European Integration and Health Care

SOCIAL AUSTERITY VERSUS STRUCTURAL REFORM IN EUROPEAN HEALTH SYSTEMS: A FOUR-COUNTRY COMPARISON OF HEALTH REFORMS

Claus Wendt and Theresa Thompson

Cost containment has captured the attention of health policymakers in most OECD countries, and deliberations about creating powerful financial incentives dominate health care politics. Some European health systems are now implementing hospital payment schemes that mirror the U.S. model of diagnosis-related groups (DRGs) and are raising premiums and copayment levels in an effort to limit public expenditures. Though financial incentives may indeed help rein in health expenditures, focusing predominantly on financial incentives hinders due consideration of needed structural reforms that improve the continuity, quality, and appropriateness of health care service delivery. This article focuses on the structural specifics of two legally enacted health insurance systems (Germany and Austria) and two national health systems (Great Britain and Denmark) to discuss the influence of structural characteristics on cost-containment efforts. Structural reform strategies discussed include increasing reliance on general practitioners, improving coordination of community and hospital-based specialty care, addressing the stark divide between ambulatory and hospital-based care that exists in some European health systems, and improving continuity of care by better integrating medical and social care sectors. Also discussed is the relative focus on financial incentives versus structural deficits in recent European health care reform strategies.

As the major focus of health care politics, health expenditures have recently captured the attention of policymakers in most OECD (Organization for Economic Cooperation and Development) countries. In contrast, political deliberations about reforming the organization and delivery structure of health services are often limited to assessing the impact of cost-containment measures, in that policymakers

International Journal of Health Services, Volume 34, Number 3, Pages 415–433, 2004 © 2004, Baywood Publishing Co., Inc.

frequently seek to curtail those services that, when rationed or eliminated, are least likely to adversely affect insured persons or, at a minimum, are least likely to trigger much public opposition.

For some time now, the debate about reining in health care expenditures has largely centered on creating financial incentives to reduce both the demand for health services by consumers and the supply of services offered by providers. Demand-side incentives include instituting or raising copayments for certain insured health services, particularly dental prostheses, eyeglasses, or more significantly, prescription drugs. Yet especially for pharmaceutical consumption, there is little international evidence to demonstrate that higher copayments successfully moderate utilization (1, 2; note that OECD Health Data 2000 are 1998 data, except 1996 for Denmark), and when this appears to be the case (3), one must question whether attempting to stem the demand for prescription drugs by primarily shifting the cost burden from health insurers to insured persons in the form of higher copayments is really an appropriate health and social policy goal (4, 5).

In the name of cost containment, powerful financial incentives have also been implemented in the hospital sector of many OECD countries, and these incentives have had a strong influence on the availability and provision of inpatient services. In many countries, for example, policymakers have implemented hospital payment schemes that mirror the U.S. model of diagnosis-related groups (DRGs) (6), with the aim of shortening hospital lengths of stay in order to reduce inpatient health care costs. However, the rate of hospital readmissions has subsequently risen in many of these countries, which appears to negate the relative effectiveness of such cost-containment efforts.

The point here is not to argue that financial incentives have no chance of successfully containing health care expenditures, but rather to underscore that focusing predominantly on the cost dimension of the health care demand-supply equation hinders the due consideration of other reform measures, particularly structural reforms that address issues related to the organization and delivery of health services. Since many structural reforms promise to improve both the quality and appropriateness of health care service delivery, greater attention to these reforms may also serve to make long-term cost containment less elusive. Current health care reform efforts in Germany are illustrative of the unbalanced focus on financial incentives versus structural reforms, as health care policy-makers in Germany are set to introduce copayments for each patient-physician contact and raise copayments for prescription drugs, while deficits such as the weak structural link between the ambulatory and inpatient care sectors are not being systematically targeted.

This article compares the health care systems of Germany, Austria, Great Britain, and Denmark (7) in order to highlight two possible structural reforms, both of which concern the link between health expenditures and the delivery of health services. The first structural reform is based on the principle of relying on

general or primary care practitioners (the family doctor system) (1) as the initial point of contact before seeking more specialized health care services. The thesis advanced here is that a dual strategy of promoting greater reliance on general practitioners, while restricting the rights of specialty physicians to establish private practices in ambulatory care, will slow the proliferation of physicians in private practice and will, in the long run, result in a more stable relationship between the provision of health services and the rate of growth of health expenditures. In contrast, when specialty physicians have an unrestricted right to establish private practices wherever they desire, and when patients are free not only to select a primary care physician but to directly access a range of specialty physicians, it is predictable that the number of specialists in ambulatory care will continue to proliferate and effective cost containment over the medium and long term will be substantially more difficult to achieve. This is in part because health services are often duplicated when patients have unhindered access to a range of specialty physicians. Furthermore, a proliferation of specialty practices opens the door for an ever expanding array of services to be offered by both physicians and nonphysician health professionals. A second possible structural reform relates to the overall delivery of inpatient services. This reform supports the second thesis of this article, which is that financial incentives alone are insufficient to reduce the average length of hospital stays. This is so because in the larger context, an intricate relationship exists not only between the hospital and ambulatory care sectors but also between the medical and social care service sectors. This assertion draws on institutional-theoretical approaches that address the central question of how people act given different institutional arrangements (7).

Of the four countries selected for comparison in this article, Germany and Austria both have legally enacted health insurance systems in which general and specialty physicians have (in principle) the unrestricted right to establish private ambulatory care practices, and patients are free to directly access any general or specialist physician. In both the German and Austrian health systems, there is also a comparably stark divide between medical care provided in ambulatory care settings and that provided by hospitals. These two health systems can be contrasted with the national health systems of Great Britain and Denmark to illustrate the close connection between the "type of health system" and the degree of reliance on general or family practice physicians as "gatekeepers" to a broader array of more specialized health care services. In the national health systems of Great Britain and Denmark, for example, specialty physicians have no legal right to establish private practices in ambulatory care, which both curtails the freedom of patients to select and directly access specialists and allows for greater integration of the specialty care offered in ambulatory care settings with that provided by hospitals. We propose that the more successful cost-containment efforts of countries with national health care systems, compared with those of countries with legislated health insurance systems, are not primarily attributable to rationing or limiting health services, but rather are largely a measure of the

418 / Wendt and Thompson

different structure of health care service delivery. In Figure 1, for example, note that Denmark remarkably reduced health expenditures in the early 1980s from an initial relatively high level, while less impressive reductions were achieved in Germany prior to reunification and in Austria in the early 1980s. Neither Germany nor Austria was able to sustain these reductions over the long term. In Great Britain, even though health expenditures continue to rise, the level of expenditures remains the lowest of all four countries. Our focus in this article is on the structural specifics of the health systems of Germany, Austria, Denmark, and Great Britain and on the influence these characteristics exert on cost-containment efforts that target both ambulatory and inpatient care.

SERVICE STRUCTURE AND HEALTH CARE PERSONNEL IN AMBULATORY CARE

Jens Alber (8, 9) advanced the thesis that the division of labor in health care systems predominantly takes two forms. Either a large number of physicians tend to work together with a relatively small number of nonphysician personnel, or a substantially lower number of physicians tend to be supported by a relatively high number of nonphysician health care workers. The data displayed in Figures 2 and 3 lend some support to this thesis, at least until the mid-1980s. Prior to this time, a lower number of health care personnel supported a high number of

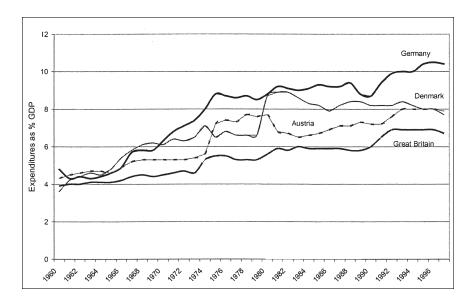


Figure 1. Health expenditures as a percentage of gross domestic product (GDP), 1960–1998. *Source:* OECD 2000 (2).

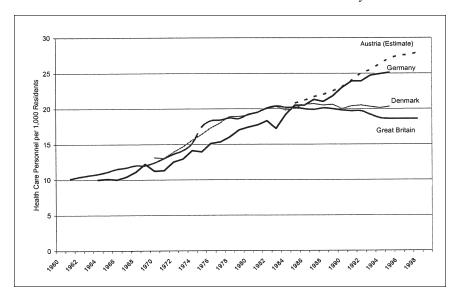


Figure 2. Total nonphysician health care personnel per 1,000 residents, 1960-1998. Source: OECD 2000 (2).

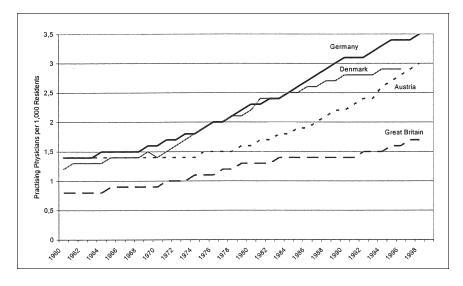


Figure 3. Total number of practicing physicians per 1,000 residents, 1960-1998. Source: OECD 2000 (2).

practicing physicians in Germany as well as in Austria. In Great Britain, the reverse was true, with a large number of nonphysician health workers supporting a relatively low number of physicians per 1,000 residents.

Since the mid-1980s, the total number of health care workers per 1,000 residents has remained relatively constant in both Great Britain and Denmark and has, in fact, slightly declined. In contrast, the total number of health workers in Germany and Austria continues to climb and has actually surpassed the number of health personnel per 1,000 residents in both countries that have national health care systems. Furthermore, in the legislated health insurance systems of Austria and Germany, an already dense concentration of physicians continues to climb and in 1998 was, respectively, 3.0 and 3.5 physicians per 1,000 residents. In Great Britain, the ratio of 1.7 physicians per 1,000 residents is remarkably lower, while in Denmark physician density has remained at a consistently high level ever since its national health system was launched in 1972. The density of physicians in Denmark, at 2.9 physicians per 1,000 residents, is today only slightly lower than in both countries that have legislated health insurance systems (2). Thus contrary to the thesis of Jens Alber, the density of both physicians and nonphysician health care personnel is today higher in the two health insurance systems than in the two national health systems considered here. One must also note that in Denmark less than 6 percent of all practicing physicians (907 of 15,390) are specialists working in private practice settings, whereas nearly 58 percent of all practicing physicians—most of whom are specialists—are employed in hospitals (10; data are for 2000). Similarly, in Britain's NHS, specialists are largely hospital-based, with virtually no specialists other than dentists and ophthalmologists working in private practice settings (11). In Germany, by contrast, 39 percent of all physicians are self-employed and 48.5 percent of these are specialists who work in private practice settings, while 47.8 percent of all physicians are employed by hospitals (12; data are for 2001). Similarly in Austria, nearly 50 percent of all self-employed physicians contracted with the social health insurance plan are specialists working in private practice (13; data are for 2001).

These data support the hypothesis that a high number of physicians in private practice drives the volume of medical care services provided (14, 15) and opens the door for additional services to be offered by other health professionals. While patients normally initiate health system contact, it has been shown that doctors determine the amount of resources used to treat patients. "It has long been recognised that the more doctors there are, the more resources are likely to be authorized" (16, p. 26). The high number of nonphysicians in Germany and Austria from the mid-1980s onward can be seen as an effect of the high density of specialty physicians in private practice. Physician density could be stabilized and the total number of health personnel curtailed over the medium and long term, if the German and Austrian health systems were to strengthen reliance on primary care by requiring patients to first seek care from a primary care physician before accessing a wider array of specialty services.

Indeed, it is not only the density of physicians in private practice that influences the quantity and thus costs of delivered health services, but also the method of physician remuneration. As a rule, primary care physicians who act as health system gatekeepers are remunerated on a per capita basis. In Great Britain, primary care physicians receive both a per diem rate for operating a private practice and a per capita rate for each person on their list of patients for whom they are responsible to provide all primary care services. In Denmark, a uniform remuneration schedule for health services is coupled with a per capita payment scheme. Both of these payment structures serve to curtail the overall number of physician-prescribed services and in turn reduce the total number of nonphysician health personnel. This effect is reflected in a range of expenditure components, including lower pharmaceutical costs and lower spending on other physician-prescribed health services. Denmark and Great Britain, for example, both rely heavily on general practitioners as health system gatekeepers, and both have substantially lower rates of pharmaceutical consumption than do health systems in which insured persons are unrestricted in their ability to directly access both primary care and specialty physicians. Despite the high and ever-rising copayment levels for pharmaceuticals in the German and Austrian health systems, policymakers have been unable to curtail the utilization rates for prescription drugs. Instead, these rising pharmaceutical copayment levels have served only to shift this particular cost burden from the public purse to the private sector, in that public sickness funds now pay a lower percentage of total pharmaceutical costs, while insured persons face growing out-of-pocket costs.

Hirschman's analytical schema (17, 18) of "exit" and "voice" can be employed to help explain the persistently high level of expenditures for physician-prescribed services in Germany and Austria (7, 19). The significance of this schema when applied to health systems in which patients are free to access any physician is that patients who are dissatisfied with the medical treatment they receive, including when physicians are unwilling to prescribe requested medications or therapeutic services, can simply decide to immediately take the "exit-option" and seek care from a different physician. In such a case, the exit-option acts as a financial penalty for physicians and may threaten their ability to attain a desired level of income. To the degree that the exit-option is exercised, and to the degree that it poses a financial threat to a private practice physician, particularly in the negotiated fee-for-service reimbursement schemes used in the legislated health insurance systems of Germany and Austria, an incentive is created for physicians to be more responsive to patients' demands. This, in turn, may facilitate excessive patient demand and lead to an overuse of physician-prescribed services. In the national health systems of Great Britain and Denmark, the exit-option is constrained by a greater reliance on primary care physicians as health system gatekeepers. As a rule, patients in these systems are permitted to select or change their primary care physician only once per year and are consequently more apt to exercise the "voice-option" when dissatisfied with the medical care they receive.

According to Hirschman (17, 18), the voice-option facilitates greater discussion between patients and physicians. Consequently, patients who exercise the voice-option can actually help improve health care services over the medium and long term because by complaining and verbalizing about how the system fails to meet their needs, patients offer valuable information to both care providers and health system managers about how service delivery can be improved. Paradoxically, while the threat of exit plays an important role in making providers more responsive to patients' needs and desires, the potentially more constructive voice-option is weakened whenever it is simply too easy for patients to resort to the exit-option. This is because once patients exit and terminate any patient-physician relationship, they can no longer influence the form and quality of delivered health services.

Patients' demand for physician services can also be evaluated by comparing the number of patient-physician contacts in each of the four health systems considered. In Germany, the average number of patient-physician contacts is 11.5 per year, which is twice as high as in Great Britain or Denmark, where the average is 5.1 and 5.2 contacts per year, respectively (20, 21; data for 1988). Assessing the number of annual contacts between patients and specialty physicians lends additional support to the link between high physician density, free patient selection of any physician, and fee-for-service payment structures. According to Sandier (22), for example, the average annual number of contacts between patients and specialty physicians at the end of the 1980s was 5.0 in Germany, 1.2 in Great Britain, and 0.6 in Denmark. Surprisingly, the equivalent number in Austria was as low as in both national health care systems, even though the Austrian system has institutional conditions that are more similar to the German health system. Though the Austrian data require further analysis, a possible explanation is that patients in Austria incur a small out-of-pocket charge or user fee at their very first physician contact, which may deter patients from consulting multiple physicians for the same complaint. Furthermore, the introduction of electronic health insurance cards in Austria in 2003 makes the tracking of multiple physician contacts technically more feasible than in the past, when patients were issued certificates to access health services. However, electronic insurance cards have also been used in Germany since 1993, but these cards still do not provide physicians with information on past consultations, meaning that there is still no measure in place to prevent duplicate examinations (23) or multiple consultations for the same complaint.

Opinion poll data show that the demand for medical care services is sensitive to the institutional structure of the health system (24). In Germany, despite the already high average number of patient-physician contacts per year, dominant public opinion is that this number is not excessive and that patients have an explicit right or claim to access all available health services, including those that may be only marginally beneficial. Of the individuals polled in Germany, only 33.5 percent said patients' demand for medical care services was too high, compared with 64.2 percent of those polled in Denmark, 51.2 percent in

Great Britain, and 54.2 percent in Austria (24). The low number of annual patient-physician contacts in these latter countries is consistent with the predominant idea that patients not only have the right to obtain health services, but also have the duty to exercise responsible demand. The legislated health insurance system of Austria again stands out as an exception. Though the difference in average annual patient-physician contacts between Germany and Austria requires further analysis, it is again conceivable that the copayment structure in Austria helps mitigate the claim or perceived "right" of insured persons to access all possible medical care services. Another plausible explanation is that Austria's health system has continued to evolve in the direction of a citizens' insurance (Bürgerversicherung) ever since the 1960s (25), and it is conceivable that integrating the entire population into a single insurance system may help sever the link between the level of insurance premium paid and the demand or perceived right to access services. In Germany's legislated health insurance system, where premiums are income-related and type of employment is strongly related to participation in a public versus private health insurance scheme, there is evidence that higher premium levels are associated with a perceived "right" to obtain more extensive services, a relationship that makes cost containment much more elusive.

SERVICE STRUCTURE AND HEALTH CARE PERSONNEL IN HOSPITAL-BASED SETTINGS

Another means by which structural reforms can reduce health expenditures relates to the provision of hospital-based specialty care, or more specifically to the connection between specialty care provided in ambulatory versus hospital settings. System-specific differences are again identifiable in the health systems of Germany, Austria, Denmark, and Great Britain. In Great Britain and Denmark, for example, specialty care for both ambulatory and nonambulatory patients is almost exclusively provided in hospital-based settings, and the specialty care provided by hospital-based physicians is considerably more integrated with that provided by specialists in community-based private practices. In contrast, specialty care for ambulatory patients in Germany and Austria is largely provided outside hospitals by specialists in community-based private practices, and this care is significantly *less* integrated with the care provided by hospital-based specialists. Yet while structural reforms in the organization and delivery of health services promise to improve the efficiency of delivered services, particularly specialty services, health care policymakers tend to focus less attention on structural issues in lieu of a greater focus on creating financial incentives such as those arising from the implementation of DRG payment schemes. The implication of this is that policymakers choose to forego an important policy-steering opportunity, while implicitly accepting undesirable secondary effects that are associated with the creation of such financial incentives. This thesis is appraised by considering hospital lengths of stay and the distribution of health care personnel.

424 / Wendt and Thompson

The distribution of total health care personnel in Great Britain and Denmark reflects the predominance of hospital-based service delivery in these national health systems. In both of these countries, approximately 70 percent of all health care workers are hospital-based, compared with only 50 percent in Germany and Austria. With the implementation of DRG reimbursement models some years ago in Great Britain and Denmark, the average length of hospital stays was shortened. Average lengths of hospital stay were also shortened in both legislated health insurance systems, yet average acute care stays are still 11 days in Germany, which is more than twice as high as the 5.0 days in Great Britain and the 5.4 days in Denmark (2). Following implementation of a DRG reimbursement scheme (26) in 1997, Austria managed to cut its average acute care hospital length of stay to about 7 days, which is considerably lower than that for acute care cases in Germany.

Beyond DRGs, hospital lengths of stay are also related to the density of health care personnel per hospital bed, which in turn reflects the intensity of care. In Austria, the average number of health workers per hospital bed involved in acute care delivery is 2.0, which is higher than the 1.5 workers per bed in Germany. In contrast, the average number of health personnel per hospital bed is 3.7 in Great Britain and 3.2 in Denmark. The relationship between intensity of care and

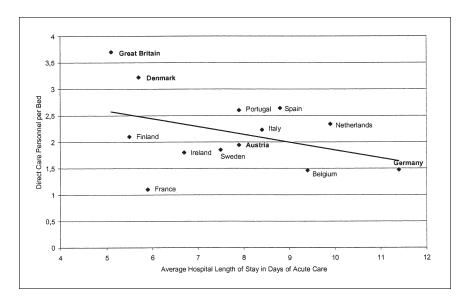


Figure 4. Direct-care hospital personnel per bed and average hospital length of stay in (current) European Union member countries, 1995. Correlation coefficient r = -0.39. For Sweden, only 1985 data are available; no data are available for Greece. Luxembourg is not included, because a high proportion of the population may receive health services from outside the country. *Source:* OECD (2).

average length of hospital stay can also be observed by comparing all European Union member countries. In Figure 4, Germany stands out among E.U. countries in that a relatively low level of care intensity is coupled with relatively longer hospital lengths of stay.

To date, there is little proof that reduced hospital lengths of stay produce direct long-term cost savings. In Austria, for example, the hospital readmission rate has climbed as average lengths of stay have been cut, resulting in an overall higher hospital admission rate. Developments in Great Britain and Denmark nonetheless suggest that climbing hospital readmission rates are not a necessary consequence of shorter hospital lengths of stay. Following a reduction in the length of hospital stays in Great Britain and Denmark, hospital admission rates stabilized at 150 per 1,000 residents in Great Britain and 200 per 1,000 residents in Denmark, while in Germany the rate is 220 per 1,000 residents and in Austria it has climbed over the past few years to 280 per 1,000 residents (2).

Securing long-term health care cost savings thus necessitates that policymakers also consider structural reforms in the organization and delivery structures of health care services. Of central importance is the aim of improving the integration and cooperation between inpatient medical care services and community-based medical and social care services for both ambulatory and nonambulatory patients. In Great Britain and Denmark, a comprehensive array of services is available at the community level to provide ongoing care after hospital discharge. When inpatient medical care is no longer required, not only is it more cost-efficient to ensure that a network of community-based care services is available, but patients often prefer community-based to hospital-based long-term care services. In Denmark, a greater integration of hospital-based and community-based care providers was ensured by establishing a structure of sanctions. Day hospital care has been expanded, and the country has one of the most developed systems of community care. Counties are responsible for hospitals, and municipalities invest heavily in home nursing, public health nursing, home helpers, and homes for the elderly. Most municipalities have developed 24-hour home nursing services. Since January 1993, if a hospital considers a patient ready for discharge and alternative community-based arrangements for care are not available, the hospital can charge the municipality for each additional day of care provided. This has led municipalities to make less expensive alternatives available, for example, to increase the number of nursing home beds for the aged (16, p. 22).

Hospital and community care are not closely integrated in either of the two legislated health insurance systems considered here, and this is likely why the hospital admission rate in Austria, unlike in Great Britain or Denmark, has continued to climb over the past few years. Measures to improve community-level care include those that enhance the integration of services offered in the health and social districts (Gesundheits- und Sozialsprengel) (27). As DRG payment schemes are today being introduced in Germany, it is expected that hospital admission rates will climb just as they have in Austria, because hospital lengths of stay will be dramatically shortened while the infrastructure of community care remains underdeveloped (7).

In the national health systems of Denmark and Great Britain, greater integration between ambulatory care and inpatient medical care has produced cost savings. Although an extensive amount of preadmission and postdischarge care is currently provided in ambulatory care settings in both Germany and Austria, a distinct structural division remains in these legislated health insurance systems between ambulatory specialty care provided in community-based private practice settings and that provided in hospital-based settings. This structural division not only prolongs hospital lengths of stay but also contributes to a duplication of medical care, because ambulatory care specialists often repeat medical procedures and tests that patients have already had as part of their inpatient hospital stays. The artificial division between ambulatory and inpatient care in Germany and Austria thus creates a basis for the "excess provision of care" (26).

Cost-efficient processes need not necessarily compromise quality of care and can in fact improve quality by enhancing the continuity of care. In Great Britain and Denmark, for example, continuity of care is enhanced because hospitals are in part financially responsible for the ongoing community-based care that patients receive, which enables hospital physicians to discharge patients earlier with less concern about compromising continuity of care. In addition, continuity of care is enhanced by a greater reliance on primary care providers, who not only act as "gatekeepers" to more advanced services but also manage the ongoing community-based care that patients require following hospital discharge. Primary care practitioners in Denmark and Great Britain are charged with keeping abreast of all medical care that their patients receive so that they can better manage necessary ongoing care and coordinate information so as to complement the care provided by other service providers such as physical therapists. In Germany and Austria, there is, as a rule, no post-discharge contact between patients and their hospital-based care providers and minimal communication between hospitalbased and community-based care providers. These factors jeopardize the continuity of care. In addition, both the "gatekeeping function" and the "coordination function" of primary care practitioners remain underdeveloped in the German and Austrian health systems.

Other general relationships between health expenditures and the organization and delivery structures of health services are demonstrated by comparing E.U. countries in terms of the percentage of total health care workers employed in community-based settings. As Figure 5 shows, total expenditures are positively correlated with the percentage of health personnel employed in community-based settings. Particularly in Great Britain, where a comparatively low percentage of nonphysician personnel are employed outside hospitals, total health expenditures are also low. In contrast, expenditures tend to be higher in E.U. countries where a high percentage of health personnel are employed in community-based settings, with Germany having the highest level of expenditures. This is in part due to the

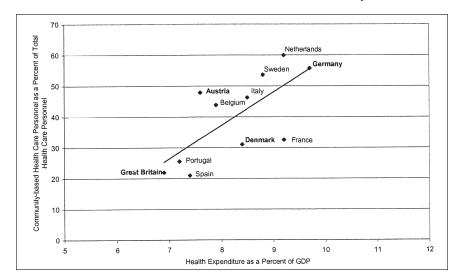


Figure 5. Health care expenditures and community-based employment of health care workers in (current) European Union member countries, 1992. Correlation coefficient r = 0.71. No data are available for Finland, Greece, or Ireland. Luxembourg is not included, because a high proportion of the population may receive health services from outside the country. *Source:* OECD 2000 (2).

absence of any gatekeeper role for primary care physicians in the legislated health care systems of Austria and Germany, which contributes to excessive demand by permitting patients to access multiple physicians for the same presenting complaint, all of whom may prescribe a range of additional services to be provided by community-based nonphysician providers. By contrast, synergistic effects may also occur in hospitals and other institutional settings where there is likely to be greater cooperation among nonphysician health personnel and a more efficient use of medical equipment (7).

Since 1992, the time period for which most current health care data are available for E.U. countries, health expenditures as a percentage of gross domestic product (GDP) have risen in both Austria and Germany, while they have declined in Denmark. Not only has the growth in health expenditures not been stabilized in Germany and Austria, but it is furthermore unlikely that health care costs will be successfully contained in the future, so long as such a high number of specialty physicians and nonphysician health personnel are employed in community-based private practice settings. This is in part because the density of specialists in private practice drives the demand for health services, and in part because it contributes to the duplication of health services and a less efficient use of technical medical equipment, making efficiency and cost-containment goals all the more elusive.

CONCLUSIONS

The four-country comparison presented here suggests that health care reform measures that predominantly rely on creating financial incentives will be insufficient to stabilize health expenditures in the coming years. Health care policymakers must pay more attention to structural reforms that over the long term promise to enhance health care delivery, improve continuity of care, and contain total health care expenditures. In this context, we have advanced five central theses (10, 28, 29).¹

1. A low density of physicians in private practice coupled with a fully institutionalized reliance on general practitioners as health system gatekeepers—the family doctor system—appears to offer significant cost-containment potential. Choosing and establishing a relationship with a primary care physician or general practitioner-led primary care team can have positive policy-related results if patients develop stronger commitments to what is no longer "the" physician but "their" physician. Possible secondary effects include the delivery of more comprehensive care, greater continuity of care that incorporates both preventive and curative health services, and consequently improved quality of care. Stronger relationships between patients and their primary care provider can also lower overall health care costs by improving the accuracy and timeliness of diagnoses, improving patient management, and promoting patients' compliance. In contrast, when insured persons are free to select any physician and directly access a range of specialists, a situation is created in which unlimited access is available to an ever more extensive array of costly services, including the expanding range of therapeutic services offered by a growing number of nonphysician health professionals. "In this latter instance, the combination of patients hopping around from specialist to specialist in search of coordinated care, with physicians earning a fee-for-service payment for each extra diagnosis test or therapeutic effort, is likely to produce high costs, low continuity, and less favourable rates of patient compliance" (30, p. 202). Starting in 2004, patients in Germany will have to pay an extra fee if they visit specialists without first consulting their family doctor. This financial incentive will presumably strengthen the family doctor principle. However, within the framework of this four-country comparison, it cannot be conclusively determined what the cost-stabilizing effect will be of implementing a family doctor system at a point in time when an expansive array of health services is already available and the associated cost dynamic has already been set in motion.

¹ These theses are preliminary in that they are based on 2000 *OECD Health Data*, a database that is continuously updated as national data become available. Thus criteria of comparability and reliability cannot be guaranteed. The high number of doctor-patient contacts in Germany, for example, is evident in *OECD Health Data 1998* and the BASYS 1998 data but not in *OECD Health Data 2000*. Nonetheless, *OECD Health Data* represents the best available data set for international comparisons of health systems.

- 2. Beyond the possible cost-containment benefit of the "gatekeeper" role, general practitioners also have an important mediating function. In health systems where services are increasingly differentiated and provided by highly trained specialists, general practitioners are suitable candidates to assume the ever more important role of coordinating therapeutic services, ensuring the flow of information between practitioners, and managing ongoing care. In both national health systems considered in this article, general practitioners have proved to be suitable actors to assume this role, and have been supported in Great Britain via the creation of "primary care groups" and at the community level in Denmark by institution of "health visiting schemes." However, mandating the use of general practitioners as health system gatekeepers in systems where free choice of physician is well established could predictably trigger considerable resistance. An alternative way of introducing a family doctor system, as demonstrated in Denmark, is to introduce the choice of mandatory use of a general physician as the first point of contact (without a copayment) along with the choice of accessing any physician (with a copayment penalty for direct access to specialists). On the basis of such copayment rules, more than 95 percent of Danes chose to first see a family physician.
- 3. Beyond enhancing patient-physician relationships, closer cooperation between health care service providers, particularly private providers in specialty practices, is also of central importance to improving the quality and cost-efficiency of health services. Possible synergistic effects between quality of care and costefficiency are especially relevant for hospitals and health centers in the area of differential use of high-tech medical equipment. In Great Britain and Denmark, for example, where specialty care for both ambulatory and nonambulatory patients is exclusively provided in hospital settings, the number of computer tomography (CT) studies is correspondingly 0.6 and 0.9 per 100,000 residents. This is markedly lower than in Germany or Austria, where the number of studies is, respectively, 1.7 and 2.5 per 100,000 residents (2) and where specialty care for ambulatory patients is largely provided by specialists in solo private practice. The number of CT studies done in Great Britain and Denmark is also influenced by negotiated practice guidelines, the use of which is not yet mandated in Germany (31). Implementing and mandating the use of negotiated practice guidelines cannot be interpreted as reducing the adequacy of care provided in national health care systems, because the high number of CTs in the legislated health insurance systems can just as easily be interpreted as excessive use. In Germany and Austria, where physicians in private practice are reimbursed on a fee-for-service basis, incentives exist for the excessive utilization of high-tech medical equipment in an effort to maximize individual income. The 2003 German health care reforms fail to target this deficit.
- 4. Long-term reductions in hospital lengths of stay cannot be achieved by relying solely on financial incentives, such as those that arise from the implementation of DRG payment schemes. Nonetheless, hospital use should be reserved

for the provision of high-intensity care, and adequate ambulatory medical care or nursing home care should be made available to provide needed postdischarge care. Earlier hospital discharge is facilitated when adequate ongoing ambulatory care is available, when it can be assured that the level of medical oversight in ambulatory care is as appropriate as that provided in hospital settings, and/or when ongoing care is coordinated by personnel who work for the same service organization. Such assurances will likely remain elusive, however, so long as there is a strict and artificial divide between hospital-based specialty care and care provided by specialists in private ambulatory care practices, as is the case in Germany and Austria. A first step to bridge this artificial divide would be to improve the flow of information between hospital-based and ambulatory-care-based providers to reduce the duplication of services, perhaps by improving the information transmitted on electronic insurance cards. Equally important is the degree of integration between ambulatory care, inpatient care, and home care. For example, hospital stays are often extended for reasons unrelated to medical need, but rather because it is unclear which organization can and will provide necessary ongoing community-based care. This is frequently the case in Germany and Austria, despite the recent expansion of outpatient services. In terms of providing needbased home care services, especially promising developments have occurred in Great Britain and Denmark, where the infrastructure of health services has been institutionalized as a local-level function. In Denmark, the integration of inpatient medical care with outpatient ambulatory and nonambulatory care has been strengthened by the fact that municipalities now face financial sanctions if they fail to ensure the availability of a sufficient number of outpatient beds.

5. In terms of structural change, the local level is a particularly important part of the overall health care system. Not only must there be significant cooperation among local service providers, but benefits can also be realized by strengthening contact between patients, health policy actors, and health care service providers. In Denmark, and to a growing degree also in Great Britain, such contact is facilitated by the development of "community health councils." Through these councils, in an otherwise very hierarchical system, patients in Britain can gain greater access to responsible health policy actors than is possible in the more structured legislated health insurance systems, where holding responsible policy actors accountable can be considerably more difficult. For patients in legislated health care systems, it is often not clear whether health politicians or physicians' associations and health insurance carriers are responsible for many of the health system decisions made. Germany, particularly at the regional and local levels, has an array of health insurance funds or "sickness funds," all of which compete for patients, a competition that will become even more vigorous as a consequence of the 2003 health reforms. In contrast, Austria has one health insurance fund per region responsible for financing a major portion of the health system, making it considerably easier to negotiate a regional and local structure of services than is possible in Germany. This is demonstrated by the

establishment of health and social districts (Gesundheits- und Sozialsprengel) in Austria (27).

Altogether, the examples provided in this comparative look at four European health care systems suggest that instead of solely or primarily relying on the creation of competitive conditions, a number of structural reforms should be instituted to enhance the provision of goal-oriented, cost-efficient health care across a continuum of needs. At first glance, this comparison suggests important lessons for the legislated health insurance systems of Germany and Austria. On closer analysis, potential lessons for reform of the British health care system are also revealed. Furthermore, this four-country comparison shows that Denmark's national health system, which has continuously evolved since its launching in 1972, reflects a service-delivery structure that has a high level of cooperation on the local level and in which competition plays a complementary rather than a central role, coming into play mostly in terms of making additional private sector insurance coverage available. In Great Britain, the local level has long been neglected, though recent efforts have attempted to strengthen the local role within an NHS that has traditionally been very hierarchical. The role of municipalities in providing community-based care services in Denmark offers a lesson for Great Britain on how financial sanctions can be used to shorten waiting periods for postdischarge community-based services. For Germany and Austria, promoting a more central role for general practitioners not only could produce positive financial benefits but could enhance the flow of health information and improve the management of ongoing community-based care. In the context of inpatient hospital care, it is disputable whether strengthening the capacity for preadmission and postdischarge care in ambulatory care will stabilize health expenditures in the long term, so long as a high number of specialty physicians remain self-employed in private practice and their budgets, which are separately negotiated between representatives of private practice physicians and representatives of health insurance funds, remain independent of efforts to improve the efficiency of inpatient and outpatient hospital care.

REFERENCES

- 1. OECD. New Directions in Health Care Policy. OECD Health Policy Studies No. 7. Paris, 1995.
- 2. OECD. OECD Health Data 2000: Comparative Analysis of 29 Countries. Paris, 2000.
- 3. Kupor, S., et al. The effect of copayments and income on the utilization of medical care by subscribers to Japan's national health insurance system. Int. J. Health Serv. 25(2): 295-312, 1995.
- 4. Stoddart, G. L., Barer, M. L., and Evans, R. User Charges, Snares, and Delusions: Another Look at the Literature. Center for Health Services and Policy Research, University of British Columbia, Vancouver, 1993.
- 5. Rice, T. The Economics of Health Reconsidered. Health Administration Press, Chicago, 1998.

- Enthoven, A. C. What can Europeans learn from Americans? In OECD: Health Care Systems in Transition—The Search for Efficiency. OECD Social Policy Studies No. 7, pp. 57–71. OECD, Paris, 1990.
- 7. Wendt, C. Krankenversicherang oder Gesundheitsversorgung? Gesundheitssysteme im Vergleich. Westdeutscher Verlag, Wiesbaden, 2003.
- 8. Alber, J. Die Gesundheitssysteme der OECD-Länder im Vergleich. In *Staatstätigkeit: International und historisch vergleichende Analysen*, ed. M. G. Schmidt, pp. 116–150. Westdeutscher Verlag, Opladen, 1998.
- 9. Alber, J. Die Steuerung des Gesundheitssystems in vergleichender Perspektive. *Journal für Sozialforschung* 29(3): 259–284, 1989.
- 10. NOMESCO. Health Statistics in the Nordic Countries. Copenhagen, 2001.
- 11. Office of Health Economics. Compendium of Health Statistics, Ed. 10. London, 1998.
- 12. Bundesministerium für Gesundheit. Statistisches Taschenbuch Gesundheit. Bonn, 2002.
- 13. Hauptverband der österreichischen Sozialversicherungsträger. Die österreichische Sozialversicherung in Zahlen. Vienna, 2003.
- 14. Evans, R. G. Supplier induced demand: Some empirical evidence and implications. In *The Economics of Health and Medical Care*, ed. M. Perlman. Macmillan, London, 1974.
- 15. Evans, R. G. Marketing markets, regulating regulators: Who gains? Who loses? What hopes? What scope? In *OECD: Health Care Reform: The Will to Change*. OECD Health Policy Studies No. 8, pp. 95–114. OECD, Paris, 1996.
- OECD. The Reform of Health Care Systems: A Review of Seventeen OECD Countries.
 OECD Health Policy Studies No. 5. Paris, 1994.
- 17. Hirschman, A. O. Exit, Voice, and Loyalty: Responses to Declines in Firms, Organizations, and States. Harvard University Press, Cambridge, 1970.
- Hirschman, A. O. Rival Views of Market Society. Harvard University Press, Cambridge, 1992.
- Wendt, C. Health Services for Children in Denmark, Germany, Austria and Great Britain. MZES Working Paper 4. Mannheimer Zentrum für Europäische Sozialforschung, Mannheim, 1999.
- 20. OECD. OECD Health Data 1998: Comparative Analysis of 29 Countries. Paris, 1998.
- 21. BASYS. Gesundheitssysteme im internationalen Vergleich: Übersichten 1997. Augsburg, 1998.
- 22. Sandier, S. Health service utilization and physician income trends. In *OECD: Health Care Systems in Transition—The Search for Efficiency*. OECD Social Policy Studies No. 7, pp. 41–56. OECD, Paris, 1990.
- 23. Beske, F., and Hallauer, J. F. Das Gesundheitswesen in Deutschland: Struktur—Leistung—Weiterentwicklung, Ed. 3 Deutscher Ärzte-Verlag, Cologne, 2001.
- 24. Central Archive for Empirical Social Research. Eurobarometer 44.3: Health Care Issues and Public Security, February—April 1996.
- Tálos, E. Vom "goldenen Zeitalter" zur Krise. In Österreich 1945–1995, Gesellschaft, Politik, Kultur, ed. R. Sieder et al., pp. 537–551. Verlag für Gesellschaftskritik, Vienna, 1995.
- 26. Badelt, C., and Österle, A. *Grundzüge der Sozialpolitik: Spezieller Teil—Sozialpolitik in Österreich.* Manzsche, Vienna, 1998.
- Bundesministerium für Gesundheit. Das Gesundheitswesen in Österreich. Vienna, 1996.

- 28. Schieber, G. J., and Poullier, J.-P. Overview of international comparisons of health care expenditure. In OECD: Health Care Systems in Transition-The Search for Efficiency. OECD Social Policy Studies No. 7, pp. 9-15. OECD, Paris, 1990.
- 29. Saltman, R. B. The context of health reform in the United Kingdom, Sweden, Germany, and the United States. Health Policy 41: 9-26, 1997.
- 30. Saltman, R. B. Patient choice and patient empowerment in northern European health systems: A conceptual framework. Int. J. Health Serv. 24(2): 201–229, 1994.
- 31. Statistisches Bundesamt. Gesundheitsberichterstattung des Bundes. Metzler-Poeschel, Stuttgart, 1998.

Direct reprint requests to:

Dr. Claus Wendt Universitat Bremen Centre for Social Policy Research Sonderforschungsbereich 597 Linzer Str. 9A 28359 Bremen, Germany

e-mail: claus.wendt@sfb597.uni-bremen.de