LEARNING FROM HIGH PERFORMANCE HEALTH SYSTEMS AROUND THE GLOBE

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EXECUTIVE SUMMARY

Thank you, Mr. Chairman and members of the Committee, for this invitation to testify today on a problem of concern to all Americans: gaps in health insurance coverage and rising health care costs.

The search for effective strategies to extend health insurance coverage to more Americans and contain costs is urgent. One-third of all Americans and two-thirds of low-income Americans are uninsured or underinsured at some point during the year. Family health insurance premiums have risen 87 percent since 2000 while median family incomes have increased by only 11 percent. One-third of families now report medical bill or medical debt problems. We spend 16 percent of our gross domestic product (GDP) on health care, yet we fall short of reaching achievable benchmark levels of quality care.

The key question is how to achieve improved coverage and greater efficiency while maintaining or improving quality. Other countries are achieving universal coverage, much lower spending per capita, and better health outcomes. While the U.S. is unlikely to adopt another country's health system in all its aspects, it is instructive to review what we know about the U.S. health system compared with that of other nations, and to highlight examples of high performance and innovative practices that may provide insights relative to the current U.S. challenge of simultaneously achieving better access, higher quality, and greater efficiency.

U.S. Health System Performance Lags Behind Many Other Industrialized Nations

The U.S. spends almost $2 trillion, or $6,700 per person on health care—more than twice what other major industrialized countries spend—and spending in the U.S. rose faster than in other countries in the last five years. Yet the U.S. is also alone among major industrialized nations in failing to provide universal health coverage. This undermines performance of the U.S. health system in multiple ways. Forty percent of U.S. adults report not getting needed care because of cost. And nearly one-fourth of sicker adults—those who rated their health as fair or poor or had a serious illness, surgery, or hospitalization in the past two years—wait six or more days to see a doctor, compared with one of seven or fewer in New Zealand, Germany, Australia, and the U.K.

The U.S. also stands out for the difficulty of obtaining care on nights and weekends. Only 40 percent of U.S. physicians say they have arrangements for after-hours care, compared with virtually all primary care physicians in the Netherlands.

On key health outcome measures, U.S. performance is average or below average. On mortality from conditions that are preventable or treatable with timely, effective medical care, the U.S. ranked 15th among 19 countries.

Furthermore, the U.S. health care system fails to ensure accessible and coordinated care for all patients. Only 42 percent of Americans have been with the same physician for five years or more, compared with nearly three-fourths of patients in other countries. While patients in the U.S. may need to change physicians when their employers change coverage, many other countries encourage or require patients to identify a "medical home," which is their principal source of primary care and is responsible for coordinating specialist care when needed.

U.S. patients are more likely to report medical errors than residents of other countries. One-third of sicker adults in the U.S. reported such errors in 2005, compared with one-fourth in other countries. And finally, only about one-fourth of U.S. primary care physicians report use of electronic medical records, compared with nine of 10 primary care physicians in the Netherlands, New Zealand, and the U.K.

The fragmentation of the U.S. health insurance system also leads to much higher administrative costs. In 2005, the U.S. health system spent $143 billion on administrative expenses. In 2004, if the U.S. had been able to lower the share of spending devoted to insurance overhead to the same level found in the three countries with the lowest rates (France, Finland, and Japan), it would have saved $97 billion a year.

Innovations in Other Countries That Provide Examples of High Performance

I'm pleased to share with the Committee health system innovations from Denmark, the Netherlands, Germany, and the U.K. that stand out as possibilities for the U.S. to consider, drawing on the Commonwealth Fund's nine years of experience in conducting comparative surveys of the public and health professionals in selected countries.

Public satisfaction with the health system is higher in Denmark than in any other country in Europe. This is related to the emphasis Denmark places on patient-centered primary care, which is highly accessible and supported by an outstanding information system that assists primary care physicians in coordinating care. Denmark, like most European countries, has universal health insurance, with no patient cost-sharing for physician or hospital services. Every Dane selects a primary care physician who receives a monthly payment for serving as the patient's medical home, in addition to fees for services provided. Patients can easily obtain care on the same day if they are sick or need medical attention.

But what most impresses me about the Danish system is its organized "off-hours service." In every county, clinics see patients at nights and weekends. Physicians take direct calls from patients and can access their computerized patient records. They can electronically prescribe medications, or ask a patient to come to the clinic to see a physician on duty. Physicians are paid for the telephone consultation, and earn a higher fee if the problem can be handled by phone. The patient's own primary care physician receives an e-mail the next day with a record of the consultation.

All primary care physicians (except a few near retirement) are required to have an electronic medical record system, and 98 percent do. Danish physicians are paid for e-mail consultations with patients. The easy accessibility of physician advice by phone or e-mail, and electronic systems for prescriptions and refills, cuts down markedly on both physician and patient time. Primary care physicians save an estimated 50 minutes a day from information systems—a return that justifies their investment in an information technology system for their practice.

Physicians are supported by a nationwide health information exchange, a repository of electronic prescriptions, lab and imaging orders and test results, specialist consult reports, and hospital discharge letters that is accessible to patients as well as authorized physicians and home health nurses. It now captures 87 percent of all prescription orders, 88 percent of hospital discharge letters, 98 percent of lab orders, and 60 percent of specialist referrals. Yet, its operating cost is only $2 million a year, or 40 cents per person.

Germany is a leader in national hospital quality benchmarking, with real-time quality information available for all 2,000 German hospitals on over 300 quality indicators for 26 conditions. Peers visit hospitals whose quality is substandard and enter into a "dialogue" on ways to improve. Typically, within a few years all hospitals come up to high standards. Germany has instituted disease management programs and clinical guidelines for chronic care, with financial incentives from insurance funds to physicians to enroll patients and be held accountable for care. Early results show that this system has positive effects on the quality of chronic care.

The Netherlands stands out for its leadership on transparency in reporting quality data, as well as its own approach to primary care and "after-hours" care arrangements. Although most Dutch primary care practices are solo practices, they support each other through a cooperative, including an after-hours nurse and physician call bank service. The Dutch government funds nurse practitioners based in physician practices to manage

chronic disease. Under national reforms implemented in 2006, payments to Dutch doctors now blend capitation, fees for consultations, and payments for performance.

The U.K. General Practitioner contract, which went into effect on April 1, 2004, provides bonuses to primary care physicians for reaching quality targets. Far more physicians met the targets than anticipated, leading to a controversial cost overrun but also demonstrating that financial incentives do change physician behavior. The U.K. National Institute for Health and Clinical Excellence conducts cost-effectiveness review of new drugs and technology. The U.K. also publishes extensive information on hospital quality and surgical results by name of hospital and surgeon.

These are just a few examples of innovative practices that the U.S. might wish to investigate more closely and potentially adapt. Most, however, require leadership on the part of the central government to set standards, ensure the exchange of health information, and reward high performance on quality and efficiency.

Conclusion

The U.S. has the world's costliest health system yet still fails to provide everyone with access to care—and falls far short of providing the safe, high-quality care that it is possible to provide. The conclusion that there is room for improvement is inescapable. Achieving a high performance health care system—high-quality, safe, efficient, and accessible to all—will require a major change in the U.S. system of delivering health services. Steps we could take include:

- extending health insurance to all, in order to improve access, quality, and efficiency;
- assessing innovations leading to high performance within the U.S. and internationally and adopting best practices;
- organizing the care system to ensure coordinated and accessible care to all;
- increasing transparency and rewarding quality and efficiency;
- expanding the use of information technology and systems of health information exchange;
- developing the workforce required to foster patient-centered and primary care; and
- encouraging leadership and collaboration among public and private stakeholders dedicated to achieving a high performance health system.

These steps would take us a long way toward ensuring that the U.S. is a high-performing health system worthy of the 21st century. Thank you very much for the opportunity to join this panel. I look forward to learning from my fellow panelists and answering any questions.

LEARNING FROM HIGH PERFORMANCE HEALTH SYSTEMS AROUND THE GLOBE

Karen Davis
The Commonwealth Fund

Thank you, Mr. Chairman and members of the Committee, for this invitation to testify today on a problem of concern to policymakers, employers, health care leaders, and insured and uninsured Americans alike: gaps in health insurance coverage and rising health care costs. The search for effective coverage and cost-containment strategies is of great urgency. One-third of all Americans and two-thirds of low-income Americans are uninsured at some point during the year or are underinsured.[1] Family health insurance premiums under employer plans have risen 87 percent since 2000 while median family incomes have increased by only 11 percent.[2] As a result, one-third of families now report difficulty paying medical bills or accumulated medical debt, with such problems growing rapidly for middle-class families.[3] We spend 16 percent of our gross domestic product (GDP) on health care, yet we fall short of reaching achievable benchmark levels of quality care.[4]

Broad consensus now exists on the need for action. A recent survey of health care opinion leaders placed expanding coverage for the uninsured and enacting reforms to moderate rising health costs at the top of a list of health care priorities for Congress.[5] Their priorities are the public's priorities as well. Ensuring that all Americans have adequate, reliable health insurance and controlling the rising cost of medical care were cited in a survey of U.S. adults last summer as the top two health care priorities for the president and Congress.[6]

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[1] C. Schoen, K. Davis, S. K. H. How, and S. C. Schoenbaum, "U.S. Health System Performance: A National Scorecard," *Health Affairs* Web Exclusive (Sept. 20, 2006):w457–w475; C. Schoen, M. M. Doty, S. R. Collins, and A. L. Holmgren, "Insured but Not Protected: How Many Adults Are Underinsured?" *Health Affairs* Web Exclusive (June 14, 2005):w289–w302.

[2] P. Fronstin and S. R. Collins, *The 2nd Annual EBRI/Commonwealth Fund Consumerism in Health Care Survey, 2006: Early Experience with High-Deductible and Consumer-Driven Health Plans* (New York: The Commonwealth Fund, Dec. 2006).

[3] S. R. Collins, K. Davis, M. M. Doty, J. L. Kriss, and A. L. Holmgren, *Gaps in Health Insurance: An All-American Problem* (New York, The Commonwealth Fund, Apr. 2006); S .R. Collins, J. L. Kriss, K. Davis, M. M. Doty, and A. L. Holmgren, *Squeezed: Why Rising Exposure to Health Care Costs Threatens the Health and Financial Well-Being of American Families* (New York: The Commonwealth Fund, Sept. 2006).

[4] K. Davis, C. Schoen, S. Guterman, T. Shih, S. C. Schoenbaum, and I. Weinbaum, *Slowing the Growth of U.S. Health Care Expenditures: What Are the Options?* (New York: The Commonwealth Fund, Jan. 2007).

[5] A. L. Holmgren, K. Davis, S. Guterman, and B. Scholl, *Health Care Opinion Leaders' Views on Priorities for the New Congress* (New York: The Commonwealth Fund, Jan. 2007).

[6] C. Schoen, S. K. H. How, I. Weinbaum, J. E. Craig, Jr., and K. Davis, *Public Views on Shaping the Future of the U.S. Health System* (New York: The Commonwealth Fund, Aug. 2006).

The key question is how to achieve both of these goals while maintaining or improving the quality of care for all. Insight is provided by contrasting the experience of the U.S. with that of other countries. There is now extensive evidence that other countries are achieving universal coverage, much lower spending per capita, and better health outcomes.[7] Given its history, institutions, and preferences, the U.S. is unlikely to adopt another country's health system in all its aspects, but it can learn from examples of practices that contribute to high performance. Today, I would like to share with the Committee what we know about the U.S. health system compared with that of other countries and highlight examples of high performance and innovative practices in countries such as Denmark, the Netherlands, and Germany, among others, that provide potential solutions to the current U.S. challenge of simultaneously achieving better access, higher quality, and greater efficiency.

This assessment of international innovations leading to high performance dovetails with the work of the Commonwealth Fund's Commission on a High Performance Health System, which has identified seven keys to a high performance health system in the U.S.:

- extending health insurance to all;
- pursuing excellence in the provision of safe, effective, and efficient care;
- organizing the care system to ensure coordinated and accessible care to all;
- increasing transparency and rewarding quality and efficiency;
- expanding the use of information technology and systems of health information exchange;
- developing the workforce required to foster patient-centered and primary care; and
- encouraging leadership and collaboration among public and private stakeholders dedicated to achieving a high performance health system.[8]

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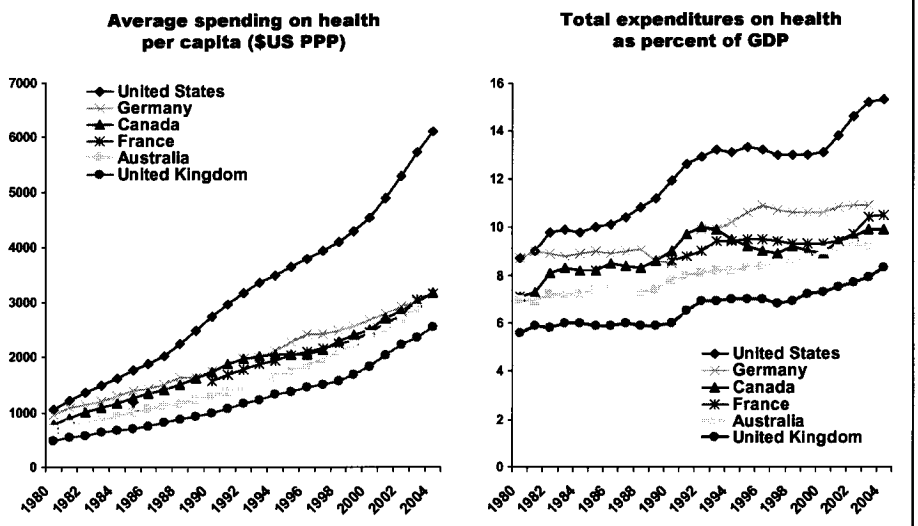
[7] C. Schoen, R. Osborn, P. T. Huynh, M. M. Doty, J. Peugh, and K. Zapert, "On the Front Lines of Care: Primary Care Doctors' Office Systems, Experiences, and Views in Seven Countries," *Health Affairs* Web Exclusive (Nov. 2, 2006):w555–w571; C. Schoen, R. Osborn, P. T. Huynh, M. Doty, K. Zapert, J. Peugh, and K. Davis, "Taking the Pulse of Health Care Systems: Experiences of Patients with Health Problems in Six Countries," *Health Affairs* Web Exclusive (Nov. 3, 2005):w509–w525; P. S. Hussey, G .F. Anderson, R. Osborn et al., "How Does the Quality of Care Compare in Five Countries?" *Health Affairs*, May/June 2004 23(3):89–99.

[8] The Commonwealth Fund Commission on a High Performance Health System, *Framework for a High Performance Health System for the United States* (New York: The Commonwealth Fund, Aug. 2006).

National Health Expenditures and Value for Money

Nothing makes it clearer that something is amiss than the contrast between health spending in the U.S. and health spending in other countries. The U.S. spends almost $2 trillion, or $6,700 per person, on health care—more than twice what is spent by other major industrialized countries (Figure 1).[9] U.S. health spending is high, even in the context of its substantial economy: the U.S. spends 16 percent of GDP on health care, while other countries spend 8 to 10 percent. Health spending in the U.S. rose faster than in other countries in the last five years, while countries with high spending such as Germany and Canada moderated their growth and countries with low spending such as the U.K. increased outlays as a matter of deliberate public policy.

Figure 1. International Comparison of Spending on Health, 1980–2004



Data: OECD Health Data 2005 and 2006.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006.

All countries face rising costs from technological change, higher prices of pharmaceutical products, and aging of the population. In fact, the population in most European countries already has the age distribution that the U.S. will experience in 20 years. Nor is the difference in spending attributable to rationing care. In fact, the U.S. has lower rates of hospitalization and shorter hospital stays than most other countries.[10] One difference is that the U.S. tends to pay higher prices for prescription drugs; in

[9] A. Catlin, C. Cowan, S. Heffler, B. Washington, and the National Health Expenditure Accounts Team, "National Health Spending in 2005: The Slowdown Continues," *Health Affairs,* Jan./Feb. 2007 26(1):142–153.

[10] B. Frogner and G. Anderson, *Multinational Comparisons of Health Systems Data, 2005* (New York: The Commonwealth Fund, Apr. 2006).

other countries governments typically negotiate on behalf of all residents to achieve lower prices.[11]

The U.S. is alone among major industrialized nations in other respects. Over half of health care spending is paid for privately, compared with about one-fourth or less in other countries. Ironically, because the U.S. is so expensive, the government—while it accounts for only 45 percent of all health care spending—spends as much as a percent of GDP on health care as do other countries with publicly financed health systems.[12]

Another striking difference is that the U.S. has fewer physicians per capita than other countries, and many more of our physicians are specialists.[13] Research both within the U.S. and across countries has shown that health care spending is higher and health outcomes worse when there is a lower ratio of primary care to specialist physicians.[14] Compared with patients in other countries, U.S. patients face a more fragmented health care system, are cared for by different physicians for different conditions, have poorer care coordination, and take more medications, all of which contributes to higher rates of medical errors.[15] More things can and do go wrong when care is provided by multiple parties. In fact, in 2006, 42 percent of U.S. adults reported having one of four experiences in the prior two years: their physician ordered a test that had already been done; their physician failed to provide important medical information or test results to other doctors or nurses involved in their care; they incurred a medical, surgical, medication, or lab test error; or their physician recommended care or treatment that in their view was unnecessary.[16]

The bottom line is that the U.S. is not receiving value commensurate to the resources it commits to health care. Many Americans would gladly pay more for health

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[11] G. F. Anderson, D. G. Shea, P. S. Hussey et al., "Doughnut Holes and Price Controls," *Health Affairs* Web Exclusive (July 21, 2004):W4-396–W4-404; G. Anderson, U. E. Reinhardt, P. S. Hussey et al., "It's the Prices, Stupid: Why the United States Is So Different from Other Countries," *Health Affairs,* May/June 2003 22(3):89–105.

[12] B. Frogner and G. Anderson, *Multinational Comparisons of Health Systems Data, 2005* (New York: The Commonwealth Fund, Apr. 2006).

[13] G. F. Anderson, B. K. Frogner, R. A. Johns et al., "Health Care Spending and Use of Information Technology in OECD Countries," *Health Affairs,* May/June 2006 25(3):819–831.

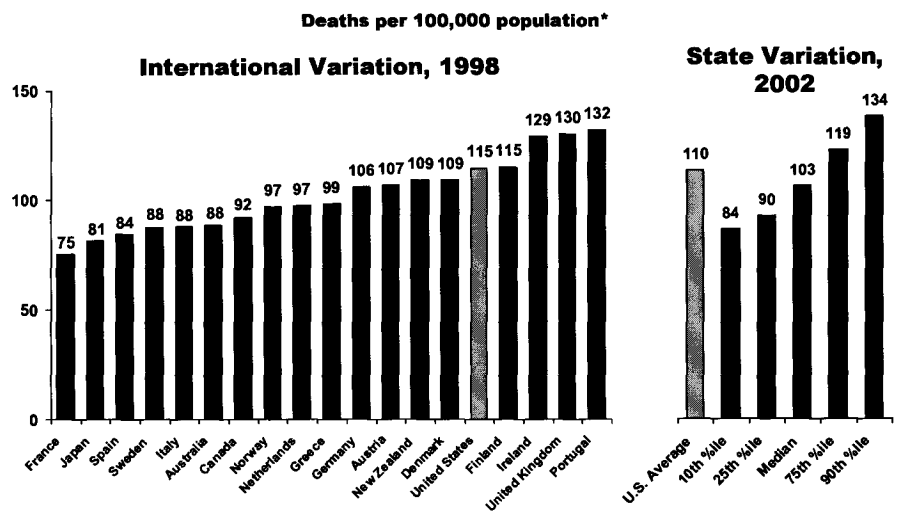
[14] J. S. Skinner, D. O. Staiger, and E. S. Fisher, "Is Technological Change in Medicine Always Worth It? The Case of Acute Myocardial Infarction," *Health Affairs* Web Exclusive (Feb. 7, 2006):w34–w47; B. Starfield, L. Shi, and J. Macinko, "Contribution of Primary Care to Health Systems and Health," *The Milbank Quarterly,* 2005 83(3):457–502.

[15] C. Schoen, R. Osborn, P. T. Huynh, M. Doty, K. Zapert, J. Peugh, and K. Davis, "Taking the Pulse of Health Care Systems: Experiences of Patients with Health Problems in Six Countries," *Health Affairs* Web Exclusive (Nov. 3, 2005):w509–w525.

[16] C. Schoen, S. K. H. How, I. Weinbaum, J. E. Craig, Jr., and K. Davis, *Public Views on Shaping the Future of the U.S. Health System* (New York: The Commonwealth Fund, Aug. 2006).

care if it meant longer lives, improved functioning, or better quality of life. Yet, on key health outcome measures, U.S. health performance is average or below average. For example, on mortality from conditions amenable to health care—a measure of death rates before age 75 from diseases and conditions that are preventable or treatable with timely, effective medical care—the U.S. ranked 15th among 19 countries, with a death rate 30 percent higher than in France, Japan, and Spain (Figure 2). If U.S. performance were comparable to the best three countries or even the best five states, nearly 90,000 lives a year could be saved.

Figure 2. Mortality Amenable to Health Care

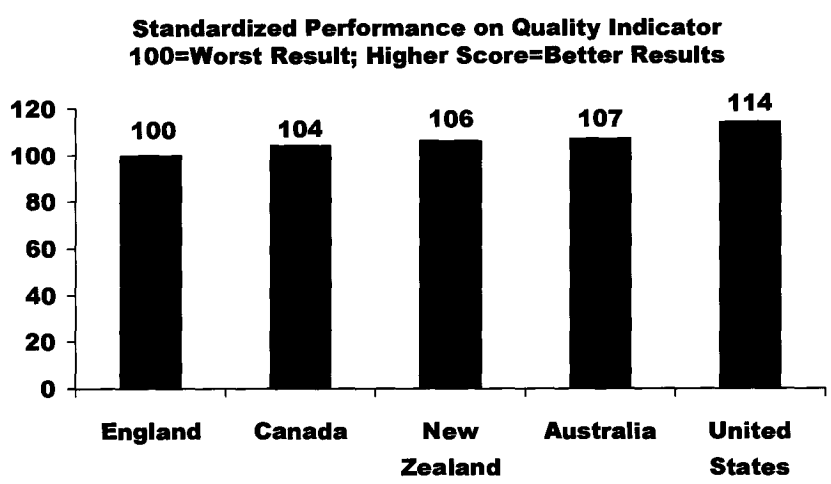


* Countries' age-standardized death rates, ages 0–74; includes ischemic heart disease.
See Technical Appendix for list of conditions considered amenable to health care in the analysis.
Data: International estimates—World Health Organization, WHO mortality database (Nolte and McKee 2003);
State estimates—K. Hempstead, Rutgers University using Nolte and McKee methodology.
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006.

The Commonwealth Fund supported an international working group on quality indicators, an effort that is now being continued and extended by the Organization for Economic Cooperation and Development. On most measures, the U.S. was neither the best nor the worst on clinical quality outcomes. It had the best outcome among five countries on five-year relative survival rates for breast cancer, but the worst outcome on five-year relative survival rates for kidney transplants (Figures 3, 4).[17] For the resources it commits to health care, the U.S. should be achieving much better results.

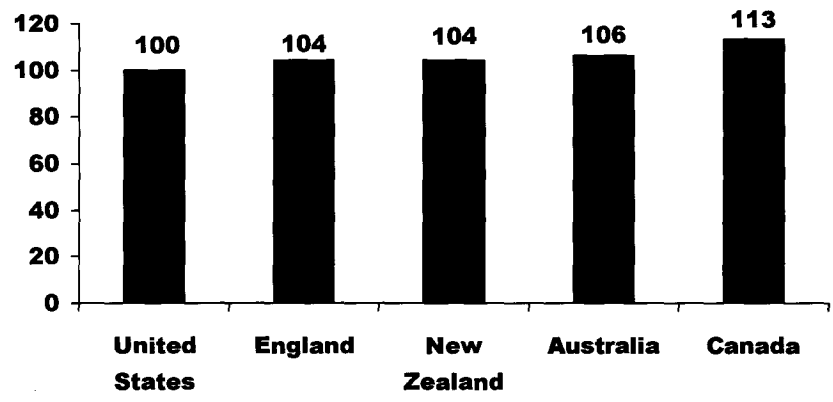
[17] P. S. Hussey, G. F. Anderson, R. Osborn et al., "How Does the Quality of Care Compare in Five Countries?" *Health Affairs*, May/June 2004 23(3):89–99.

Figure 3. Breast Cancer 5-year Relative Survival Rate



Source: P.S. Hussey, G.F. Anderson, R. Osborn et al., "How Does the Quality of Care Compare in Five Countries?" *Health Affairs* (May/June 2004).

Figure 4. Kidney Transplant 5-year Relative Survival Rate

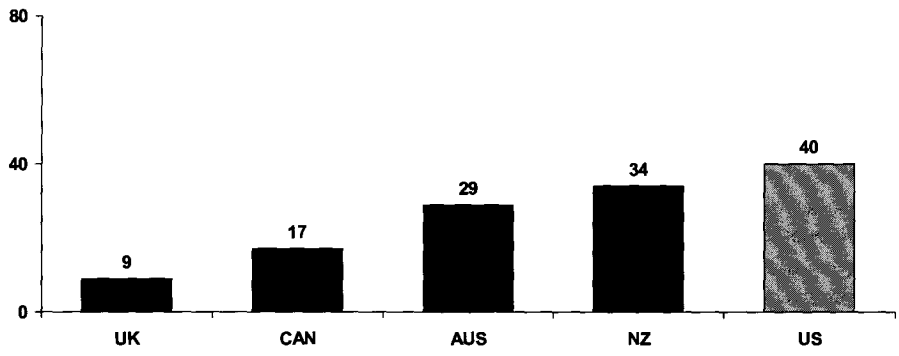


Source: P.S. Hussey, G.F. Anderson, R. Osborn et al., "How Does the Quality of Care Compare in Five Countries?" *Health Affairs* (May/June 2004).

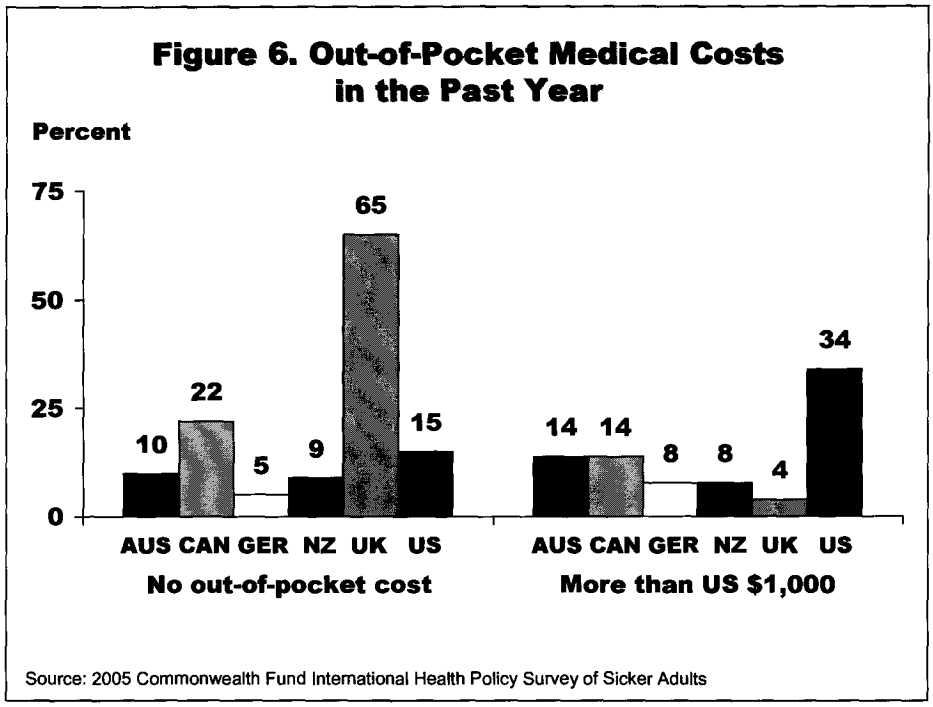
Access to Care

The U.S. is also alone among major industrialized nations in failing to provide universal health coverage. This undermines performance of the health system in multiple ways, but the most troubling is the difficulty Americans face in obtaining access to needed care (Figure 5). Forty percent of U.S. adults report one of three access problems because of costs: not getting needed care because of the cost of a doctor's visit; skipping medical test, treatment, or follow-up because of costs; or not filling prescription or skipping doses because of cost. Further, Americans pay far more out-of-pocket for health care expenses and are more subject to financial burdens as a result of either no health insurance or inadequate health insurance (Figure 6).

Figure 5. Access Problems Because of Costs in Five Countries, Total and by Income, 2004



* Did not get medical care because of cost of doctor's visit, skipped medical test, treatment, or follow-up because of cost, or did not fill Rx or skipped doses because of cost.
UK=United Kingdom; CAN=Canada; AUS=Australia; NZ=New Zealand; US=United States.
Data: 2004 Commonwealth Fund International Health Policy Survey of Adults' Experiences with Primary Care (Schoen et al. 2004; Huynh et al. 2006).
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006.



Aside from the evident failure of the U.S. health system to guarantee financial access to care, the organization of care in the U.S. also fails to ensure accessible and coordinated care for all patients. In fact, the U.S. stands out for having patients who report either having no regular doctor or having been with their physician for a short period of time (Figure 7). Only 42 percent of Americans have been with the same physician for five years or more, compared with over half to three-fourths of patients in other countries. Managed care plans with restricted networks exacerbate poor continuity of care, as patients may need to change physicians when their employers change coverage. By contrast, many other countries encourage or require patients to identify a "medical home," which is their principal source of primary care and is responsible for coordinating specialist care when needed.

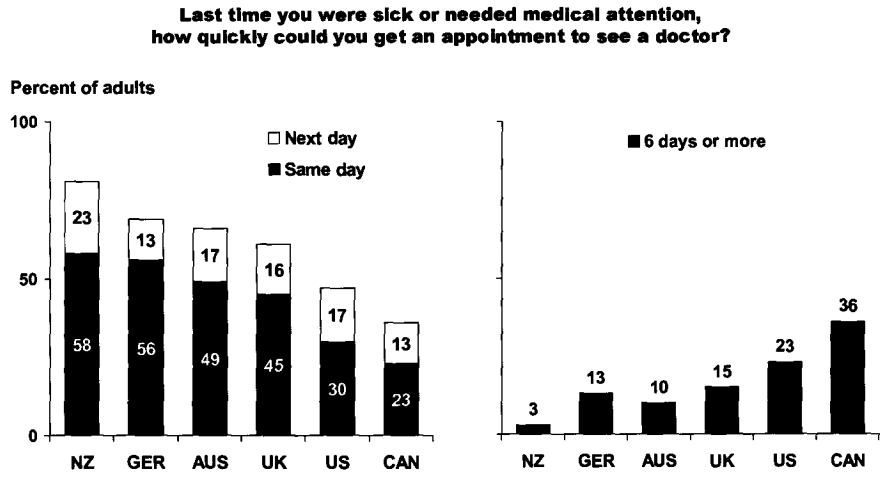
Figure 7. Length of Time with Regular Doctor

Percent:	AUS	CAN	GER	NZ	UK	US
Has regular doctor	92	92	97	94	96	84
Less than 2 years	16	12	6	19	14	17
5 years or more	56	60	76	57	66	42
No regular doctor	8	8	3	6	4	16

Source: 2005 Commonwealth Fund International Health Policy Survey of Sicker Adults

Together, these differences in care arrangements and the undersupply of primary care physicians relative to other countries mean that many Americans are unable to get needed care, whether in the doctor's office during the day or on nights and weekends. Among sicker adults—those who rated their health as fair or poor or had a serious illness, surgery, or hospitalization in the past two years—nearly one-fourth of Americans and one-third of Canadians wait six or more days to see a doctor when sick or in need of medical attention, compared with only one of seven or less in New Zealand, Germany, Australia, and the U.K. (Figure 8). The U.S. has short waiting times for elective surgery such as hip replacements or cataract operations. but timely access to primary care is rarer in the U.S.

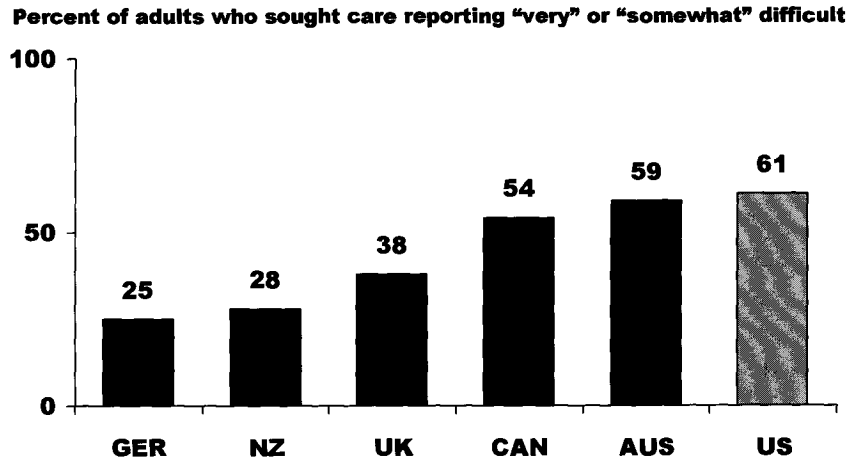
Figure 8. Waiting Time to See Doctor When Sick or Need Medical Attention, Sicker Adults in Six Countries, 2005



NZ=New Zealand; GER=Germany; AUS=Australia; UK=United Kingdom; US=United States; CAN=Canada.
Data: 2005 Commonwealth Fund International Health Policy Survey of Sicker Adults (Schoen et al. 2005a).
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006.

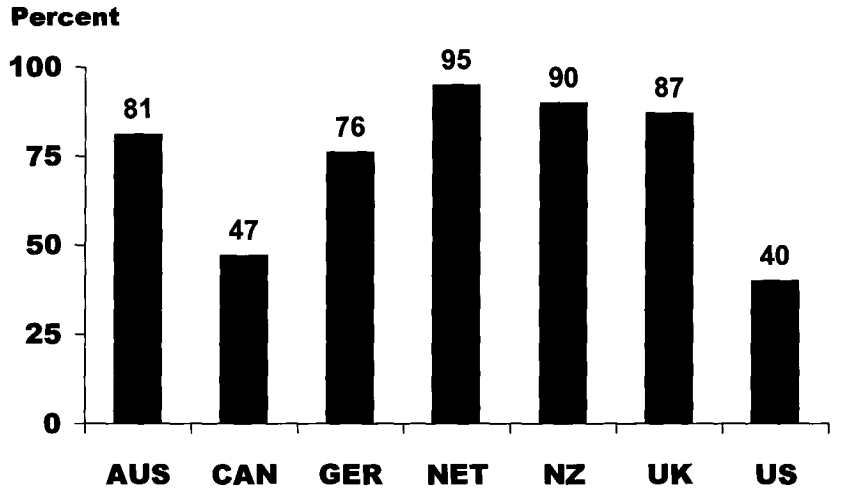
The U.S. also stands out in terms of the level of difficulty in obtaining care on nights and weekends. Three of five Americans report that it is difficult to obtain care off-hours, compared with one of four in Germany and New Zealand (Figure 9). In a recent survey, only 40 percent of U.S. primary care physicians say they have an arrangement for after-hours care, compared with virtually all primary care physicians in the Netherlands (Figure 10).

Figure 9. Difficulty Getting Care on Nights, Weekends, Holidays Without Going to the ER, Among Sicker Adults in Six Countries, 2005



GER=Germany; NZ=New Zealand; UK=United Kingdom; CAN=Canada; AUS=Australia; US=United States.
Data: 2005 Commonwealth Fund International Health Policy Survey of Sicker Adults (Schoen et al. 2005a).
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006.

Figure 10. Practice Has Arrangement for After-Hours Care to See Nurse/Doctor



Source: 2006 Commonwealth Fund International Health Policy Survey of Primary Care Physicians

These differences in the accessibility of basic primary care are a reflection of policy decisions made by different countries.[18] Most fundamentally, of course, other countries make primary care financially and physically accessible to their residents. In contrast, the U.S. erects substantial barriers to primary care, including large numbers of uninsured and significant deductibles that pose financial barriers to primary care even for the insured. Other countries provide relatively higher payments to primary care physicians, and support physician practices in organizing after-hours care. These policies increase the attractiveness of primary care practice.

Quality of Care

The U.S. faces a major increase in chronic conditions as its population ages. Adults with multiple chronic conditions are particularly at risk for experiencing poor-quality or uncoordinated care. Coordination of information across sites of care is essential for safe, effective, and efficient care. Measured by patients saying that test results or medical records were not available at the time of appointments or that physicians duplicated tests, one-third of U.S. patients experience breakdowns in coordination, compared with about one-fifth in other countries (Figure 11).

Figure 11. Patients Report Problems with Care Coordination

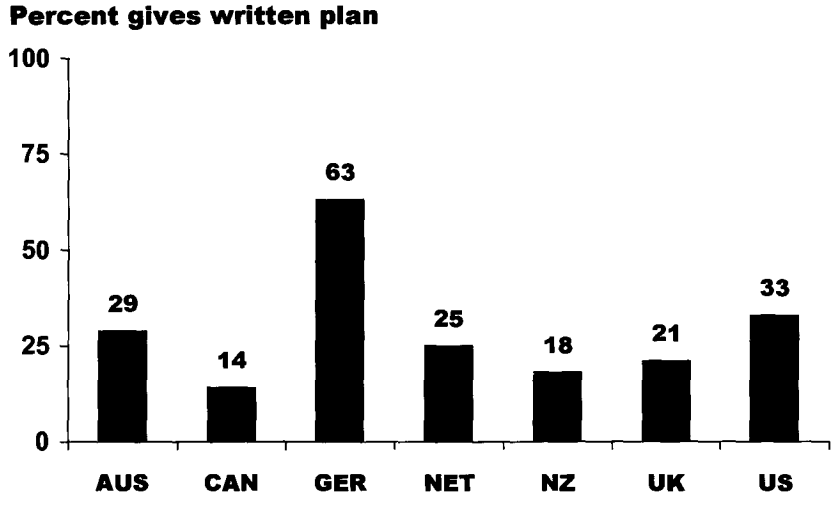
Percent saying in the past 2 years:	AUS	CAN	GER	NZ	UK	US
Test results or records not available at time of appointment	12	19	11	16	16	23
Duplicate tests: doctor ordered test that had already been done	11	10	20	9	6	18
Percent who experienced either coordination problem	19	24	26	21	19	33

Source: 2005 Commonwealth Fund International Health Policy Survey of Sicker Adults

[18] C. Schoen, R. Osborn, P. T. Huynh, M. Doty, K. Zapert, J. Peugh, and K. Davis, "Taking the Pulse of Health Care Systems: Experiences of Patients with Health Problems in Six Countries," *Health Affairs* Web Exclusive (Nov. 3, 2005):w509–w525; C. Schoen, R. Osborn, P. T. Huynh, M. Doty, J. Peugh, and K. Zapert, "On the Front Lines of Care: Primary Care Doctors' Office Systems, Experiences, and Views in Seven Countries," *Health Affairs* Web Exclusive (Nov. 2, 2006):w555–w571.

Improving the management of patients with chronic disease is key to effective control and prevention of complications. One-third of primary care physicians in the U.S. report routinely giving patients a plan to manage their chronic diseases at home, compared with almost two-thirds in Germany (Figure 12).

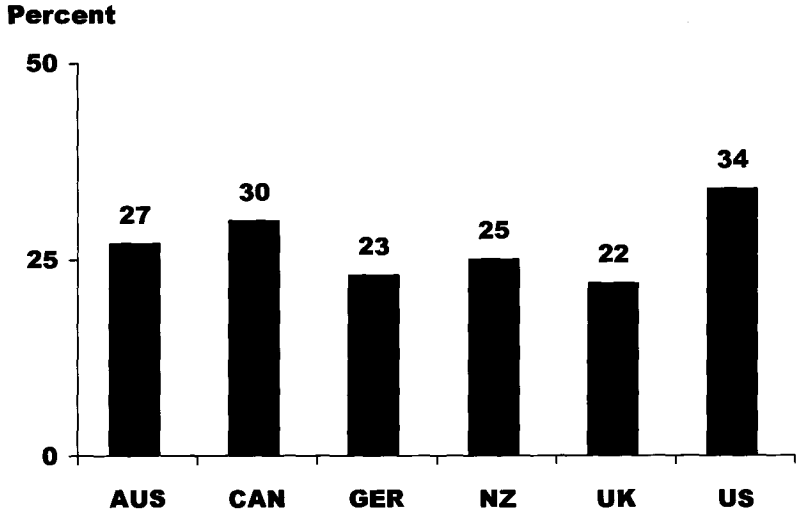
Figure 12. Doctor Routinely Gives Patients with Chronic Diseases Plan to Manage Care at Home



Source: 2006 Commonwealth Fund International Health Policy Survey of Primary Care Physicians

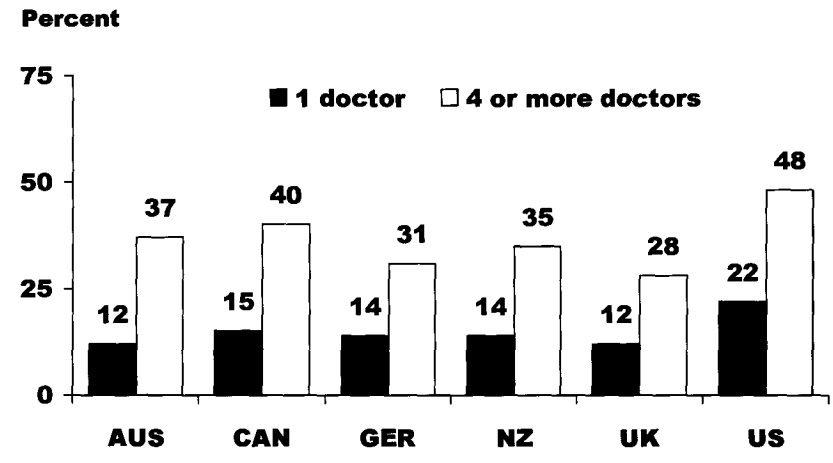
Patient safety has received heightened attention in the U.S. in the last five years. Despite this, US patients are more likely to report experiences of medical errors than residents of other countries. These experiences include medical or medication errors, hospital-acquired infections, incorrect lab or diagnostic tests, or delays in communicating abnormal results to patients. Overall one-third of sicker adults in the U.S. reported such errors in 2005, compared with one-fourth in other countries (Figure 13). The frequency of errors was strongly associated with the number of doctors involved in a patient's care: almost half of U.S. sicker adults that were seeing four or more physicians reported such errors (Figure 14).

Figure 13. Any Error: Medical Mistake, Medication Error or Test Error in Past 2 Years



Source: 2005 Commonwealth Fund International Health Policy Survey of Sicker Adults

Figure 14. Patients Reporting Any Error by Number of Doctors Seen in Past Two Years

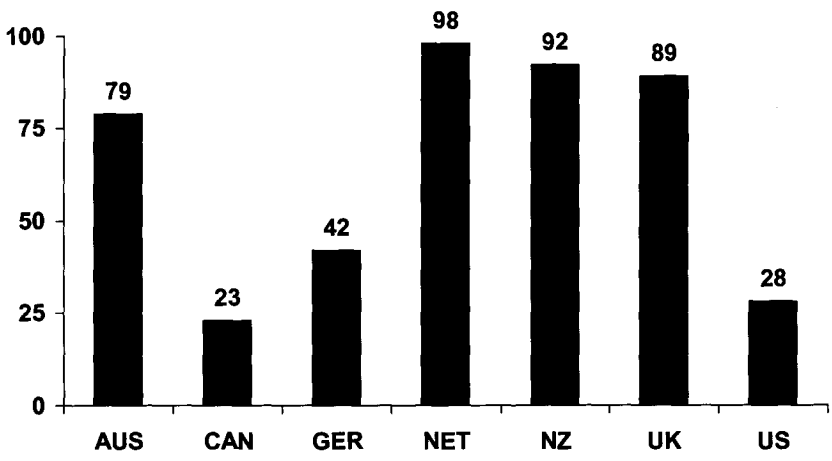


Source: 2005 Commonwealth Fund International Health Policy Survey of Sicker Adults

Efficiency

U.S. physicians are highly trained, and U.S. hospitals are well equipped compared with hospitals in other countries.[19] Some of the waste and missed opportunities to provide high-quality, safe care may be attributable to more limited adoption of information technology in the U.S. About one-fourth of U.S. primary care physician report using electronic medical records. compared with more than nine of 10 primary care physicians in the Netherlands, New Zealand, and the U.K. In these countries, physicians are often able to purchase electronic medical record systems through direct financial support from government or reimbursement incentives (Figure 15).

Figure 15. Primary Care Doctors Use of Electronic Patient Medical Records, 2006



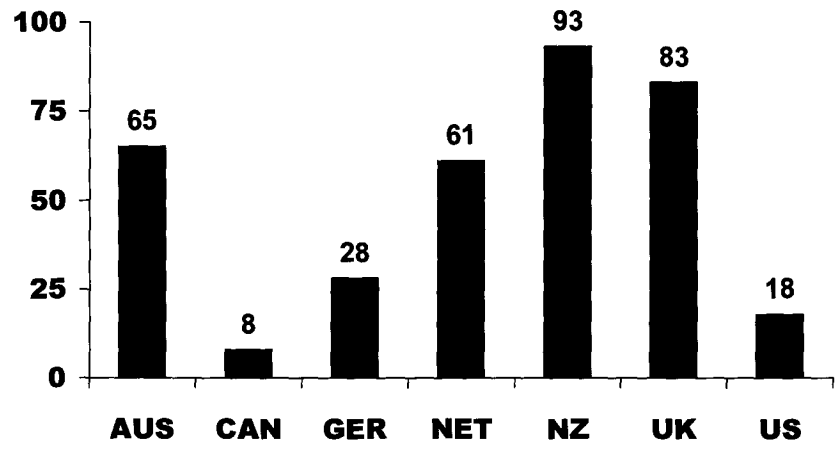
Source: 2006 Commonwealth Fund International Health Policy Survey of Primary Care Physicians

Primary care physicians in other countries not only have basic electronic medical records (EMRs) but an array of health information technology, often facilitated by government-arranged systems of information exchange. Less that one-fifth of U.S. primary care physicians routinely send reminder notices to patients about preventive or follow-up care, compared with over nine of 10 in New Zealand (Figure 16). Nine of 10 primary care physicians in the Netherlands, New Zealand, and the U.K. receive electronic alerts about potential problems with prescription drug dosage or interaction, compared with only one-fourth in the U.S. (Figure 17). When assessed against 14 different functions of advanced information capacity (EMRs; EMR access to other doctors; access

[19] A. M. J. Audet, M. M. Doty, J. Shamasdin, and S. C. Schoenbaum, *Physicians' Views on Quality of Care: Findings from The Commonwealth Fund National Survey of Physicians and Quality of Care* (New York: The Commonwealth Fund, May 2005).

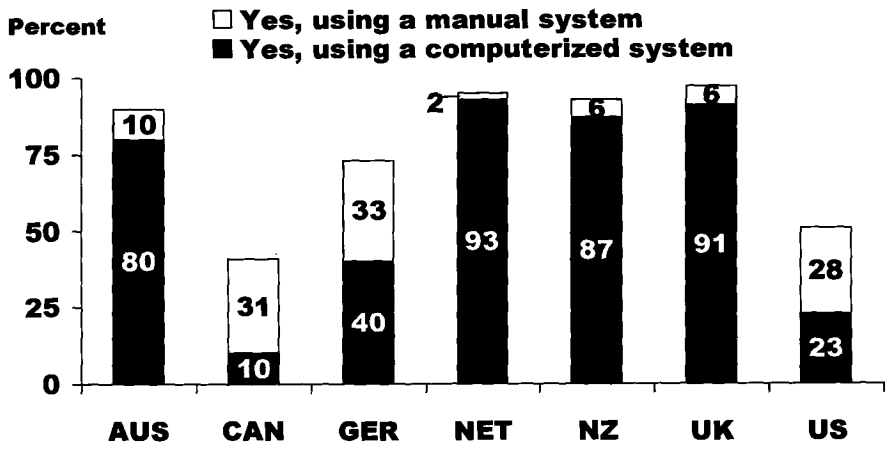
outside office; access by patient; routine use of electronic test ordering; electronic prescriptions; electronic access to test results; electronic access to hospital records; computerized reminders; Rx alerts; prompt tests results; and easy to list diagnoses, medications, and patients due for care), one of five U.S. primary care physicians reported having at least seven of the 14 functions, compared with nine of 10 physicians in New Zealand (Figure 18).

Figure 16. Patients Routinely Sent Reminder Notices for Preventive or Follow-Up Care



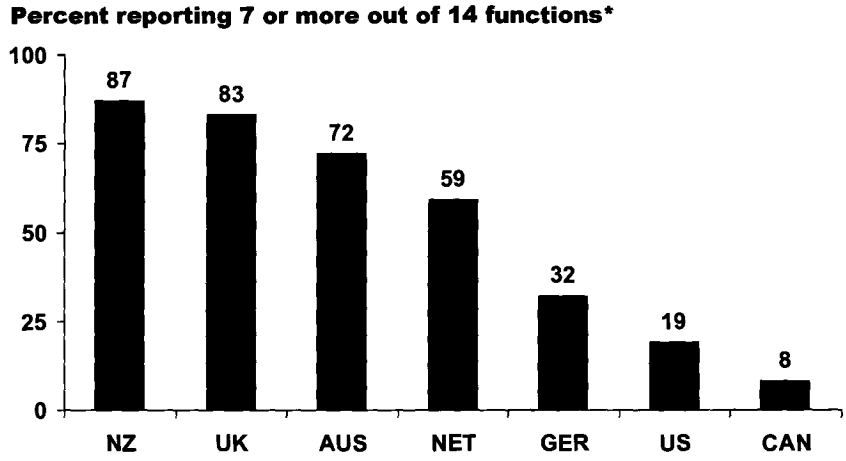
Source: 2006 Commonwealth Fund International Health Policy Survey of Primary Care Physicians

Figure 17. Doctor Routinely Receives Alert about Potential Problem with Drug Dose/Interaction



Source: 2006 Commonwealth Fund International Health Policy Survey of Primary Care Physicians

Figure 18. Primary Care Practices with Advanced Information Capacity



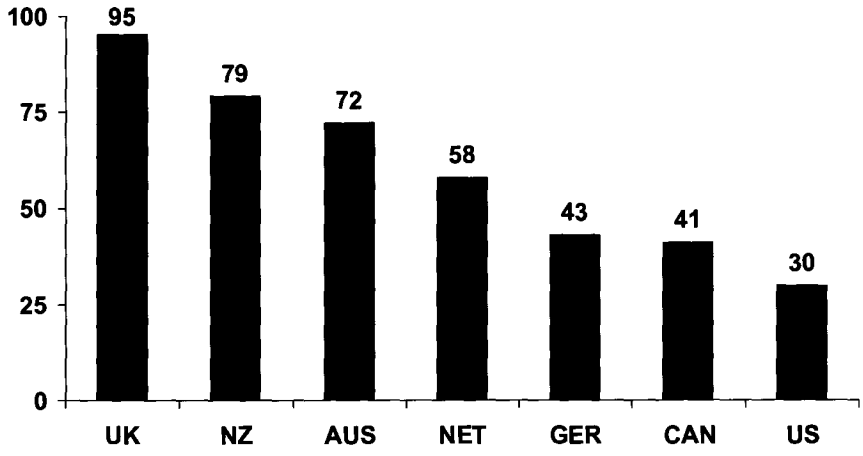
*Count of 14: EMR, EMR access other doctors, outside office, patient; routine use electronic ordering tests, prescriptions, access test results, access hospital records; computer for reminders, Rx alerts, prompt tests results; easy to list diagnosis, medications, patients due for care.

Source: 2006 Commonwealth Fund International Health Policy Survey of Primary Care Physicians

The U.S. relies on market incentives to shape its health care system, yet other countries are more advanced in providing financial incentives to physicians targeted on quality of care. Only 30 percent of U.S. primary care physicians report having the potential to receive financial incentives targeted on quality of care, including the potential

to receive payment for: clinical care targets, high patient ratings, managing chronic disease/complex needs, preventive care, or quality improvement activities (Figure 19). By contrast, nearly all primary care physicians in the U.K. and over 70 percent in Australia and New Zealand report such incentives.

Figure 19. Primary Care Doctors' Reports of Any Financial Incentives Targeted on Quality of Care



* Receive of have potential to receive payment for: clinical care targets, high patient ratings, managing chronic disease/complex needs, preventive care, or QI activities

Source: 2006 Commonwealth Fund International Health Policy Survey of Primary Care Physicians

The reliance on private insurance and the fragmentation of the U.S. health insurance system—with people moving in and out of coverage and in and out of plans, and changing their usual source of care—all contribute to high administrative costs for insurers and health care providers.[20] In 2005, the U.S. health system spent $143 billion on administrative expenses, not including administrative expenses incurred by health care providers.[21]

The U.S., with its mixed public–private system of financing, devotes a much higher share of health spending to administration than other nations. The U.S. spends 7.3 percent of total health expenditures on insurance administrative expense (Figure 20).[22] In 2004, if the U.S. had been able to lower the share of health care spending devoted to

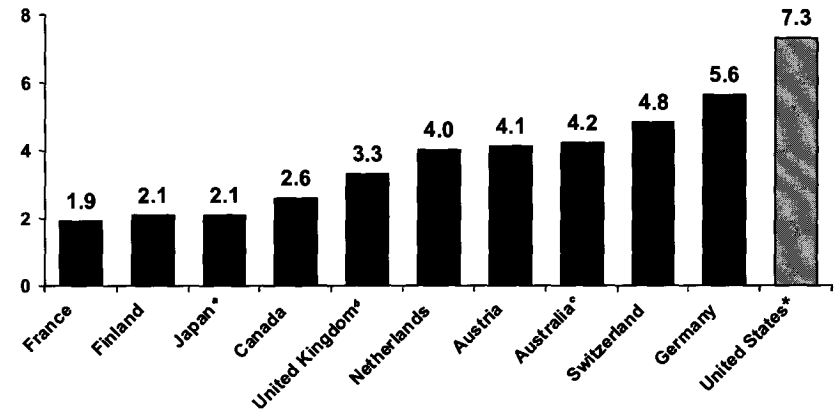
[20] K. Davis, *Time for Change: The Hidden Costs of a Fragmented Health Insurance System*. Invited Testimony, Senate Special Committee on Aging, March 10, 2003.

[21] A. Catlin, C. Cowan, S. Heffler, B. Washington, and the National Health Expenditure Accounts Team, "National Health Spending in 2005: The Slowdown Continues," *Health Affairs,* Jan./Feb. 2007 26(1):142–153.

[22] C. Schoen, K. Davis, S. K. H. How, and S. C. Schoenbaum, "U.S. Health System Performance: A National Scorecard," *Health Affairs* Web Exclusive (Sept. 20, 2006):w457–w47.

insurance overhead to the same level found in the three countries with the lowest rates (France, Finland, and Japan), it would have saved $97 billion a year. If the U.S. had spent what countries with mixed public–private insurance systems, such as Germany and Switzerland, spend on insurance administrative costs, it could have saved $32 billion to $46 billion a year.

Figure 20. Percentage of National Health Expenditures Spent on Health Administration and Insurance, 2003



[a] 2002 [b] 1999 [c] 2001
* Includes claims administration, underwriting, marketing, profits, and other administrative costs; based on premiums minus claims expenses for private insurance.
Data: OECD Health Data 2005.
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006.

Innovations in Other Countries That Provide Examples of High Performance

The key question is how the U.S. might achieve improved coverage and greater efficiency while maintaining or improving the quality of care for all. Given its history, institutions, and preferences, the U.S. is unlikely to adopt another country's health system in all its aspects, but it can learn from examples of practices that contribute to high performance. In considering the Commonwealth Fund's nine-year experience conducting comparative surveys of the public as well as health professionals in selected countries and sponsoring annual symposia focused on health care innovations for top government officials and experts, numerous examples of innovative practices and high health system performance stand out. I have also had the opportunity of serving on a team of economists charged with critiquing the Danish health system and preparing a report for the Danish parliament.[23] Drawing on this experience, I'm pleased to share with the Committee innovations for the U.S. to consider, highlighting examples of high

[23] K. Davis, "The Danish Health System Through an American Lens," *Health Policy*, Jan. 2002 59(2):119–132.

performance and innovative practices in Denmark, the Netherlands, Germany, and the U.K.

Let me begin with Denmark, which I visited again last October. Public satisfaction with the health system is higher in Denmark than in any other country in Europe.[24] In my view, this is related to the emphasis Denmark places on patient-centered primary care, which is highly accessible and has an outstanding information system that assists primary care physicians in coordinating care (Figure 21). Denmark, like most European countries, has a universal health insurance system with no patient cost-sharing for physician or hospital services. Every Dane selects a primary care physician, who receives a monthly payment per patient for serving as the patient's medical home in addition to fees for services provided. Incomes of primary care physicians are slightly higher than those of specialists, who are salaried and employed by hospitals. Primary care physicians own their own practices, which are open from 8 a.m. to 4 p.m., and patients can easily obtain care on the same day if they are sick or need medical attention.

Figure 21. Denmark Leads the Way in Patient-centered Primary Care

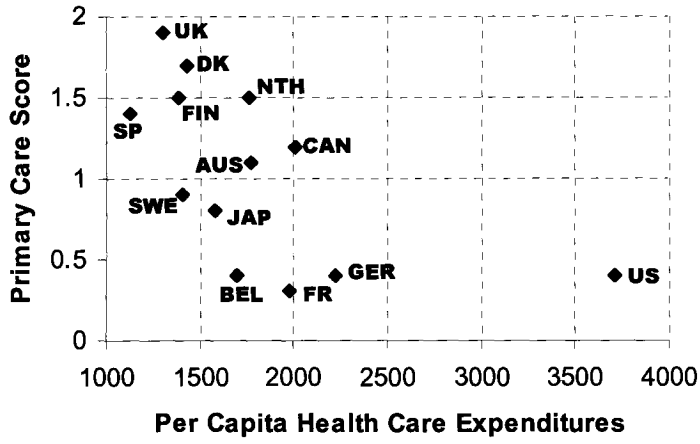
- **Blended primary care payment system**
  - **Fee for service**
  - **Medical home monthly fee per patient**
- **Organized off-hours service**
  - **Physicians staff phone banks nights and weekends with computerized access to patient information; paid for telephone consultations**
  - **Physicians staff evening and weekend clinics, and**
  - **Off-hours service physicians do home visits**
- **Health information technology and information exchange**
  - **98% of primary care physicians totally electronic health records and e-prescribing**
  - **Paid for e-mail with patients**
  - **All prescriptions, lab and imaging tests, specialist consult reports, hospital discharge letters flow through a single electronic portal (MedComm – a nonprofit organization) accessible to patients, physicians, and home health nurses**

This system of primary care contributes to highly accessible basic and preventive care, as well as lower total health care expenditures. Denmark is rated as one of the best countries on primary care as measured by high levels of first contact accessibility,

[24] E. Mossialos, "Citizens' Views on Health Care Systems in the 15 Member States of the European Union," *Health Economics,* 1997 6:109–16.

patient-focused care over time, a comprehensive package of services, and coordination of services when services have to be provided elsewhere (Figure 22).[25]

Figure 22. Primary Care Score vs. Health Care Expenditures, 1997



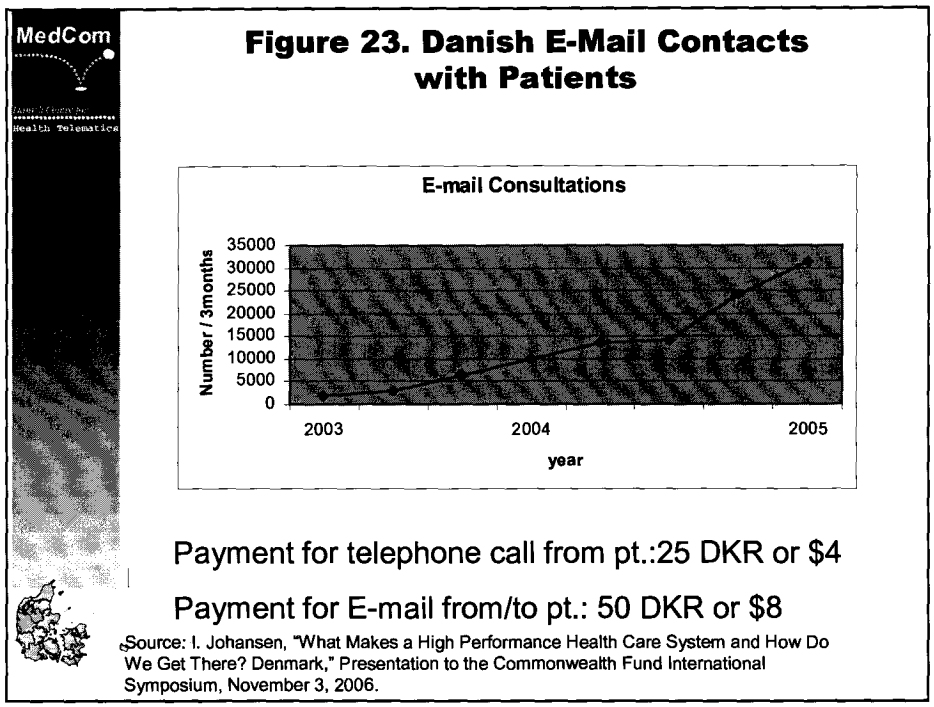
Source: B. Starfield, "Why More Primary Care: Better Outcomes, Lower Costs, Greater Equity," Presentation to the Primary Care Roundtable: Strengthening Adult Primary Care: Models and Policy Options, October 3, 2006. According to Starfield, good primary care is defined as high levels of first contact accessibility, patient-focused care over time, a comprehensive package of services, and coordination of services when services have to be provided elsewhere.

But what most impresses me about the Danish system is its organized "off-hours service." In every county, clinics see patients at nights and weekends. Physicians sit at phone banks in the "back office" of the clinic and take direct calls from patients. They sit in front of computer terminals and can access computerized patient records. After listening to a patient's complaint, they can electronically prescribe medications, or ask the patient to come in to see a physician on duty. Physicians are paid for the telephone consultation, and earn a higher fee if the problem can be handled by phone. The patient's own primary care physician receives an e-mail the next day with a record of the consultation.

All primary care physicians (except a few near retirement) are required to have an electronic medical record system, and 98 percent do. Danish physicians are now paid about $8 for e-mail consultations with patients, a service that is growing rapidly (Figure 23). The easy accessibility of physician advice by phone or e-mail, and electronic systems for prescriptions and refills, cuts down markedly on both physician and patient time. Primary care physicians save an estimated 50 minutes a day from information

[25] B. Starfield, "Why More Primary Care: Better Outcomes, Lower Costs, Greater Equity," Presentation to the Primary Care Roundtable: Strengthening Adult Primary Care: Models and Policy Options, October 3, 2006.

systems that simplify their tasks, a return that easily justifies their investment in an information technology system for their practice.[26]



Physicians, whether seeing patients through the off-hours service or during regular hours, are supported by a nationwide health information exchange, maintained by a nonprofit organization, MedCom. An assessment of health information systems in 10 countries ranks Denmark at the top, and concludes that countries with a single unifying organization to set standards and serve as an information repository have the highest rates of information system functionality (Figure 24).[27] MedCom is a repository of electronic prescriptions, lab and imaging orders and test results, specialist consult reports, and hospital discharge letters that is accessible to patients as well as authorized physicians and home health nurses. It now captures 87 percent of all prescription orders, 88 percent of hospital discharge letters, 98 percent of lab orders, and 60 percent of specialist referrals (Figure 25). Yet, its operating cost is only $2 million a year for a population of 5.3 million Danes, or 40 cents a person a year.

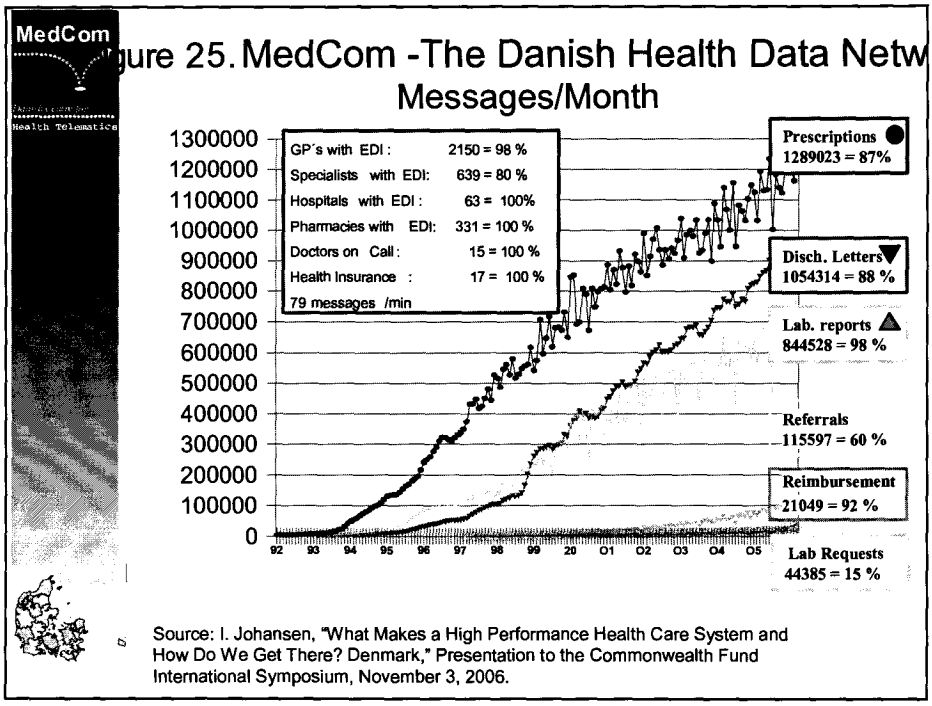
[26] I. Johansen, "What Makes a High Performance Health Care System and How Do We Get There? Denmark," Presentation to the Commonwealth Fund International Symposium, November 3, 2006.

[27] D. Protti, "A Comparison of Information Technology in General Practice in Ten Countries," Presentation to the Commonwealth Fund International Symposium, November 3, 2006.

Figure 24. Countries with a Single Unifying Organization Have Higher Rates of HIT

- **Denmark**
  - **nonprofit organization, arms length from government**
- **New Zealand**
  - **a private company**
- **Scotland**
  - **the department of health**
- ***The lack of a unifying organization is seen to be a limiting factor in a number of countries***
- **Culture and tradition; standards (e.g. communications); structured data (e.g. Read codes in England & Scotland, ICPC in Norway); and size may also be contributing factors**

Source: D. Protti, "A Comparison of Information Technology in General Practice in Ten Countries," Presentation to the Commonwealth Fund International Symposium, November 3, 2006.



Source: I. Johansen, "What Makes a High Performance Health Care System and How Do We Get There? Denmark," Presentation to the Commonwealth Fund International Symposium, November 3, 2006.

Denmark is not the only country with cutting-edge innovations to improve the quality, accessibility, and efficiency of health care. Germany is a leader in national hospital quality benchmarking, with real-time quality information on all 2,000 German hospitals with over 300 quality indicators for 26 conditions (Figure 26). Peers visit

hospitals where quality is substandard and enter into a "dialogue" about why that is the case. Typically, all hospitals come up to high standards within a few years (Figure 27). Germany has instituted disease management programs and clinical guidelines for chronic care, with financial incentives from insurance funds to physicians to enroll patients and be held accountable for care. Initial results show that this system has positive effects on quality (Figure 28).[28] Germany is also experimenting with an all-inclusive global fee for payment of care of cancer patients in Cologne (Figure 29).

Figure 26. National Quality Benchmarking in Germany

Size of the project:

- **2,000 German Hospitals (> 98%)**
- **5,000 medical departments**
- **3 Million cases in 2005**
- **20% of all hospital cases in Germany**
- **300 Quality indicators in 26 areas of care**
- **800 experts involved (national and regional)**

Ideas and goals:

- → **define standards (evidence based, public)**
- → **define levels of acceptance**
- → **document processes, risks and results**
- → **present variation**
- → **start structured dialog**
- → **improve and check**

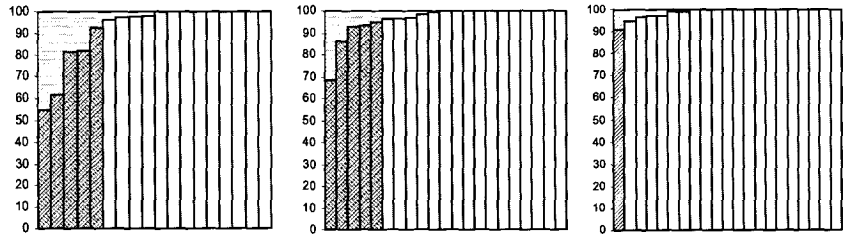
Source: Christof Veit, "The Structured Dialog: National Quality Benchmarking in Germany," Presentation at AcademyHealth Annual Research Meeting, June 2006.

[28] M. Hallek, "Typical Problems and Recent Reform Strategies in German Health Care - with Emphasis on the Treatment of Cancer," Presentation to the Commonwealth Fund International Symposium, November 2, 2006.

Figure 27. Improvement:

Hamburg: Antibiotic Prophylaxes in Hip-Replacement.

2003: 95,6% → 2004: 98,5% → 2005: 99,3%



Source: Christof Veit, "The Structured Dialog: National Quality Benchmarking in Germany," Presentation at AcademyHealth Annual Research Meeting, June 2006.

Figure 28. Disease Management Programs for Chronic Diseases in Germany

- **Conditions:**
  - **Diabetes type I and II**
  - **COPD**
  - **CHD**
  - **Breast cancer**
- **Specific regulations for care targets, drugs, quality management and documentation**
- **1.6 million enrolled patients (August 2006)**
- **Preliminary data show positive effects on quality**
- **Cost reductions unlikely**

Source: Michael Hallek, "Typical problems and recent reform strategies in German health care - with emphasis on the treatment of cancer," Presentation to the Commonwealth Fund International Symposium, November 2, 2006.

Figure 29. German Global Payment for Integrated Oncology: Key Elements

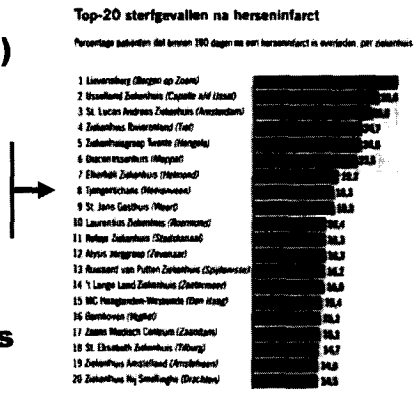
- **Treatment according to evidence-based guidelines**
- **Detailed treatment pathways and standard operating procedures (SOPs)**
  - **Define multi-disciplinary cooperation**
  - **Assign responsibilities between hospital and office-based sectors**
  - **Avoid inconsistent or redundant medical procedures**
- **New cancer-specific quality indicators**
- **Innovative financing (1-year package, global fee)**
  - **Stage-adapted global fees for 12 months from diagnosis**
  - **Fees include diagnostics, surgery, radiotherapy, chemotherapy, follow up and palliative care**
  - **Additional payments for outliers (example: early relapse)**
  - **Remuneration of office-based physicians by the oncology center**

Source: Michael Hallek, "Typical Problems and Recent Reform Strategies in German Health Care - With Emphasis on the Treatment of Cancer," Presentation to the Commonwealth Fund International Symposium, November 2, 2006.

The Netherlands stands out for its leadership on transparency in reporting quality data, as well as its own approach to primary care and "after-hours" care arrangements (Figures 30, 31). Although most Dutch primary care practices are solo practices, they support each other through a cooperative, including an after-hours nurse and physician call bank service. The Dutch government funds nurse practitioners based in physician practices to manage chronic disease. Under national reforms implemented in 2006, payments to Dutch doctors now blend capitation, fees for consultations, and payments for performance.

Figure 30. Improve Quality Transparency: The Netherlands

- **Collect comparative data: (quality indicators)**
- **Inspectorate examines care providers with different quality indicators**
- **Make quality differences visible through the internet**



Source: Hans Hoogervorst, Minister of Health, Netherlands,, "A Vision for Health Care in the 21st Century," Presentation to the Commonwealth Fund International Symposium, November 2, 2006.

Figure 31. Primary Care Organization in Netherlands

- **After hours care arrangements**
  - **Nurse and physician call banks**
- **Most are solo practices yet organized to support each other with nurse and doctor cooperative**
- **Integrated electronic medical records**
- **Widespread use of registries**

Source: R. Grol, P. Giesen, and C. van Uden, "After-Hours Care In The United Kingdom, Denmark, and the Netherlands: New Models," *Health Affairs*, November/December 2006 25(6): 1733-1737.

The U.K. General Practitioner contract, which went into effect on April 1, 2004, provides bonuses to primary care physicians for reaching quality targets (Figure 32). Far more physicians met the targets than anticipated, leading to a controversial cost overrun,

but amply demonstrating that financial incentives do change physician behavior.[29] The U.K. National Institute for Health and Clinical Excellence conducts cost-effectiveness review of new drugs and technology (Figure 33). The U.K. also publishes extensive information on hospital quality and surgical results by name of hospital and surgeon (Figures 34, 35).

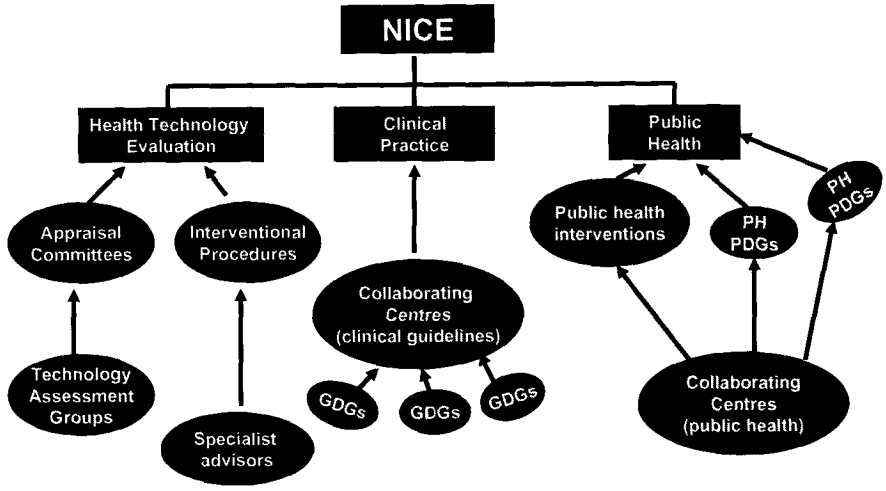
Figure 32. UK: First Year Performance

- **Practice by practice results for the Quality and Outcome Framework for England were published on August 31, 2005**
- **Average score for practices in England in the first year was 959 out of a possible 1050. The maximum score of 1,050 points was achieved by 222 practices (2.6%)**
- **8,486 practices in England took part, covering 99.5% of NHS registered patients**
- **Some of higher performance may have been improved documentation**

Source: http://www.ic.nhs.uk/services/qof/data/index_html

[29] T. Doran, C. Fullwood, H. Gravelle et al., "Pay-for-Performance Programs in Family Practices in the United Kingdom," *New England Journal of Medicine,* 2006 355(4):375–384.

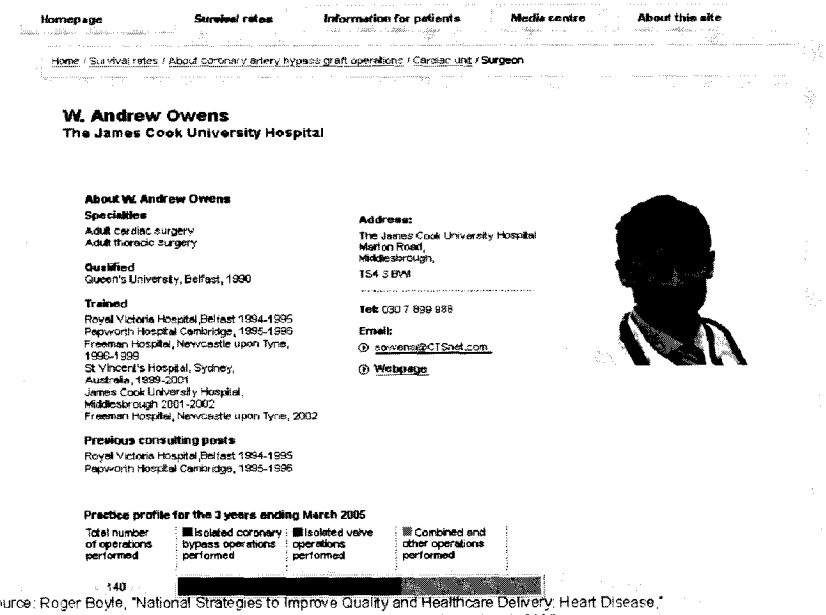
Figure 33. The UK's National Institute for Health and Clinical Excellence (NICE): "Virtual" Institute



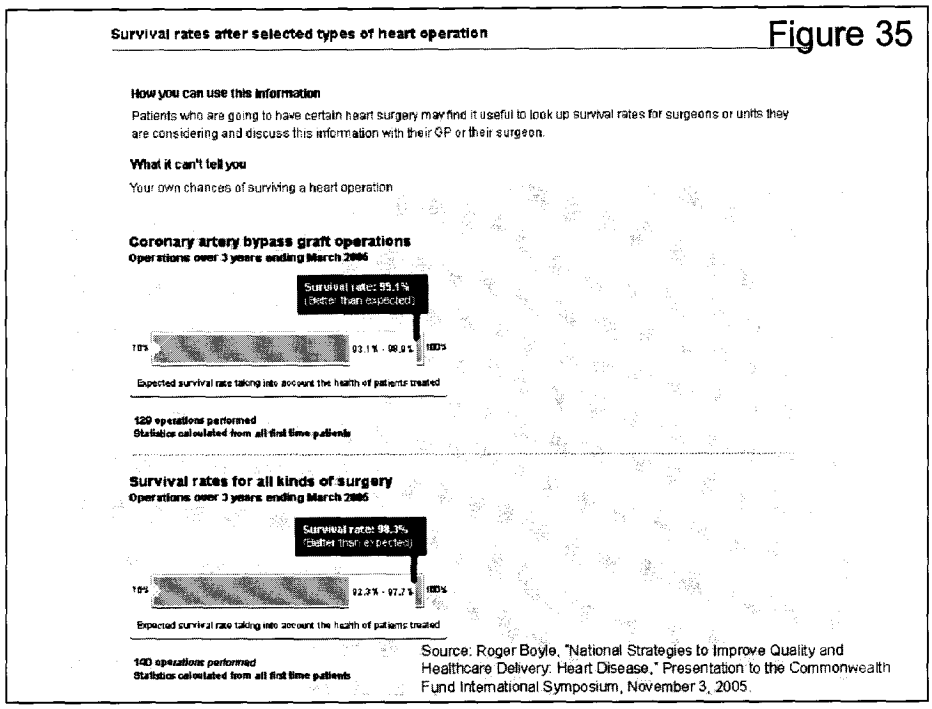
Source: Peter Littlejohns, "Using evidence to drive pharmaceutical policy: a NICE experience," Presentation to the Commonwealth Fund International Symposium, November 2, 2005.

Heart surgery in Great Britain

Figure 34



Source: Roger Boyle, "National Strategies to Improve Quality and Healthcare Delivery: Heart Disease," Presentation to the Commonwealth Fund International Symposium, November 3, 2005.



These are just a few examples of innovative practices that the U.S. might wish to investigate more closely and potentially adapt. Most, however, require leadership on the part of the central government to set standards, ensure the exchange of health information, and reward high performance on quality and efficiency.

Conclusion

If we have the world's costliest health system yet still fail to provide everyone with access to care—and fall far short of providing the safe, high-quality care that it is possible to provide—the conclusion that there is room for improvement is inescapable.[30] Only by facing this fact squarely and putting into action the best ideas and experiences across the U.S. and around world can we achieve a vision of American health care that includes: automatic and affordable health insurance for all, accessible care, patient-responsive care, information- and science-based care, and commitment to quality improvement.[31]

[30] K. Davis, S. C. Schoenbaum, K. S. Collins, K. Tenney, D. L. Hughes, and A.-M. J. Audet, *Room for Improvement: Patients Report on the Quality of Their Health Care* (New York: The Commonwealth Fund, Apr. 2002); K. Davis, C. Schoen, S. C. Schoenbaum, A.-M. J. Audet, M. M. Doty, A. L. Holmgren, and J. L. Kriss, "Mirror, Mirror on the Wall: The Quality of American Health Care" (New York: The Commonwealth Fund, forthcoming).

[31] K. Davis, C. Schoen, and S. C. Schoenbaum, "A 2020 Vision for American Health Care." *Archives of Internal Medicine,* Dec. 2000 160(22):3357–62.

Achieving a high performance health care system—high-quality, safe, efficient, and accessible to all—will require a major change in the U.S. system of delivering health services.[32] Steps toward this goal include:

- extending health insurance to all, in order to improve access, quality, and efficiency;
- assessing innovations leading to high performance within the U.S. and internationally and adopting best practices;
- organizing the care system to ensure coordinated and accessible care to all;
- increasing transparency and rewarding quality and efficiency;
- expanding the use of information technology and systems of health information exchange;
- developing the workforce required to foster patient-centered and primary care; and
- encouraging leadership and collaboration among public and private stakeholders dedicated to achieving a high performance health system.

These steps would take us a long way toward ensuring that the U.S. is a high-performing health system worthy of the 21st century. Thank you very much for the opportunity to join this panel. I look forward to learning from my fellow panelists and answering any questions.

[32] The Commonwealth Fund Commission on a High Performance Health System, *Framework for a High Performance Health System for the United States* (New York: The Commonwealth Fund, Aug. 2006).