Patient power

By William N. Higbie

Few industries are as fragmented and in need of reform as health care. But with their emphasis on connected health care, a small group of high-performance providers is revolutionizing the way quality health care can be delivered.

Pick up a newspaper or magazine almost anywhere in the developed world and the message is the same: Health care costs are soaring while the quality of care and access to services is moving in the opposite direction. The situation is indeed alarming—but not everywhere. Through Accenture's continuing research into the industry-specific attributes of high-performance business, we have uncovered some health care providers that significantly outperform their peers. Their approach to health care delivery may offer some lessons to other providers—and, if adopted, it could eventually help ease the looming crisis.

Health care spending already consumes nearly 10 percent of the GDP of most rich nations—and this percentage, by all projections, will continue to grow. While there have been many improvements during the past 30 years—including increasing life expectancy and decreasing infant mortality—health care costs continue to outpace inflation. We're all living longer, and over-65s cost three to four times as much to treat as younger patients. What's more, the disparity in medical costs between the older, health care-consuming public and younger taxpayers is widening as baby boomers approach old age.

But skyrocketing costs are only part of the picture. Access to health care is suboptimal from Boston to Brisbane. In Western Europe, despite record amounts of government health care funding, waiting lists for some types of nonemergency surgery—hip and knee replacements and cataract removals, for example—stubbornly refuse to shrink. In parts of Asia, the number of patients in emergency rooms who experience long waits for admission has swelled significantly. In the United States, where 45 million people are uninsured, more than half of low-wage earners lack health insurance because they fall into the gap between a private system that primarily covers corporate employees and a public system focused on the elderly and the indigent.

The funding and delivery models of developed countries' health care systems vary enormously. The United States is, for the most part, a private market. Elsewhere, health care services are largely publicly owned and funded, primarily through taxation (in countries like Canada, Britain and Sweden, for instance) or compulsory contributions (in Germany, France and the Netherlands).

Yet the quality of care in almost all modern health systems is declining. Historically, modern medical care has been organized and delivered in silos based on profession, specialty and location. Look under the covers of most modern hospitals today and you will find byzantine complexities. For example, in one Australian hospital it takes 107 separate steps and 11 different people to book and manage an outpatient consultation, and 65 steps and 10 people to conduct a routine chest X-ray.

Funding models based on individual patient-clinician interactions only

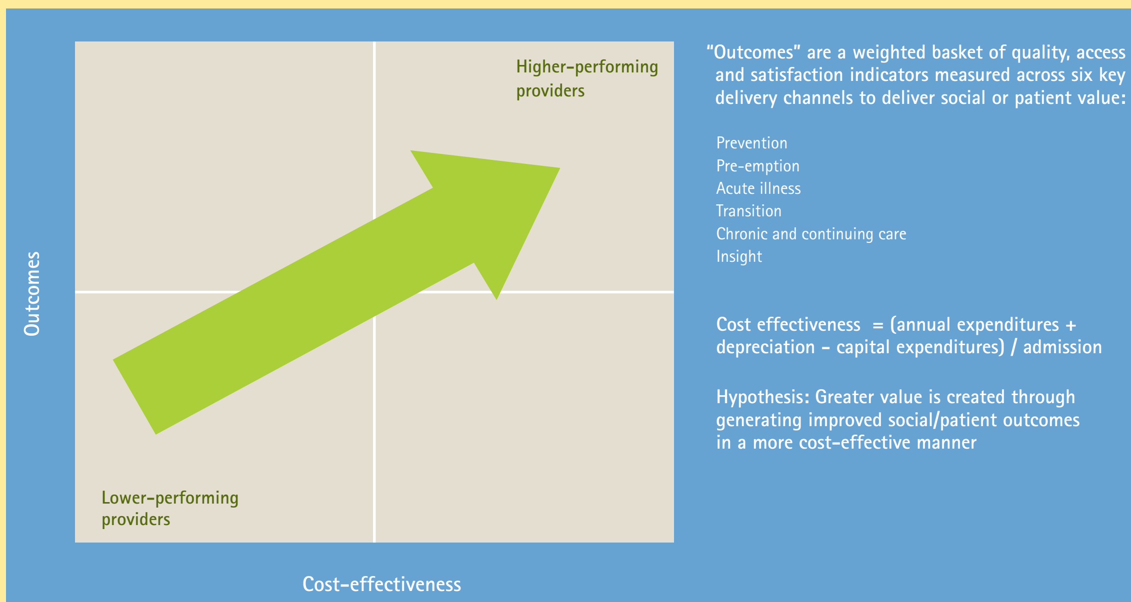
About the research

Defining high performance for health care providers is fraught with difficulty. Differing funding regimes and delivery models make international comparisons a significant challenge (see story).

However, an extensive survey of leaders in the Accenture Providers & Government Health operating group in North America, Europe and Asia has helped us isolate some key market trends. On the basis of these findings, we have developed an evaluation model that cross-references health outcomes (factors such as quality, access and satisfaction) with cost-effectiveness, and provides the basis for comparison and tracking over time. We are now pursuing a more extensive global study of high performers using this model.

Health systems that provide better patient outcomes (in terms of quality access and service) in a more cost-effective manner create value in this industry. Overall outcomes are a weighted basket of indicators. Cost-effectiveness is defined as annual expenditures plus depreciation, minus capital expenditures.

The Accenture Health Care Provider Value Model



"Outcomes" are a weighted basket of quality, access and satisfaction indicators measured across six key delivery channels to deliver social or patient value:

- Prevention
- Pre-emption
- Acute illness
- Transition
- Chronic and continuing care
- Insight

Cost effectiveness = (annual expenditures + depreciation – capital expenditures) / admission

Hypothesis: Greater value is created through generating improved social/patient outcomes in a more cost-effective manner

NSW Health: Unblocking access

Australia's NSW Health, one of the world's largest health care providers, serves more than 6.6 million people in New South Wales, the country's most populous state. NSW Health has a budget of nearly $10 billion, and it employs about 90,000 people.

Until recently, however, this health care giant was suffering a serious case of so-called access block. The percentage of patients admitted through emergency who then had to wait longer than eight hours for a hospital bed was steadily increasing. In some of NSW Health's Sydney hospitals, access block exceeded 50 percent—well above the state department of health's target of 20 percent. And the swelling numbers were affecting other metrics, like ambulance to emergency handover times, elective surgery cancellations and inpatient bed utilization.

In May 2004, NSW Health embarked on an aggressive reform program designed to reengineer the flow of patients across the entire system: from the community through emergency departments, inpatient wards, transitional care facilities and back to the community.

Organizational excellence and end-to-end patient flow management—both core capabilities that distinguish high performers (see story)—drove NSW Health's success in this reform endeavor. The provider's strengths in program governance, performance management and accountability, coupled with a broad and participatory approach to solutions development, created sustainable approaches that boosted patient flow management and significantly improved patient access.

Among other measures, NSW Health has set up special patient flow units that are supported by time management benchmarks to drive accountability. It has also introduced key performance indicator "dashboards" to provide immediate views of such critical patient flow data as bed availability, planned admissions and patients waiting in emergency. By adopting regular bed and service reconfiguration planning, it has better aligned delivery resources with demand. And a new focus on individual patient journeys means specific protocols or models of care for specific patient populations.

The upshot: Access block already has been reduced in 7 of the 10 hospitals targeted. So has the average length of inpatient stay across a range of sites and clinical specialties.

serve to reinforce the complexity. Services are poorly integrated, and patient information is not widely shared. Breakdowns in communication are common, particularly when a patient is handed from one care setting to the next. The upshot: confusion, frustration and delays for both patients and care providers.

Indeed, few industries are so fragmented. And reform remains elusive, which makes the handful of providers that Accenture characterizes as high performers all the more noteworthy.

Because of all these factors, identifying the high performers in this sector is also an exercise in complexity. Health care is one of the few industries that defy Accenture's standard performance measurement metrics, which in the past we have successively applied to industries as diverse as banking, utilities, chemicals and retail hypermarkets. The health care industry varies so much from country to country that it is not easy to make international comparisons, although we have created some metrics that offer meaningful insights (see "About the research," page 11). Thus far, our research strongly suggests that high performance in this sector is best defined in terms of *how well providers handle the intricate handoffs of an extended "patient journey."*

That journey begins, of course, with disease prevention and staying well. But it also encompasses the provision of primary care services, the management of acute illness and the transition through rehabilitation to recovery. While the concept of "patient-centricity" is not new, relatively few provider organizations—Vanderbilt University Medical Center in the United States, NSW Health in Australia and LBK in Europe are notable exceptions (see case studies)—have successfully adopted this holistic approach to health care provision, an approach with the patient at its core.

LBK: Systematizing the patient journey

Landesbetrieb Krankenhäuser Hamburg (LBK) is one of the largest public health providers in Germany. It owns seven hospitals with a total of more than 5,000 beds. Within its jurisdiction—the city and state of Hamburg—it controls about half the market for acute care. (The company was recently acquired by Asklepios, which currently owns 49 percent and is providing management, with an option to increase up to 75 percent. LBK is now incorporated, although not publicly traded.)

Yet like the users of so many health services worldwide, LBK's patients have suffered the consequences of a fragmented, silo-driven system of care provision, characterized by poorly integrated services and uncoordinated access to information (see story). Large numbers of different departments and medical specialties, coupled with the prevalence of an "it's not my job" mentality, have meant lengthy waiting times for medical appointments, hospital admissions and lab test results. No longer.

LBK has embarked on a systemwide transformation process that has involved establishing patient-focused care centers, reengineering clinical processes and teams, and setting up performance management principles that make the staff accountable for results.

The transformation is still under way, but already LBK has realized savings, improved bed and operating theater utilization and significantly reduced patient waiting times. In specific areas like logistics and finance, it has already reduced costs by 20 percent to 25 percent. As a result of these successes, it has moved into the next phase of its transformation and is becoming one of the first public hospital groups to begin privatization by merging its operations with one of the biggest private hospital groups in Germany. (For more on LBK, see "LBK Hamburg meets the market," *Outlook,* January 2000.)

Too often, reform efforts focus on specific episodes or professional specialties, reinforcing fragmentation within the system. The challenge is to systematize the entire patient journey, creating a framework for *"connected health care."* New business and technology systems can better connect the overall flow, enabling innovative patient care models that pre-emptively target disease. In addition, these models can provide a level of management insight that better informs operating decisions, service integration and strategic investment. Within this framework we see the emergence of high-performance characteristics that are shaping solutions for the future.

High performers' commitment to patient-centric health care rests on their mastery of four core capabilities. These capabilities are clearly interconnected, and they work together to support the various stages of the patient journey.

Pre-emptive care models are designed, in the first instance, to promote wellness and self-management, reducing the demand for more costly acute services. Key target populations are typically, but not exclusively, the chronically ill. Pre-emption involves proactively identifying high-risk patient sectors and customizing pre-emptive interventions and support to help patients and their families self-manage treatment at home or in a low-cost environment. The UK National Health Service, for example, runs breast and cervical cancer screening services and vaccination and smoking cessation programs that are administered and delivered locally, in the community.

High performers distinguish themselves through the sophisticated use of analytical profiling for chronically ill and at-risk populations, supported by coordinated care teams, contact centers and case management tools. They have found ways to shape their organi-

Vanderbilt University Medical Center: Integrated clinical information architectures

More than 1 million people pass through Vanderbilt University Medical Center's 95 outpatient and 36 inpatient departments every year. From cancer treatment to neonatal care, its clinics rank among the best in the United States. Until recently, however, clinicians at this Nashville, Tennessee–based health care provider were having a hard time keeping track of individual patient journeys (see story).

Vanderbilt's clinics relied on paper records, and if an individual patient's files went astray, no one—including that patient's primary care physician—had access to the complete medical history necessary for making frontline clinical decisions. Vanderbilt executives recognized the urgent need for more complete, integrated and, above all, accessible information about its rapidly growing patient body.

What was required was a very special information architecture that would aggregate data about individual patients from a multitude of sources and then align it with clinicians' workflows. To ensure continuity of quality care, the architecture would have to integrate not only basic information about lab tests and prescriptions but also clinicians' notes and communications between doctors and patients. At the same time, the architecture needed to help the clinician draw on data about the most up-to-date standards of care and best practices. What's more, it would have to make this comprehensive electronic health record accessible to doctors working in multiple locations.

It took five years to develop the right architecture, but the results have been so successful that Vanderbilt is now an international leader in applying IT to support and accelerate clinical decision making. The architecture allows physicians to access information about both their individual patients and different patient groups, from wherever the physicians may be located, and to do so with the kind of security that health care demands. The technology has also saved Vanderbilt an estimated $3.5 million annually in clerical services and transcription costs. Moreover, using decision-support tools, the system has trimmed redundant and unnecessary medical care and reduced ordering errors.

The same technology is already being used in a pilot data-sharing project to improve health care delivery across much of the state of Tennessee. And later this year, Vanderbilt is spinning off a separate subsidiary to sell its technology worldwide.

zation and funding models to enable integrated care and focused campaign management that delay or avoid the onset of acute illness.

Integrated clinical information architectures are essential to managing the patient journey effectively and establishing the systemwide technological infrastructure necessary for sustainable reform. The most prominent example of this trend is the emergence of electronic health record (EHR) platforms that connect and integrate a variety of legacy systems by setting up systemwide sources of clinical data that can be shared across the care continuum. A number of countries across Europe, North America and Asia are undertaking countrywide health information infrastructure programs, including Connecting for Health in the United Kingdom, the Canada Health Infoway, the US National Health Information Network and HealthConnect in Australia.

At Vanderbilt University Medical Center, for instance, EHR platforms form the core of an applied information technology that supports and accelerates frontline clinical decision making. The best organizations have extended the use of traditional clinical applications, like results reporting and order management, into more sophisticated approaches that standardize care and eliminate the significant variations in clinical practice. High performers have used change management methodologies to develop technologies that clinicians want to use because they fit seamlessly into existing workflows.

End-to-end patient flow and demand management, right across the patient journey, is a hallmark of high performance in this industry. It describes the ability to integrate and coordinate a range of clinicians and other staff, as well as community caregivers, across the complete care continuum. High-performance providers establish special units to

manage the patient transfer process and to monitor the flow of patients between the services and facilities that mark the patient journey. Both LBK Hamburg and NSW Health, for instance, have set up special patient flow units that are supported by time management benchmarks to drive accountability.

High performers develop more sophisticated scheduling and staffing systems that can more closely match health system supply with patient demand. As a result, patients have to spend less time on waiting lists or in emergency rooms waiting for hospital beds, they can be discharged more quickly to post-acute services, and readmission rates are reduced.

Managerial insight and organizational excellence is a combination of strong change leadership, robust governance structures and performance management principles that align accountability for outcomes. These capabilities underpin all the others.

High performers begin with a dedication to the data and the courage to promote transparency in making tough management decisions. They establish a culture of continuous improvement, and they support that culture with responsive systems for tracking patient flow, clinical quality and key cost indicators. They push this information out to front-line caregivers and empower new management structures to shape more responsive solutions.

The patient-centric approach at the heart of all these capabilities is the key to health care reform. *Patient-centered* isn't just a catchy political mantra. Given the scale of challenges facing providers, it's fast becoming a necessity. By instituting reforms that reshape and connect services around the entire patient journey, health systems (both public and private) are providing better access and quality for a given level of investment. Over time, these changes will reset the standard for health systems globally and guide the broader transformation of this industry.

About the author

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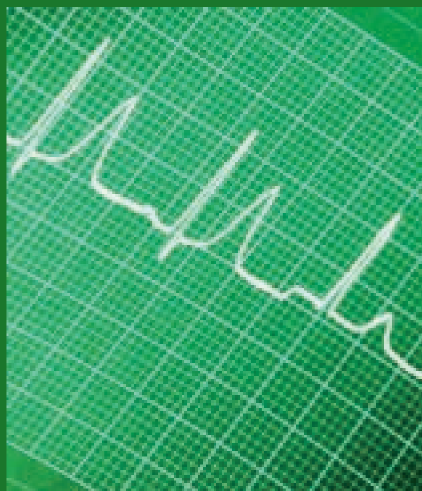


By the numbers

In need of treatment

The charts below offer a snapshot of the health care industry.

On average, 40 percent of respondents are actually dissatisfied with the health care system . . .

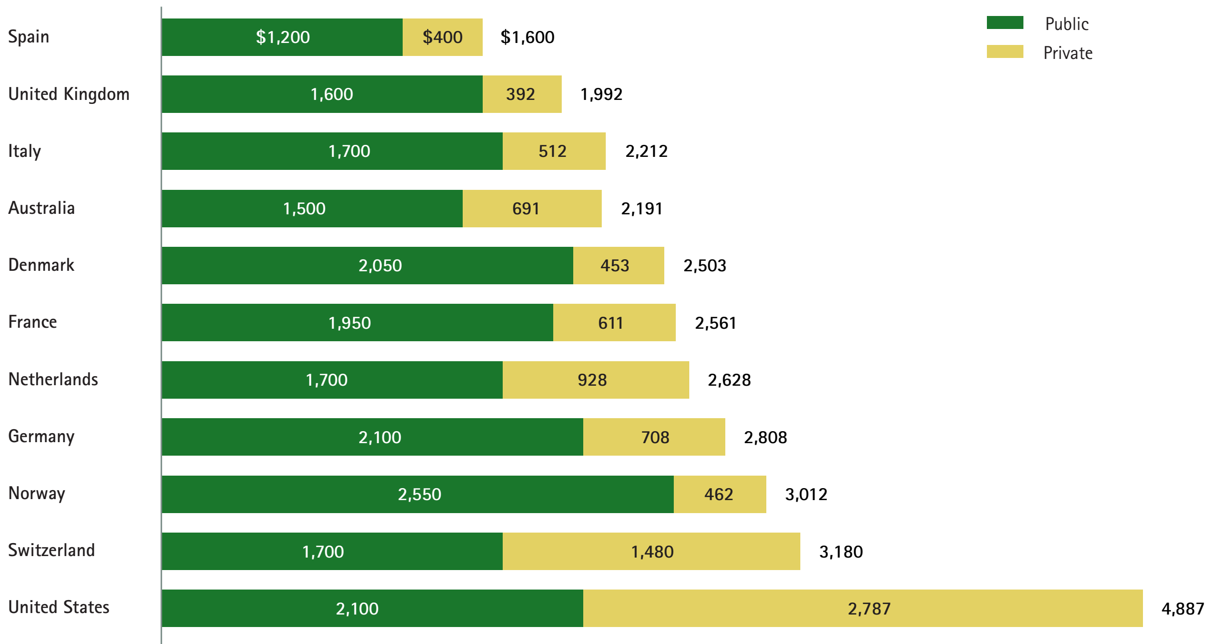
Satisfaction with health systems, 1999

	Share of population satisfied			Share of population dissatisfied		
	Very satisfied	Fairly satisfied	Total satisfied	Fairly dissatisfied	Very dissatisfied	Total dissatisfied
Austria	31.4	52.0	83.4	11.9	2.2	14.1
Belgium	15.8	61.2	77.0	16.9	4.0	20.9
Denmark	30.7	45.1	75.8	20.1	3.8	23.9
Finland	18.0	56.3	74.3	22.1	2.6	24.7
France	16.0	62.2	78.2	16.7	4.4	21.1
Germany	7.4	42.5	49.9	35.5	12.2	47.7
Greece	2.9	15.7	18.6	45.7	34.1	79.8
Ireland	11.4	36.3	47.7	26.9	20.3	47.2
Italy	2.1	24.2	26.3	45.6	26.2	71.8
Luxembourg	26.0	45.6	71.6	16.8	5.1	21.9
Netherlands	19.0	54.2	73.2	21.9	4.1	26.0
Portugal	3.1	21.0	24.1	42.4	31.7	74.1
Spain	9.6	38.0	47.6	40.6	9.3	49.9
Sweden	13.5	45.2	58.7	29.6	9.3	38.9
United Kingdom	13.0	42.7	55.7	31.8	10.5	42.3
European Union + (15-country average)	10.6	42.2	52.8	32.5	12.7	45.2
All countries average ++	14.7	42.8	57.5	28.3	12.0	40.3
Standard deviation	9.3	14.0	21.4	11.4	10.8	21.4

+ Weighted average by population
++ Unweighted average
SOURCE: EUROPEAN COMMISSION EUROBAROMETER RESULTS LISTED IN KEY FIGURES ON HEALTH POCKET BOOK (2001)

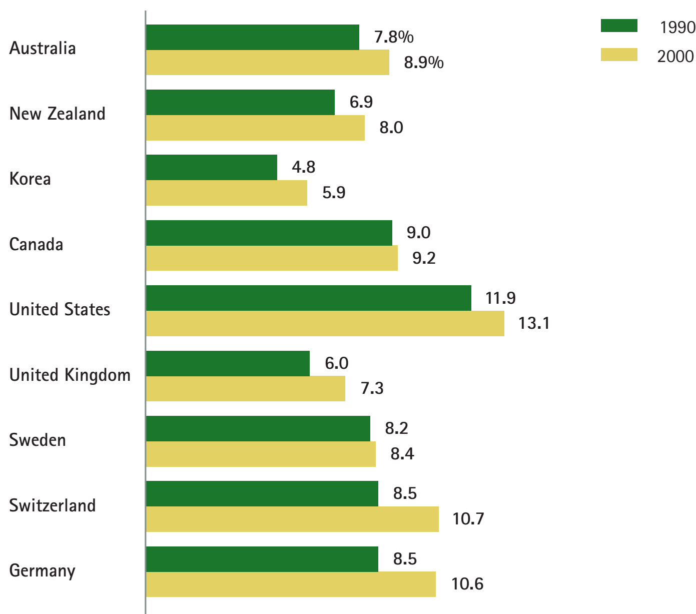
. . . even though per capita spending is high—and growing as a percent of GDP.

Health expenditures per capita (US$ 2001)



SOURCE: OECD HIGH PERFORMING HEALTH STUDY

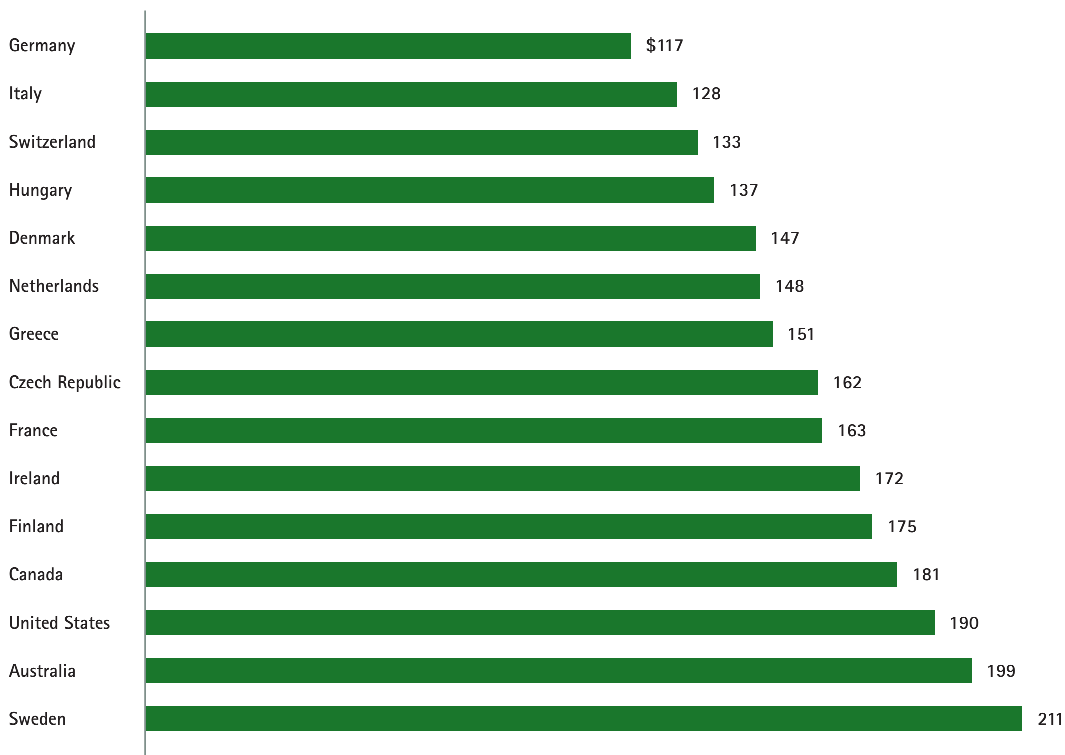
Health spending as a percentage of GDP



SOURCE: OECD HEALTH DATA, 2003

Increases in the cost of pharmaceuticals, which are included in the total health expenditure, are helping to drive the rising costs.

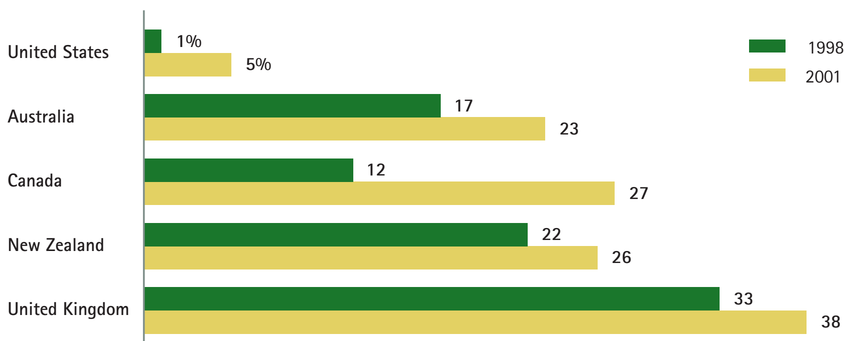
Growth in pharmaceuticals expenditures per capita, in real terms, 1990–2001 (1990=100)



SOURCE: OECD HEALTH DATA, 2003

Despite more spending in health care, waiting lists for surgeries are going up, especially in publicly run systems.

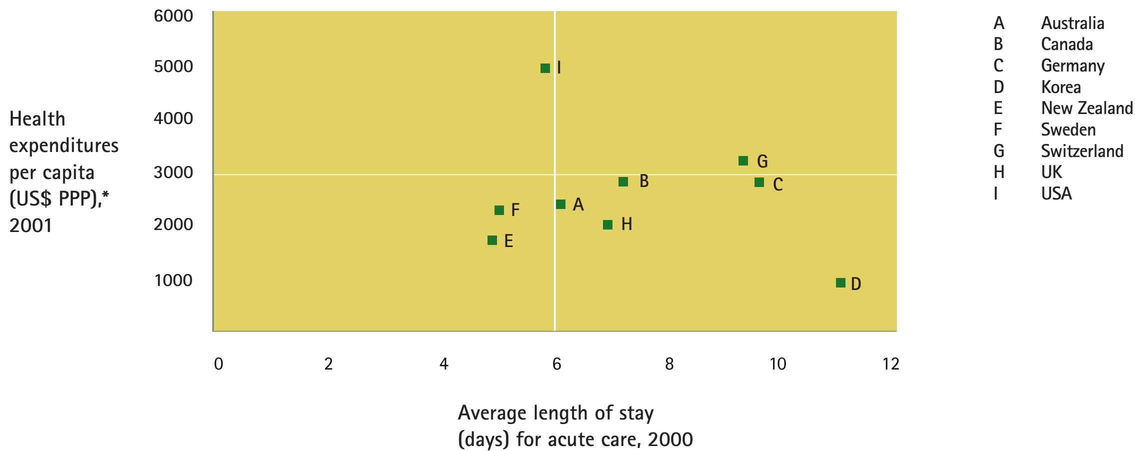
Percentage of patients waiting more than four months for elective surgery



Base: Those with elective surgery in the past two years
SOURCE: DONELAN ET AL. (1999) AND BLENDON ET AL. (2002); OECD HIGH PERFORMING HEALTH STUDY

And higher per capita expenditures do not seem to affect hospital length of stay . . .

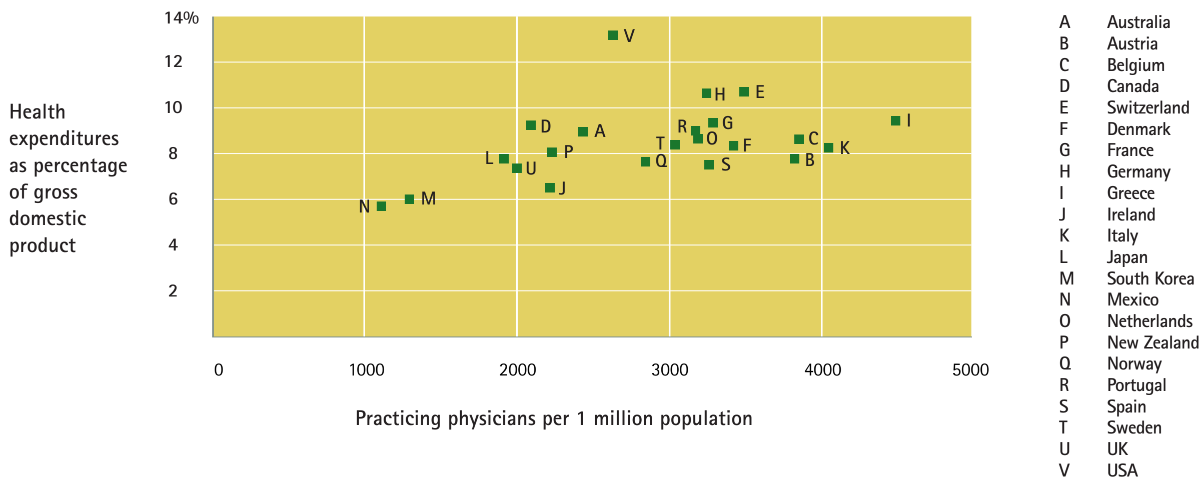
Relative variation in health care delivery



*Purchasing Power Parity (PPP) provides a means of comparing spending between countries. PPPs are the rates of currency conversion that equalize the cost of a given "basket" of goods and services in different countries.
SOURCE: OECD HEALTH DATA, 2003

. . . or be related to physician density.

Physician density and health expenditures, 2000



SOURCE: OECD HUMAN RESOURCES IN HEALTH CARE PROJECT AND OECD HEALTH DATA 2003, 3RD EDITION