
International Health Effectiveness Comparisons: How Does the US Stack Up?

As we all know the US spends a lot more on health care and coverage than any other nation – nearly 16% of GDP vs. 11% in Germany and 8.7% on average in OECD (Organization for Economic Cooperation and Development) countries. And we have 45 million or more of our nation’s residents uninsured while they have next to none.

Why do we spend more?¹ It is not due to high use and excess capacity; it is due to high prices. After adjusting for cost of living differences, the costs for an American inpatient hospital day are three times the OECD average; our use and capacity (hospital beds and bed days per 1000) are 30% lower than the OECD average and our average length of stay is a full day shorter. It is spending on physician services where we spend three times the OECD average. It is spending on pharmaceuticals where we spend twice the OECD average. And it is spending on administration where we spend 250% of the OECD average.

What are we getting for our spending? It appears that on many rankings from life expectancy to infant mortality to preventable deaths we rank poorly as compared to our economic competitors in the OECD countries. In a recent comparison of the efficiency of national health systems in producing positive health outcomes, Italy, France, Spain and Japan ranked in the top ten of 191 countries measured. Britain, Canada, Germany and The Netherlands all ranked in the top 30; the United States ranked 37th.² This is a measure of the *efficiency* of the system in producing positive health outcomes -- not the outcomes themselves; on outcomes alone, the United States ranked 15th.³

Are we as a nation happy with our system? Not so very much, only 40% of US citizens expressed satisfaction in our 37th ranked health system as compared to 91% in Denmark, which ranked 34th in health system efficiency. But then only 20% of Italians were satisfied with their system, which ranked 3rd in the world in health system efficiency in producing positive health outcomes, while 65% of the French were satisfied with their system that ranked 4th in system efficiency. So citizen satisfaction does not necessarily align with the effectiveness of the health systems.

How much does our personal behavior contribute to the problem? Well we smoke a lot less and eat and weigh a lot more than citizens of the other OECD countries.

Where the United States did rank highly? In this study, it ranked first in responsiveness of the system to the patient.

¹ See Shea et al, Health System Performance in Selected Nations

² See Evans et al, Comparative Efficiency of National Health Systems

³ For example, if two countries each reduced infant mortality to 5 infant deaths per 1000 births and one spent twice as much to get that result, it would be half as efficient.

A recent study based on doctor, patient, and seriously ill patient survey interviews from the Commonwealth Fund updates some of this information and provides some surprising (to me at least) details.⁴ It compared six health systems: in Britain, Germany, Canada, the US, Australia and New Zealand. Overall, the US ranked last and Canada 5th, while England and Germany were 1st and 2nd respectively. Germany ranked 1st in access, 1st in safe care and 2nd in healthy lives. Canada and the US ranked 5th or 6th interchangeably on many of the factors weighed, except the US ranked 1st in prevention. All the other countries spent half or less per capita of what we spent in the US.

Sick patients in all six countries had a very jaundiced view of the health system with 65 to 85% saying either “fundamental changes were needed” or the system needs to be rebuilt completely. Britons had the more positive perspective (only 65% were calling for fundamental changes or complete re-building while Germans the most negative views of their system; Americans were half-way between. Doctors also had very negative views of their own systems; 96% of German physicians called for fundamental changes or complete rebuilding as compared to only 85% of American doctors calling for fundamental changes or complete rebuilding. Only in The Netherlands (physician survey) were a majority (52%) of physicians reasonably satisfied with their system. Dutch doctors were also the most satisfied with their freedom to make clinical decisions, spend time with patients and their incomes from their practices.

This study summary points to the following areas of strength in the US health system: prevention and prompt access to specialists and to surgical services. Areas of the American delivery system needing the most improvement were: patient safety, use of information technology, care of the chronically ill, communication with patients, and care coordination.

In “right” care, a category that combines both prevention and chronic care, the US ranked first while Canada was last. In prevention, the US ranked first or second on most issues such as pap smears, mammograms, but fell down to 5th on the use of IT, for example, to print out lists and reminder notices of patients needing follow-up care or who are overdue for preventive care. In chronic care indicators, the US typically ranked 4th or 5th due largely to the lack of system connectivity and use of health IT. In safe care and in coordinated care, Germany ranked 1st and the US ranked last in safe care and 5th in coordinated care; Canada was 5th in safe care and last in coordinated care. The problems of lack of system connectivity and use of health IT accounted for the poor American scores. The US ranked particularly well in explaining the risks to patients before hospitalizations and in explaining follow-up and next step to patients during hospital discharges, but we particularly poorly in financial incentives to improve quality of care.

Patient-centeredness refers to patient communications with the doctors and hospital staff, the continuity of care with the same doctor, and the engagement of patients with their

⁴ K. Davis et al, Mirror, Mirror on the Wall

providers in making decisions about their own care. On patient-centeredness aspect of care, the US ranked 5th, just ahead of Canada while Germany and New Zealand ranked second and first respectively.

Access to care involved cost barriers, wait lists and waiting time barriers.⁵ Germany ranked first, Canada fifth and the US sixth and last. Germany and the US ranked highly on short wait times for elective surgery or to see specialists, while Britain and Canada were last. In the US, patients encountered far greater cost barriers to care and treatment than elsewhere and stunted on needed care as a result; the US ranked last on all measures related to cost barriers to care. US and Canadian patients also reported a hard time getting a timely and convenient appointment to see their primary care doctor when sick while this was relatively easy in Germany, Australia and New Zealand. Doctors in New Zealand, Britain and the Netherlands reported they had arrangements for their patients' after hours care at twice the rates of their American and Canadian counterparts.

Efficiency measures included: the percentage of GDP devoted to health, percentage of health expenditures devoted to administration, percent of ER visits that could have been treated in the regular doctor's office, duplicate testing, medical records missing at the time of the patient's visit, multi-disciplinary practice teams and high clinical information. On overall efficiency, England, New Zealand and Germany ranked 1, 2 and 3, while Canada was 5th and the US 6th. On nearly every "efficiency" measure, the US ranked 5th or 6th. Canada excelled on the low portion of health spending it devoted to administration and was the worst on high clinical information. Sicker German and New Zealand patients reported very low rates of avoidable ER use, less than half the rates of avoidable ER use for the sicker American and Canadian patients. Ninety percent or more primary care doctors reported they used electronic medical records in The Netherlands, New Zealand and England as compared to less than 30% of American and Canadian doctors.

Equity measures included inability to see a doctor or dentist, get treatment or medications due to cost. It also included wait times and duplicate testing. Patients were divided between those with above average income and those with below average income. On equity measures for patients with below average incomes, the US ranked 6th and last. For higher income patients, the US ranked 5th. The countries ranked 1st and 2nd were England and Germany while Canada ranked 5th, just ahead of the US. Canada's scores were poorest on wait times, rather than the cost barriers to care that plagued US patients. The cumulative difference in treatment of higher vs. lower income patients was most extreme in the US system.

Healthy lives included infant mortality, mortality amenable to health care and health expectancy of those reaching age 60. Australia ranked first, Germany second, and the US sixth and last.

⁵ For example wait lists of more than four months for elective surgeries or of more than six days for sick patients to get an appointment or two hours to be seen in the hospital emergency room.

So where should we be looking for models to improve our health system? The study authors recommended we look to Australia for models to improve health outcomes and equity, to Great Britain for safe care and efficiency, to Germany for access and healthy lives and to New Zealand for quality. The authors point to the surprising anomaly that in the age of computer systems developed in the US that we are the only country without a national commitment to developing electronic medical records, electronic prescribing and electronic access to test results.

Resources:

D, Evans et al, Comparative Efficiency of National Health Systems: Cross National Econometric Analysis *British Medical Journal* 2001; 323:307 (August 11, 2001)

K. Davis et al, *Mirror, Mirror on the Wall: an International Update on the Comparative Performance of American Health Care* (Commonwealth Fund, May 2007)

K. Shea, *Health System Performance in Selected Nations: A Chartpack* (Commonwealth Fund, May 2007)

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Six Nation Comparison Chart⁶

	Australia	Canada	Germany	New Zealand	United Kingdom	United States
Overall Ranking 2007	3.5	5	2	3.5	1	6
Quality care	4	6	2.5	2.5	1	6
Right care	5	6	3	4	2	1
Safe care	4	5	1	3	2	6
Coordinated care	3	6	4	2	1	5
Patient centered care	3	6	2	1	4	5
Access	3	5	1	2	2	6
Efficiency	4	5	3	2	1	6
Equity	2	5	4	3	1	6
Healthy lives	1	3	2	4.5	4.5	6

⁶ Mirror, Mirror on the Wall