has been using to manage its health care spending, we spoke with Franz Knieps, director general for public health care, health insurance, and long-term care insurance in the German Federal Ministry of Health. Matthias Wernicke, a principal in McKinsey's Berlin office, conducted the interview.

The *Quarterly*: *As an introduction, could you tell us a little bit about how health care is funded in Germany?*

Franz Knieps: Health care funding is more complicated in Germany than in many other countries because we do not rely on a single source of revenue. Instead, a variety of sources are used. The statutory [public] health insurance funds, often referred to as the sickness funds, cover about 90 percent of the population. Contributions to these funds, which are based on income, are made by both employers and employees. Germany has some 180 statutory health insurance funds, and they account for approximately 70 percent of the health system's revenue.

About 10 percent of the population has private health insurance; the premiums for these plans vary based on each patient's risk factors. Tax subsidies are used to finance approximately 10 percent of health care services. In addition, patients are required to make out-of-pocket copayments for many services, including drug prescriptions; employers underwrite the cost of a few services; and there are a handful of other, minor sources of funding.

The *Quarterly*: *Over the past decade or so, Germany has been fairly successful in containing its health care costs, especially in comparison with some other countries. What are the primary mechanisms the country has used?*

Franz Knieps: There was no single lever we used for cost containment. Instead, we implemented a large number of minor measures to stabilize the health system's income and expenditures. In the past 20 years, our overriding philosophy has been that the health system cannot spend more than its income.

The minor measures were implemented at every level of the health system. For example, each year we establish an overall budget for the system at the national level to serve as a guide for all participants in the system. Virtual budgets are also set up at the regional levels; these ensure that all participants in the system—including

the health insurance funds and providers—know from the beginning of the year onward how much money can be spent.

In addition, we carefully control all types of spending. We contract with office-based doctors for their services, we use DRGs [diagnosis-related groups] to reimburse for hospital care, and we have specific regulations for drug expenditures. We have also introduced incentives that encourage everyone to avoid unnecessary expenditures.

The *Quarterly*: *Please elaborate on these incentives. How do you use them to control costs?*

Franz Knieps: As an example, I will describe the incentives we use to limit drug expenditures. First, we introduced small copayments for prescriptions. These copayments, which vary based on each drug's cost, discourage patients from using expensive medications that provide no real advantage over less expensive alternatives.

We then introduced a reference price system based on therapeutic classes—groups of similar drugs used for the same condition. Under this system, we reimburse for all drugs in a therapeutic class at the same price (for more details on how this is done, see sidebar "How Germany establishes reference prices," p. 6). Our goal was to give pharmaceutical companies an incentive to concentrate on innovation and not simply to produce follow-on medications.

Reference pricing does not prevent a pharmaceutical company from demanding more money for a given drug, nor does it prevent a doctor from prescribing that drug. However, the doctor would have to explain to patients why that drug is necessary, and the patients would have to be willing to pay an added amount above the normal copayment. The pharmacists filling the prescriptions would also question the patients to make sure that they understood that less expensive alternatives were available. Because generic substitution is permitted in Germany, we have yet another check in place to ensure that expensive drugs are used only when appropriate.

Last but not least, we removed most over-the-counter drugs from the benefits package. Patients who buy drugs without a prescription have to pay for them.

The *Quarterly*: *How have patients reacted to the introduction of prescription copayments and the fact that they may have to pay additional money for some drugs?*

Franz Knieps: In our experience, about 90 percent of patients are willing to use a cheaper drug if their doctor explains that it is as good as the more expensive medication. If a doctor says that the more expensive drug is a bit better, about 70 percent of patients are still willing to take the cheaper medication. This suggests to us that the incentives are having the desired effect—patients are complying with our efforts to control drug expenditures.

The *Quarterly*: *How else are you using incentives to control costs?*

Franz Knieps: A few years ago, we introduced disease-management programs, an approach we adopted from the United States. Because that country has so many different health insurance plans, it is often a laboratory for new ideas. Some US health insurers are using disease-management programs to improve the quality of

Franz Knieps

Education
Studied law and political science at the University of Bonn and the University of Freiburg, graduating in 1981; also did graduate work in political science and German literature at the University of Bonn

Career highlights
German Federal Ministry of Health and Social Security
(2003–present)
Director general for public health care, health insurance, and long-term care insurance

AOK Bundesverband
(1998–2003)
Managing director for social policy and health system development

AOK Bundesverband
(1989–98)
Head of the policy staff unit

German Federal Ministry for Labor and Social Affairs
(1987–89)
Helped prepare the 1988 Health Care Modernization Act

Worked for the parliamentary committee, reforming the structure of the country's statutory health insurance system

Other professional accomplishments
Editor of the journal *Gesundheit und Sozialpolitik* (Health and Social Policy)

Active as a consultant on social policy and health system development for the World Health Organization, the European Union, and other organizations

care delivery while managing costs. We were impressed by the results these insurers were obtaining, and so we decided to implement similar programs in Germany.

We now have disease-management programs for patients with heart disease, diabetes, and some other common chronic conditions. The programs were designed using evidence-based guidelines, which ensures that the treatments included in the programs' protocols are the most effective ones available.

To participate in the programs, patients must agree to get regular checkups from their doctors and to adhere to treatment recommendations. The doctors must agree to adhere to the programs' protocols and to educate the patients about self-care. The programs give both patients and doctors an incentive to participate. For example, doctors are given additional money for each patient they enroll, and copayments are lower for enrolled patients. The health insurers benefit as well, because the programs are designed to prevent disease exacerbations, complications, and the high costs they entail. The insurers were also given additional funding from the federal risk-adjustment scheme to cover the programs' initial costs.

Clear evidence is emerging that the programs have been very successful. Millions of patients have already enrolled; all of them have agreed to abide by the program's protocols.

To promote integrated care, we set aside money to encourage ambulatory-care doctors and hospitals to experiment with new ideas and new models of care delivery

The *Quarterly*: *Many countries are attempting to more closely coordinate care delivery as another way to improve care quality while managing costs. What steps has Germany taken to better integrate care?*

Franz Knieps: Historically, the German system was strictly separated into two major fields: ambulatory care, which can be provided by either family doctors or specialists, and hospital care. However, this strict division led to a lot of money being wasted, and so we are trying to bridge the gap between ambulatory and hospital care. For example, we now encourage ambulatory-care doctors to cooperate more closely with their hospital-based colleagues, and we even permit ambulatory-care doctors to work in hospitals. Hospital doctors can also work in ambulatory-care offices. In addition, we opened up the hospitals so that their staffs could provide specialized out-patient care for certain rare diseases and very complicated cases.

We have also been trying to find ways to more fully integrate the whole continuum of care, from prevention to ambulatory care, hospital care, rehabilitation, and even long-term care. To promote integrated care, we set aside money in the budget to encourage ambulatory-care doctors and hospitals to experiment with new ideas and new models of care delivery. We now have to evaluate the results of these experiments and bring the best new ideas into the system as a whole.

The *Quarterly*: *Outside these experiments with integrated care, how much success has Germany had with disease prevention?*

Franz Knieps: Unfortunately, Germany has not yet had much success. Our constitution gives responsibility for public health to the 16 federal states—the Länder—and there is little coordination among them, or between them and the federal government, on preventive health initiatives or laws to promote public health—antismoking legislation, for example. Compared with some other countries, we need to develop our skills in this area.

The *Quarterly*: *Germany has long experience with polyclinics, a form of primary care that other countries are now experimenting with. What has been your experience with polyclinics?*

Franz Knieps: Polyclinics—clusters of general practitioners who work together to form more specialized primary care centers—were used extensively and quite successfully in the former German Democratic Republic. However, many politicians in West Germany initially disliked the idea of polyclinics because they associated them with communist ideology. It took a while for many people to understand that polyclinics offer significant

advantages with regard to communication, coordination, and cooperation.

In the late 1990s, we reintroduced polyclinics under a new name, medical centers, and they are now seen as a very attractive form of care delivery. Many young doctors, especially those who want to have a good work/life balance, think that practicing in a medical center is preferable to working in a solo or small group practice.

In Germany, medical centers first became popular in major cities such as Berlin and Munich. However, they are also now quite popular in rural areas, which have historically suffered from doctor shortages. The medical centers are staffed not only by doctors but also by nurses and other health professionals, and the centers can organize their activities so that the doctors are able to concentrate their time on patient care, the core of their work.

How Germany establishes reference prices

Reference pricing is not applied automatically to all drugs in Germany; rather, decisions are made on a case-by-case basis by the Gemeinsamer Bundesausschuss (G-BA), the federal joint committee that represents all stakeholders in the health system. In making its decisions, the G-BA relies on scientific assessments made by the Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen (the Institute for Quality and Efficiency in Health Care).

When it begins to investigate a drug class, the G-BA classifies each product in one of three categories:

- Those that have identical active ingredients
- Those that have pharmacologically or therapeutically comparable active ingredients
- Those that have therapeutically comparable effects

The last category is important in that it enables the G-BA to create 'jumbo groups' that contain many more drugs than the molecule-based reference groups used in other countries. For example, jumbo groups can include not only drugs that have lost patent protection and their generic equivalents, but also any medications that are thought to offer no significant therapeutic advantage over similar products.

Once a jumbo group is defined, the Spitzenverband der Krankenkassen (the Association of Statutory Health Insurance Funds) calculates the reference price for the group according to the 'lower-third rule.' First, it identifies the current prices being charged for all of the drugs in the jumbo group. Then, it determines the cost of the drug at the top end of the lower third of the pricing range. That amount becomes the reference price for all drugs in the class—the maximum reimbursement level that health insurers will provide for those drugs. These calculations are repeated annually.

Pharmaceutical companies are free to demand higher prices for their products, but the only way they can obtain additional money is if patients agree to pay the amount out of pocket. That rarely happens, however. Furthermore, patients have another incentive to use less expensive alternatives: drugs that are priced 30 percent or more below the reference price are exempt from normal copayments.

Patent-protected drugs are exempt from reference pricing if they can demonstrate clear evidence of superior effectiveness or safety, or if they have been approved for a new indication. Furthermore, reference pricing cannot be applied if a jumbo group contains only two drugs, both of which are patent-protected.

The *Quarterly*: *Many countries are beginning to question whether they should pay for treatments that are not very cost effective. Does Germany try to limit the use of such treatments?*

Franz Knieps: By law, our health insurers cannot reimburse for services that are deemed unnecessary. Thus, a doctor who provides such services will not be paid for them.

To determine the value of medical services and products, Germany established a national agency, the Institute for Quality and Efficiency in Health Care [Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen (IQWiG)]. This agency is similar to the National Institute for Health and Clinical Excellence [NICE] in the United Kingdom. Like NICE, IQWiG investigates medical devices, drugs, and other forms of treatment to determine how effective they are. If IQWiG decides that a given

Fast facts about the German health care system

General information

Germany's system for universal health care coverage funded through nationwide health insurance is the oldest in Europe (it originated in social legislation passed in the 1880s). Its underlying principles remain social solidarity and pay-as-you-go financing.

Like most countries, Germany has seen its health care costs rise—by an average of about 1.4 percent—in recent years. In 2007, Germany spent about $346 billion, or 10.4 percent of its GDP, on health care (an average of $4,209 per capita). Overall, Germany has been more successful than many other countries in limiting the increase in its health care spending as a percentage of GDP.

The country's population, currently about 82 million, may be shrinking slowly because of a low birth rate. However, the population is also aging; about 20 percent of the population is now age 65 or older, and that number is expected to rise to 27 percent by 2030.

Health insurance

Health insurance coverage is mandatory.

The statutory (public) health insurance funds, which cover about 90 percent of the population, are managed by independent, nonprofit, nongovernmental organizations regulated by law. Employees are free to choose among the statutory funds in their region; all the funds basically provide the same level of coverage (95 percent of health benefits are predefined), but they vary slightly from each other in the details of their benefits packages (coverage of alternative medicine, for example).

Contributions to the statutory funds are based on salary. Until recently, these funds were free to set their own contribution rates. Since July 2009, however, they must use a uniform contribution rate. At present, the rate is 14.9 percent of income; 7.9 percent is paid by the employees and 7.0 percent by the employers. All contributions are centrally pooled in a new national health fund, which allocates resources to each statutory fund based on a risk-adjusted capitation formula.

To opt out of the statutory funds and receive coverage through private health insurance, employees must meet a minimum income requirement, which has risen in recent years (it is €48,600 in 2009). Because civil servants and the self-employed are excluded from the public plans, they are the largest groups with private health insurance.

treatment does not provide value, the treatment can be excluded from the benefits package. These decisions are made by a very special institution in our system—the Gemeinsamer Bundesausschuss [G-BA], a federal joint committee that represents doctors, nurses, other health professionals, the health insurance funds, and hospital owners. If IQWiG decides that a new device or drug is no better than existing therapies, reimbursement is set near the rate given to the existing therapies. But if IQWiG decides that a new drug or device is a real innovation, there are many fewer restrictions on reimbursement than in other countries.

The *Quarterly*: *In the United Kingdom, there has been considerable public debate about treatments that were excluded from reimbursement. How has Germany dealt with patients' expectations about coverage?*

About 24 percent of the population has supplemental coverage, which entitles them to benefits not offered by the public plans (some types of dental care, for example).

Both public and private payors give patients almost complete freedom to choose providers.

Ambulatory care

Germany has more than 288,000 practicing physicians (about 3.5 per 1,000 people). It also has 818,000 practicing nurses and 48,000 practicing pharmacists.

About 48 percent of its practicing doctors work in ambulatory care (roughly speaking, 50 percent as general practitioners and 50 percent as specialists). Most of these doctors are for-profit self-employed practitioners.

Patients can consult specialists directly, but their copayments are lower if they comply with gatekeeper rules (that is, if they get a referral from a general practitioner).

Reimbursement for ambulatory care is paid through fee-for-service arrangements; however, there is a strong trend toward using a flat rate per case. Under this system, doctors are paid a flat rate for each patient that presents for treatment in a given quarter of the year. The rates paid differ by type of physician (general practitioner versus cardiologist, for example) and are negotiated at the regional level.

Hospital care

Germany has more than 2,000 hospitals, which gives it one of the highest hospital beds densities in Europe (6.2 per 1,000 population). It also has about 11,000 nursing homes. Both hospitals and nursing homes can be public, private, or charitable institutions.

Reimbursement for hospital care is based on DRGs (diagnosis-related groups) that were introduced in 2004.

Hospital accreditation is mandatory; the accreditation process is the responsibility of the state health ministries.

Public-health metrics

Life expectance at birth: 77.2 years for men; 82.4 years for women.

Infant mortality per 1,000 births: 3.8.

Maternal mortality per 100,000 live births: 4.1.

Source: Federal Statistical Office, Organisation for Economic Co-operation and Development, Kassenärtzliche Bundesvereinigung, Bundesvereinigung Deutscher Apothekerverbände, Federal Ministry of Health, Private Health Insurance Association

Franz Knieps: In Germany, every new treatment is included in the benefits package as soon as it is approved for use, and IQWiG is then expected to determine how much value it offers. Only if the Institute's findings are negative—if it determines that the treatment has no value—is reimbursement denied. Germany does not require that IQWiG offer a positive recommendation before a new treatment can be included in the benefits package.

In our experience, most patients and doctors usually accept IQWiG's recommendations. However, strong debates have arisen about a few drugs, such as the long-acting insulin analogs. IQWiG decided that these drugs provide no additional value beyond what existing diabetes treatments offer, and thus the manufacturers were not granted the additional pricing they sought. The long-acting insulin analogs were included in the benefits package, though, and the manufacturers accepted the lower reimbursement rates.

The *Quarterly*: *What does Germany do to get all participants in the health system to reach consensus about care delivery?*

Franz Knieps: The G-BA plays a strong role in this regard. German law states that patients have the right to get access to ambulatory care, but what does that mean? Which services are included within the definition of ambulatory care? Which services are excluded? What quality standard is expected? The G-BA is tasked with making decisions about these questions and then regulating care delivery—it is able to make what we call "soft law." Because the committee includes doctors, nurses, fund managers, and hospital CEOs, many different types of knowledge are brought together, and the decisions the G-BA makes are more likely to be accepted by all stakeholders in that system. If the decision-making process were inside the health ministry's walls, there would be much less stakeholder agreement.

The *Quarterly*: *Does Germany use waiting lists as a way to allocate services?*

Franz Knieps: In Germany, there are no official waiting lists. Of course, patients who want to consult well-known specialists or receive treatment at very prominent hospitals may encounter delays. But most patients can get access to any service at any time in the German system. If anything, we have too much capacity in our hospital sector, and most of our urban areas are overcrowded with specialists. So, waiting lists do not really exist.

The *Quarterly*: *Do you use claims data and other patient information to control costs?*

Franz Knieps: In the German system, the health insurance funds have always obtained a lot of data from doctors, hospitals, pharmacies, and other sources. However, they are now allowed to bring all this information together. Doing so has improved their ability to check whether the claims are accurate, but what is even more important is that the aggregated data enables us to steer the system more effectively. In addition, it permits the insurance funds to identify and set incentives for patients, doctors, and hospitals that encourage them to change their behavior. Information technology therefore plays a very important role in our system.

Not everything about data aggregation is working well in Germany yet; for example, we have had problems with data protection. But we believe that data aggregation is quite important for the future of our system.

The *Quarterly*: *What other new ideas is Germany considering to further control health care costs?*

Franz Knieps: I think there are no new, revolutionary ideas in health care policy, but there are some old ideas that are still worth thinking about. When I was a young man, I met Brian Abel-Smith, an influential health economist at the London School of Economics, and I asked him what the major idea in health care policy was. His reply, in essence, was this: "My dear young friend, the only way to organize and pay for health services well is to change the system every second year so that nobody feels comfortable in it." He meant that every so often you have to rearrange the coalition of stakeholders within that system so that nobody feels complacent, nobody feels safe.

In Germany, we recently tried to accomplish this type of rearrangement by introducing greater competition into the system. Patients have been given much greater freedom to choose among the various statutory health insurance funds. They also have greater freedom to choose which services they want to have covered, which doctors they consult, and which hospitals they visit for treatment. As a result, the insurance funds, doctors, and hospitals must now compete for patients. The change has brought a lot of new ideas into the system, and it has increased the pressure on payors and providers to deliver high-quality services efficiently. We believe that the increased competition, in combination with our regulatory safeguards, could enable our health system to reinvent itself, if not year by year, then at least decade by decade.

Whether it makes sense to introduce this type of competition into other health systems, especially those that are centrally run, is not yet clear. It's difficult to give advice to others, but I think that we should all be willing to learn from one another and adopt successful experiments. For example, a centrally run system could introduce competition gradually, perhaps first by bringing in private hospitals. If that went well, the next step might be to increase competition between public and private insurers. Changes can be made step by step, so that the health system can see whether they work or not.

The *Quarterly*: *At this stage, can you precisely quantify the impact of the changes you have discussed, such as drug reference pricing, integrated care, and data aggregation?*

Franz Knieps: No, not yet. At present, it's not clear whether we have produced real cost reductions or whether we have simply slowed the rise in spending.

I am convinced that the cost of health care is not going to go down, but there is much we can do to dramatically reduce the amount of money wasted. And that money can be invested in prevention, rehabilitation, and higher-quality care.