

Health, markets, and intervention

Bettina Experton

The 20th century has ushered in some of the greatest health gains the world has ever witnessed: a 33% reduction of worldwide infant mortality, the eradication of life-threatening diseases such as smallpox, and substantial gains in life expectancy in developing and industrialized countries¹.

Despite such progress, enormous health problems remain and new ones are emerging. One of the most universal is the burden of disease-related disabilities. Over the last half-century, the average life span has increased by more than 20 years. However, we have not prolonged youth but extended dotage. Our lives are longer by years of disability². As John F. Kennedy said in the 1960s, "It is not enough for a great nation to have added new years to life. Our objective must be to add new life to those years." All nations now face an "aging revolution."

Most healthcare systems strive to allocate more resources efficiently in order to improve citizen health and quality of life, be more responsive to consumer preferences, and maintain equitable access to health services. Yet different countries have chosen different routes and with markedly different results.

Comparing care systems

Health status differs greatly among nations and by geographic region. The burden of disease, whether attributable to premature mortality or preventable disability, is five times greater (per capita) in the least healthy regions than in the healthiest regions. For example, life expectancy is less than 50 years in some sub-Saharan African countries but over 75 years in established market economies.¹ Health spending also varies enormously—whereas developing countries spend approximately 4% of their gross national product (GNP) on healthcare (\$50 per person annually)¹, the United States spends 13.6% of GNP (approximately \$4,000 per person per year; Table 2)³.

The wealthiest regions appear to be the healthiest. But is health spending the sole or primary determinant of health status? The answer is clearly "no." Assembling health and socioeconomic indicators from 142 countries, Milton Roemer demonstrated that the strongest factors related to life

expectancy in almost all countries were not healthcare spending, but the literacy of women and access to safe water (Table 1)⁴. Furthermore, neither health spending nor income and education can fully explain variation in health outcomes. For example, although France and Singapore have almost achieved predicted life expectancy based on GNP and education, China has five years of life expectancy beyond that predicted. Egypt and the United States have life expectancies approximately five years less than predicted¹.

Health status is based upon a complex array of variables such as income, education, lifestyles, behaviors, genetics, environmental factors, social cohesion, sanitation, housing conditions, working environment, and use of health services. However, it is difficult to weigh the impact of each variable, and furthermore, it is easy to selectively choose indicators that will produce favorable outcomes. Therefore, reported outcomes based on such models should be examined with caution. To illustrate, the French healthcare system performs well in terms of female life expectancy (82 years). Yet the French

system would be deemed mediocre if the selected indicator were male life expectancy (only 74 years).

It would be beneficial to expand health investment models beyond merely examining money spent on direct health services. For example, rather than immediately allocating resources toward the direct provision of health services for a specific health status gain, it would be prudent to establish the effectiveness of investing in general education to achieve that same gain. Enhancing a society's educational level results in improved health status from greater individual preventive care and better use of direct healthcare services¹. In order to facilitate priority setting goals, healthcare system decision makers should consider expanded health investment models that include, for instance, education as well as the direct provision of "disease care" services.

Controlling total spending

World health expenditures are enormous and growing. So is the potential for misallocation, waste, and inequitable distribution of resources. In the last 10 years, efforts to control rising healthcare costs have been a major priority for most industrialized countries. The United States has, in essence, relied on a market-driven approach to totally redesign the provision of healthcare services, whereas Western European countries and Canada have given government a much stronger role. In the mid-1980s and early 1990s, global competition, slowed economic growth, and a common desire to decrease tax burdens led these nations to primarily focus on curbing the growth of total health expenditures (a macroefficiency approach). Toward that end, governmentally led European and Canadian health systems have done a better job of controlling total spend-

Table 1. Correlates with life expectancy.

Variable	Coefficient of correlation with life expectancy
Female literacy	0.877
Access to water	0.862
Doctor supply	0.754
GNP per capita	0.658
Government health expenditure	0.635
Hospital bed supply	0.582

Source: Reference 4.

Table 2. Who has contained healthcare costs?

	National health expenditures as a percent of GNP					
	1960	1970	1980	1990	1995	1997
Great Britain	3.9	4.5	5.6	6.0	6.9	6.7
Japan		4.4	6.4	6.0	7.2	7.3
Denmark	3.6	6.1	6.8	6.5	8.0	7.7
Netherlands	3.8	5.9	7.9	8.3	8.8	8.5
Canada	5.5	7.1	7.3	9.2	9.7	9.3
France	4.2	5.8	7.6	8.9	9.9	9.9
Germany	4.3	5.7	8.1	8.2	10.4	10.4
United States	5.2	7.2	9.1	12.7	13.6	14.0

Source: OECD Health Data, 1998

Bettina Experton is president and CEO of Humetrix, 110 15th Street, Del Mar, CA 92014, USA (experton@humetrix.com).

ing than has the predominately market-based United States system. Furthermore, unlike the US, these countries have maintained universal access to basic healthcare for all citizens. Even though some European countries have recently introduced competitive market-based elements in their healthcare systems (whether among providers in Great Britain or insurers in the Netherlands), they have deliberately retained governmental dominance over their systems, to guard the valued principle of equity of access, while ensuring greater efficiency.

Even as total spending remains a critical issue, most industrialized countries have redirected their efforts towards microefficiency, attempting to reform healthcare systems to provide care at lower cost. These efforts have resulted in decreased use of hospital care (the most costly segment of health services), and a growing emphasis on primary care versus specialty medical care. Overall strategies have included introducing fiscal control mechanisms with prospective pricing for hospital services (and in some instances physician services), and replacing in-patient surgeries and high technology procedures with ambulatory care. Increasingly, primary-care physicians have been assigned not only greater clinical roles but also gatekeeper functions to restrict patient access to care.

When healthcare systems place a strong emphasis on primary care, they clearly perform better on both health status outcomes and costs. Specialty care is oriented towards the cure of specific diseases at a given time: Only primary care (or generalist) physicians can care for the whole person over time, emphasizing the prevention of diseases and the promotion of health. Investing in mostly low-cost interventions (such as immunization, or hormonal replacement therapy in postmenopausal women to prevent osteoporotic fractures or cardiovascular diseases and Alzheimer's disease⁵) gives nations a high return on their investment. Unfortunately, the market demand for expensive technology has been responsible for a persistent tendency toward specialty care rather than primary care. This explains the lower cost-efficiency of the US healthcare system focus. While ranking number one in health spending, the US ranks only number six on major health status outcomes. This is lower than more primary care-focused nations such as The Netherlands or even Cuba, which spend less on healthcare. In fact, with its strong primary care infrastructure and investment in nationwide clinical computerized monitoring of health status, Cuba has reached a population health status comparable to many industrialized countries.⁶

Wise use of information technology (IT) is another means of improving efficiency. The US healthcare system has finally caught on to the benefits of information technology. US healthcare organizations were expected in 1998 to invest more than \$13 billion⁷ on healthcare IT. The intended return on this investment is to achieve cost efficiency and attain competitive advantage through enhancing consumer and provider satisfaction, and expanding managerial decision making.

In the United States, such cost-saving measures, along with the tight contracting practices of private managed care companies, have helped curb the growth of healthcare inflation in the last five years. Unfortunately, since 1998, US healthcare spending is again increasing. Health insurance premiums are inflating at double digit levels and projected health expenditures are expected to reach 16% of GNP by 2007⁸. The resumption of inflation is the result of both a more technology intensive American system with fewer competitive forces in what is now a highly consolidated health insurance and healthcare delivery market.

Health system shortcomings

In many industrialized countries, cost saving measures restricting the use of health services have created public discontent. In response to American consumer backlash against the ruling managed care industry, and contrary to its market ethos, the US government has stepped in to regulate the health insurance industry to guarantee minimum quality and access to healthcare. In 1996, more than 400 new legislative bills were passed for this purpose⁹.

Furthermore, in response to consumer demand in a highly competitive market, the US has taken the lead in developing accountability measures and processes to evaluate healthcare services. However, the public views US healthcare evaluation data with suspicion, because they are generated by the health industry itself. US consumer discontent is evidenced by a growing demand for personal empowerment, through access to healthcare information. During 1998, two-thirds of Americans who visited the worldwide web accessed healthcare information at some point. Consumer access to health information is critical in ensuring healthcare system efficiency. Additionally, evaluation of healthcare must be held to the same type of rigorous standards (including audits by objective third parties) as seen in the financial accounting industry¹⁰.

Another concern to US citizens is the decreasing access to healthcare services over the last 10 years, despite a booming economy. This is partially attributed to the

increasing cost of employer-based health insurance, forcing more employers to reduce health benefits offered to their employees. Since 1996, 1.7 million more Americans lack health insurance coverage. In 1998, 43.4 million Americans (16% of the population) lacked health insurance coverage¹¹.

Although most other industrialized nations offer universal health insurance coverage, the growth of individual cost sharing and out-of-pocket expenses in those systems, especially for prescription drugs and long-term care (such as home health services or nursing home care) may also create or increase gaps in healthcare access.

Global success

Health systems in most countries are undergoing reforms, in essence to control rising healthcare costs. Reform efforts of government-led healthcare systems have partially succeeded in reducing healthcare inflation, while honoring equity of access. Yet these systems have been slow in incorporating modern clinical and administrative practices. Market-driven systems with little or no public accountability have a poor record in cost control and access to care, but have been quicker to develop and implement new technologies for prevention and treatment of disease and healthcare administration. Therefore, the optimal healthcare system is a hybrid in which market forces are counterbalanced by government intervention. A successful healthcare system must also be characterized by substantial information sharing between all parties (consumers, providers, and insurers).

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