# **Universal Health Care: Lessons From the British Experience**

Britain's National Health Service (NHS) was established in the wake of World War II amid a broad consensus that health care should be made available to all. Yet the British only barely succeeded in overcoming professional opposition to form the NHS out of the prewar mixture of limited national insurance, various voluntary insurance schemes, charity care, and public health services.

Success stemmed from extraordinary leadership, a parliamentary system of government that gives the winning party great control, and a willingness to make major concessions to key stakeholders. As one of the basic models emulated worldwide, NHS—in both its original form and its current restructuringoffers a number of relevant lessons for health reform in the United States. (Am J Public Health. 2003;93:25-30)

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#### THE UNITED STATES IS THE

only remaining industrialized country without some form of universal access to medical services, in part because policy debates are driven by false, selfdefeating beliefs. One such belief is that the United States cannot afford to cover the uninsured, when in fact a coordinated financing system is the key tool for holding costs down, and there are affordable ways to do it.1 Even the largest employers are unable to hold major cost drivers in check.

A second belief, held by the medical profession, is that they would lose still more power than they have already under corporate managed care. Yet universal health care systems elsewhere give the profession greater institutional powers.

Third, many believe that the only alternative to voluntary, market-based health insurance is a single-payer system financed by tax revenues, when there are a number of options.

Fourth, many believe that the United States is so large and diverse that any lessons one might learn from smaller and less diverse countries do not apply here, so why bother with possible lessons from anywhere else?

Finally, conservative policymakers and providers imagine that a universal health care system would mean low salaries, rundown facilities, poor quality, and endless waits to see a doctor, as with the British National Health Service (NHS). In US policy debates, the NHS serves as a dreary image of everything we want to avoid and might get if we actually developed a universal system that was equitable and efficient. US journalists almost never describe its remarkable achievements or its innovative and instructive reforms. One wonders, then, why any sensible reader should waste time on an article about the NHS.

Most of the NHS's dreary features-the rundown hospitals, the chronic shortages of specialists in every field, the long waiting lists-stem from chronic underfunding and undersupply of personnel and equipment. Many universal health care systems avoid these problems. How well a system is designed must always be distinguished from how well it is funded; the NHS is quite well designed but underprovisioned. By contrast, the US health care system is richly funded but designed so that it maximizes waste, inefficiency, and inequity.2 This makes people working in it feel it is inadequately funded as well as badly designed. A large health services research industry has arisen to try to figure out how to reduce these inefficiencies but without discussing how the basic design of US health carerisk-selecting insurers, self-enriching fiefdoms, and profitseeking vendors-impedes that goal. Learning about other, better-designed systems provides a needed comparative perspective (box below).

It is important to understand, given the dominance of conservative views in US politics, that the NHS and related systems

### **Policy Dilemmas Facing Any Health Care System**

On the basis of the writings of Rudolf Klein<sup>4</sup> and my own experiences, there are 7 policy dilemmas that the NHS has faced since its founding. They also challenge any large health care delivery system, such as Kaiser Permanente or Aetna-US Health Care in the United States, though often they are simply avoided.

- 1. How does one reconcile the need for regional or national coordination with the ability to respond to local needs?
- 2. How does one reconcile urban with rural needs and the problems of maldistribution?
- 3. How does one devise a national health care system and yet honor and foster the energies, creativity, and resources of the voluntary sector?
- 4. How does one reconcile public accountability with professional autonomy and expertise?
- 5. How shall primary care be integrated with specialty and hospital care?
- 6. How shall individualistic principles and patterns of practice be reconciled with national standards and a national system?
- 7. How is a system to reconcile a focus on the patient with a focus on community and population health?

may be characterized by some as "socialist" but may actually support conservative values: to maximize the ability to exercise individual freedom and responsibility by enabling people to take care of themselves and be productive.3 Indeed, conservatives in every other industrialized country believe their values support universal access to health care.

### **BACKGROUND OF THE NHS**

The history and development of the NHS-as documented in several highly readable books4-7-suggest a number of aspects relevant to achieving universal health care in the United States. In 1911, Parliament passed a very limited national health insurance act that covered workers (but not dependents) for primary care, pharmaceutical drugs, and cash benefits during sickness and disability. Provident societies, doctors' "clubs," and fraternal organizations offered varying degrees of voluntary insurance coverage. Otherwise, health care was financed by private fees, charity, or through public hospitals. Public hospitals tended to be larger, more comprehensive, and better funded than voluntary hospitals, many of which faced mounting debts during the depression of the 1930s. The 2 hospital systems were poorly coordinated. Access to specialists was uneven, largely owing to specialists gravitating to areas with more private patients. General practitioners (GPs) and members of specialty royal colleges feuded over who was qualified to do what and who could work in hospitals.8

Two basic approaches to reform characterized proposals in the 1920s and 1930s. One proposal was to extend the limited 1911 act into comprehensive national health insurance, analogous to universalizing an improved, more comprehensive Medicare in the United States today. Another was to build up and universalize existing, locally funded and run public health services.4 The first is based on individuals having a right to health care, the second on the idea that society has an obligation to look after the health of its people. This profound difference in the purpose of health care needs to become part of debates in the United States.

The NHS historian Charles Webster believes it took Hitler and mass bombing to break down the petty rivalries, the protective yet often shabby fiefdoms, and factional politics to allow an actual plan to emerge. The terrorist attacks of September 11 pale in comparison. During World War II, more than 2 million homes in Britain were damaged or destroyed by the Luftwaffe.5(chap1) More than 100000 people were killed. An Emergency Medical Service was formed that took charge of all medical services in the nation and created a coordinated hospital service, national and regional services for laboratory work and blood transfusions, and national services for surgery, neurology, psychiatry, and rehabilitation. As Webster notes, "The Luftwaffe achieved in months what had defeated politicians and planners for at least two decades." Still, "The bitter jealousies that wrecked the pathetically limited pre-war efforts at reform resurfaced. . . ." They were "deeply damaging and cast a long shadow over the future of the NHS."5(p8)

#### CREATING THE NHS

Leadership matters. In June 1941, Sir William Beveridge, a well-known civil servant, educator, and radio personality, was asked to plan social reconstruction after the war. Beveridge had served as a social worker among the poor in the East End of London. He had witnessed the many contradictory, partial programs for unemployment, child support, medical services, public health, and housing, run by different departments under different rules, not unlike those we have in the United States today. Beveridge decided that the only approach was to address them all at once, in ways that would create partnerships between the individual and the state.4(chap1-3)

The Beveridge report, Social Insurance and Allied Services, called for comprehensive health care as part of a postwar government master plan promoting education, employment, housing, and social security. Although the report provided only a preliminary and tentative sketch, it captured an essential vision and sold more than 400000 copies worldwide. The Beveridge plan for a taxbased national health service as a public good offered a basic alternative to the older Bismarck design of national insurance to provide access as an individual right; even today, international reports use "Beveridge" or "Bismarck" to classify these 2 types of universal health care systems.

Rudolf Klein and others believe that the NHS would have happened even if Beveridge had not written his report because of the shared perspective that had arisen between the world wars on how to solve Britain's health care problems. 4,7 But it might not have happened without Aneurin

Bevan, who was appointed minister of health in 1944. He quickly displayed his skill for constructive action, an ability to establish control, and a capacity to steer through the shoals of medical politics. His bold proposal to nationalize all hospitals drew on the wartime Emergency Medical Service. Financing through national taxes addressed the widely differing abilities of local governments to raise funds. At the same time, Bevan concluded that bringing all services under one administration was impractical because local authorities defended their control over public health, and GPs fiercely defended their independent-contractor status. (Independence is a relative term; GPs have had only one contract with one contractor-the government. Nevertheless, defending this "independence" has dominated GP politics for decades.)

Bevan and other leaders had the advantage of a parliamentary system of government that gives the winning party control over the legislative and executive branches. This makes any reform much easier to pass than in the fractured US political structure, designed from the start to impede and frustrate popular reform, even before powerful lobbying groups arise to block or co-opt popular reforms. Still, Bevan found negotiations difficult, filled with broken promises and betrayals, sudden unilateral shifts in positions and threats.<sup>4,5</sup> Getting a specific plan for universal health care passed was difficult and almost did not happen.

One principal obstacle was the doctors. To silence their vociferous opposition, Bevan "filled their mouths with gold."5(p28) Senior specialists (consultants) received a lifetime salary and indexed pension as well as the

right to continue their private practices. Other inducements included specialist control of private beds in the NHS hospitals, the right to operate independent "firms," power over a separate authority for teaching hospitals, and control over substantial lifetime merit increases to their salaries and pensions. The final result was a tripartite structure: hospitals and specialists under 14 regional boards, general practice under a national contract, and community health servicessuch as home nurses, midwives, health visitors, maternal and child care, and preventionunder the control of local governments. Eventually, this control was moved to regional health authorities. All units reported to the minister of health and his staff. Yet the NHS was basically a hospital-dominated system in which specialists were a law unto themselves while GPs ran their own practices and undergirded the system.

Even today, the basic design has much to admire. It features largely tax-based financing to fund universal health care services that are usually free at the point of service. About 60% of all institutional long-term care, pharmaceuticals, and vision care are also provided in the NHS. 9(Table 2.2) This universal and relatively comprehensive health service costs about one third what the United States spends per capita. 10 At this level of funding, everyone can choose a primary care physician and be seen promptly and all urgent cases are treated fully; but elective referrals for specialty care are put on the infamous British "waiting lists" for assessment or treatment.

Waiting lists are a common pressure valve in many systems, a brake on spending far more equitable than the American approach of access by ability to pay and its large number of formal and de facto waiting lists for the working and lower classes. In the NHS, the average waiting time for elective hospital-based care is 46 days, although some patients wait over a year. Differences by social class in funding, services, and access are minimal by international standards, although more affluent people are always more skilled at manipulating any public service.

The British system has always had a private sector for those who want quicker or more luxurious elective care. This sector's clinical quality is no better and may be worse.9 The proportion of adults who take out private health insurance policies, or get them as a managerial perk, has been flat for several years at about 11.5% of the population. 9(Table 2.6-7) These policies provide duplicative coverage for elective procedures for which specialists charge very high fees. Private care is concentrated in the greater London region and a few other cities. Currently, all private admissions and day cases total 2.2% of all NHS admissions and day cases. 9(Table 2.3, 2.10)

# LESSONS FROM MANAGED COMPETITION

Managed competition is one of a series of policy and management imperatives that spread from the United States to Western Europe and other Organization for Economic Cooperation and Development (OECD) countries and then to Eastern Europe and developing countries. International agencies such as the World Bank, the International Monetary Fund, and the World Trade Organization play key roles in such reforms. <sup>11,12</sup> Most European countries joined the competition policy bandwagon but then pulled back as they realized the risks of dislocation, bankruptcy, and the high transaction costs that competition in health care might bring. <sup>13,14</sup>

Margaret Thatcher and many other heads of state joined the international policy movement of competition as a way to challenge entrenched, inefficient, and unresponsive public services in education, municipal services, and health care.15 Health authorities were changed from being administrative offices to being purchasers. Hospitals, community health services, and specialists became semi-autonomous "trusts" that had to sell their services, although most just continued as before under contracts with their health authorities. Switching from global budgets to unit prices and setting up markets was very costly. Mrs Thatcher also reconceptualized patients as consumers and encouraged them to be demanding. She then transformed the NHS from a public service for sick patients to a public system of purchasers and providers trying to please patients-turnedconsumers. The government aimed to provide greater choice and greater rewards to providers who responded to local preferences. Who could possibly disagree? "Almost everyone." As Klein explains, "Nothing like it had been seen in the NHS policy arena since the opposition provoked by Nye Bevan 40-odd years before."4(p192-193)

By 1996, the conservatives concluded that these competition policies were not working well. <sup>16</sup> Even in its perfect form, managed competition has been shown to have deep flaws, and of

course it undermines public health and a population-based health care system. 15,17,18 Competition required more regulation and government monitoring, because health care has so many kinds of market failure.12 The costs of setting up and running a market became apparent and large. The salaries of top managers escalated, and the number of managers at least tripled. Overall costs rose, not shrank. A thorough review of US managed care and managed competition by British researchers found little evidence for their alleged benefits.19 (Perhaps out of bias, few Americans read this major study.)

As a wild card, GPs were offered the opportunity to control funds for a limited number of elective services. "GP fundholding" became the star of the reforms, but evidence showed that only about 15% of GP fundholders actually used the power of the purse to wrest better prices or services from specialists and hospitals.20 Still, the impact on specialists and specialty services was historic. By 1996, most GP fundholders said they did not want the job, and most had neither the taste nor skill for becoming purchasing agents for complex services.<sup>21</sup> Fundholding also disrupted the mandate of health authorities to purchase for the entire population and produced some two-tier access. Morale declined. Sick leaves, days off, and other evidence of despondency increased.<sup>22</sup> In 1997, the Labour Party promised an end to competition and a new era of partnership. It won by a landslide.

### THE NEW NHS

The plan for the new NHS by the present government is even more ambitious than the transformation wrought by Margaret Thatcher.23 The NHS was widely discussed as no longer sustainable, as a quaint utopia no longer affordable. Limiting it to an emergency and welfare service would have been politically feasible and would have fit in with the public-private partnership themes of New Labour. Instead, Tony Blair and his ministers, notably the minister for health, Alan Milburn, have moved toward the far more difficult position of admitting that the NHS has been starved of funds for years and raising the national health insurance tax to fund the largest increases in its history.

The government's new plan also aims to bring GPs from the organizational periphery to the center of the NHS; to organize them into geographic units called primary care trusts; to combine them with community services and with a public health agenda for improving the health status of the population; to develop coordinated programs with housing, employment, education, and the voluntary sector; to devolve most of the centrally held budget to them; and to have them develop new integrated relations with specialists and hospitals. This new master plan addresses most of the segmenting compromises Bevan had to make at the founding of the NHS.24 A similar vision in the United States was the community-oriented primary care movement of the 1970s.

The Blair government has come to recognize, as its predecessors did not, that waiting lists need to be reduced and restructured. The existing system of each specialist managing his or her waiting list in an uncoordinated way has created a conflict of interest: specialists are rewarded for building up private practices, which only lengthens waiting times for everyone else on the waiting list.<sup>25</sup> The new NHS calls for replacing waiting lists with appointments, removing waiting list management from specialists, rewriting the specialists' contract to reward full-time commitment and productivity, and substantially increasing the number of subspecialists and nurse specialists.

The government is also ad-

dressing the historic absence of quality standards by establishing new institutions that set standards for the nation and monitor them in rigorous ways. These measures draw on US models, but the NHS can implement them far more systematically and vigorously than comparable efforts in the United States. The government as payer has set up an entire system for inspecting the quality of medicine delivered at its hospitals and clinics, and quality standards are becoming part of every contract. Chief executives can be-and already have been-replaced for poor performance. Senior specialists whose services are found inferior are the object of formal rehabilitation. Academic medicine is now subject to a commission to oversee the coordination of training for all the health professions. Both of these changes represent a considerable weakening of power by professional associations and the royal colleges in the face of widely publicized evidence of their failing to uphold standards. The unified vision behind these reforms consists of strong national standards together with devolved purchasing and empowering patients and clinicians.

Besides addressing the historic flaws of the NHS, the government plans to unite specialty care with primary care, primary care with community health care, and all three with social services, so that one ends up with comprehensive, integrated services that are community based. While the government eliminated Community Health Councils, it requires laymen to be appointed to the new governing boards, and it has institutionalized patient power in a number of ways. A nationwide telephone call-in service to trained nurses who answer patients' questions and provide advice has been established. Webbased information on a wide range of health issues and problems has been developed by clinical teams so that citizens are not at the mercy of the bewildering array of unreliable commercial information on the Internet.

In short, what Bevan found he could not achieve in 1948 is now being attempted. Similar efforts are taking place in other European systems that have also been plagued by hospital dominance and protective specialty fiefdoms. These efforts toward population-based health gain and integrated services represent the next generation of health reform, building on the last generation's creation of universal health care systems. The United States is now more than a generation behind, unable to reduce health disparities in a system characterized by ever-shifting market shares among competing managed care plans that change insurance coverage from year to year and policy to policy for "populations" of employees. The real chasm in US health policy is between the rhetoric to reduce health disparities and the realities of organization and finance.

Given how much US policymakers admire markets and dis-

parage governments, it is interesting that the British are using government power to achieve all the benefits of markets without markets. However, the reality falls short in several ways. Many of the changes are only beginning, although the speed of implementation is remarkable. Specialists and hospitals are resisting, as they have since the NHS was founded. And Blair is pushing to bring in private "partners" (a high-fashion term), especially large corporations. Of course, he thinks he will do so on his terms for the public interest, but one wonders if he knows how persistent and successful large corporations are at reworking the public interest for their business interests. What would happen to the government if it faced highly trained corporate advocates with large expense accounts, who never have to stand for election and never go away?<sup>26</sup> For them, the purpose of health care is to make money, of course in the name of saving money.

Still, governmental leaders in the United Kingdom have achieved much more in the last 3 years than governmental or corporate leaders in the United States have over the past decade. One could do worse than to emulate the new NHS, especially in the United States, where policy leaders do not know how to repair the distrust, backlash, and rising medical costs that resulted from turning over clinical services to forprofit corporations (box above). A strong quality movement is building, but it has to improve margins to succeed. The US credo, "No margin, no mission," is stated as a self-evident law of nature, but actually it is contradicted by most health care systems. The credo in the NHS

#### **Transferable Policy Lessons From the United Kingdom**

The British have made a number of good decisions that are transferable to other systems. Some of these are mentioned in the text and others come from a more comprehensive list.<sup>27</sup>

- 1. Health care should be "free at the point of service," a founding principle of the NHS. Although this is precisely opposite the principle of American employers and politicians as they increase co-payments, the evidence from the United States and abroad supports the British position. Co-payments create inequities, raise barriers to access, and usually do not achieve their goals.<sup>28,29</sup> They are not very effective in containing costs, because patients have discretion over just a small percentage of ambulatory and elective choices. Most "cost containment" efforts focus on minor, front-end costs rather than addressing major, back-end costs. 30 Moreover, co-payments undermine the goals of appropriate and effective care and discriminate against the working and lower classes. Such evidence seems ignored by advocates of co-payments in Congress and the business community.
- 2. Fund health care from income taxes. Whenever the British have reviewed the option of using health insurance instead of income tax financing, they have found evidence that an insurancebased health care system costs more to operate, is more inequitable, controls costs less effectively, and provides no basis for population-oriented prevention or public health gains. By sharp contrast, US employers are moving the other way, from large group insurance toward individuals buying their own policies on a voluntary basis, long known as the most costly and inequitable way to structure health insurance, with few means to contain costs, raise quality, or improve the health status of the population.
- 3. Establish a strong primary care base for a health care system. Every UK resident chooses a personal physician or practice. The system provides incentives to practice in underserved areas and prevents new GPs from setting up in saturated, affluent areas. The primary care base of the NHS is widely celebrated<sup>31</sup> and has been consistently strengthened over the decades. For example, as recruitment into general practice and morale waned and subspecialty medicine grew in the postwar years, the British raised GP lifetime incomes to equal those of subspecialists. Other changes were made to strengthen primary care by providing more practice staff and nurses in order to encourage solo practitioners to come together into teams. More recently, these teams have been further enlarged by bringing together geographic clusters of GP practices into large Primary Care Trusts that include all community health care services and many social services as well.
- 4. Pay GPs extra for treating patients with deprivations and from deprived areas. Almost 20 years ago, Brian Jarman developed a deprivation scale based on factors that affect clinical care, so that living alone is a factor as well as low income. 32 The British

- have long paid GPs considerably more for taking care of patients who are more likely to have more problems and whose care is more demanding. American health policy researchers are still debating whether it can be done.
- 5. Reduce inequalities in historic funding that usually favor the affluent. Regional inequities in the United Kingdom are much smaller now than 20 to 30 years ago, and all major budgets are risk adjusted, in sharp contrast to the United States. Reductions have been achieved through national planning, building up hospitals and resources in underserved areas, and giving disproportionately more new funds to less well-funded areas.
- 6. Devise a set of bonuses for GP practices that reach population-based targets for prevention. Starting in 1990, the government added a new element to the GP contract—lump sums or bonuses for carrying out preventive measures on a high percentage of the patient panel (enrollees). For example, a practice could receive about \$1250 if it completed the childhood immunization series for 70% to 89% of all eligible children registered and \$3700 if it completed the series for 90% or more. The result has been high levels of immunizations and other preventive measures. Another incentive rewards GPs for using generic drugs for 70% of their prescriptions. Why don't US health plans follow suit?
- 7. Pay all subspecialists on the same salary scale. This policy conveys the sense that psychiatry is as important and complicated as cardiology and pediatrics as challenging as orthopedics. On what defensible grounds should one specialty (cardiology) be paid more than another (psychiatry)? Equal pay signals to young doctors that they should specialize in what they do best and enjoy. Yet in many systems pay differs greatly by specialty. This decision has many cultural, organizational, and clinical benefits, even though some subspecialties have more opportunities to supplement their incomes than others.
- 8. Control prescription drug prices while rewarding basic research for breakthrough drugs. Like most other countries, the British have a national board that negotiates with the industry. Pharmaceutical companies like to portray this approach, which is nearly universal outside the United States, as "price controls" that can "never work." In fact, nationally negotiated price schedules have worked well for years and saved billions. The British approach goes further, by rewarding breakthrough research and discouraging "me too" research or patent manipulation. It regulates profits, not prices, by having companies submit financial records and by determining set proportions for expenditures (e.g., a limit of 7% of sales for spending on marketing) on inpatent branded drugs. 33,34 If prices result in higher profits than allowed, the excess profits are paid back. The British approach both ensures and limits profits.<sup>7,8</sup> Meanwhile, providers are given drug budgets within which they have to live. Any other nation or large buyer can learn from this system.

and in many health care systems is "Mission, not margin," and their mission does not falter when they are in the red, as often they are.

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#### References

- 1. Shaffer ER. The California health service plan, and 8 other models for universal coverage. Available at: http:// www.healthcareoptions.ca.gov. Accessed October 7, 2002.
- Light DW. The restructuring of the American health care system. In: Litman TJ, Robbins LS, eds. Health Politics and Policy. Albany, NY: Delmar; 1997: 46-63.
- 3. Light DW. A conservative call for universal access to health care. Available at: http://www.med.upenn.edu. bioethics. Accessed October 7, 2002.
- Klein R. The New Politics of the NHS. 3rd ed. New York, NY: Longman;
- Webster C. The National Health Service: A Political History. New York, NY: Oxford University Press; 1998.
- Rivett G. From Cradle to Grave: Fifty Years of the NHS. London, England: The King's Fund; 1998.
- Eckstein H. The English Health Service: Its Origins, Structure and Achievements. Cambridge, Mass: Harvard University Press; 1958;chap 5.
- 8. Honigsbaum F. The Division in British Medicine. London, England: Kogan Page; 1979.
- 9. Keen J, Light D, Mays N. Public-Private Relations in Health Care. London, England: The King's Fund; 2001.
- 10. Appleby J. Funding UK health care from general taxes-time for a change? Presented at: The Changing Health Care System: A British-American Dialogue [symposium organized by the New York Academy of Medicine and the Royal Society of Medicine]; April 25, 2002; New York, NY.
- 11. Iriart C, Merhy E, Waitzkin H. Managed care in Latin America: the new common sense in health policy reform, Soc Sci Med. 2001:52: 1243-1253.
- 12. Light DW. The sociological character of markets in health care. In: Albrecht GL, Fitzpatrick R, Scrimshaw SC, eds. Handbook of Social Studies in Health and Medicine. London, England: Sage; 2000:394-408.
- 13. [Special issue on comparative institutional responses to competition policy.] Soc Sci Med. 2001;52(8).
- 14. [Special comparative issue on competition in health care markets.] J Health Polit Policy Law. 2000;25(5).

- 15. Glaser WA. The competition vogue and its outcomes. Lancet. 1993;341:
- 16. Light DW. From managed competition to managed cooperation: theory and lessons from the British experience. Milbank Q. 1997;75:297-341.
- 17. Light DW. Equity and efficiency in health care. Soc Sci Med. 1992;35: 465-469
- 18. Light DW. Homo Economicus: escaping the traps of managed competition. Eur J Public Health. 1995;5: 145 - 154.
- 19. Robinson R. Steiner A. Managed Health Care. Philadelphia, Pa: Open University Press; 1998.
- 20. Audit Commission. What the Doctor Ordered: A Study of GP Fundholding in England. London, England: Her Majesty's Stationery Office; 1996.
- 21. Light DW. Effective Commissioning. London, England: Office of Health Economics; 1998:chap 3, 5.
- 22. Williams S, Michie S, Pattani S. Improving the Health of the NHS Workforce. London, England: The Nuffield Trust;
- 23. Department of Health (UK). The NHS Plan. A Plan for Investment. A Plan for Reform. London, England: Stationary Office: 2000.
- 24. Milburn A. The new NHS-developing the NHS national plan. Department of Health Key Speech delivered at: Royal College of Surgeons; May 18, 2000; London, England.
- 25. Light DW. How waiting lists work and their hidden agenda. Consumer Policy Rev [UK]. 2000;10:126-132.
- 26. The Other Drug War: Big Pharma's 625 Washington Lobbyists. Washington, DC: Public Citizen Congress Watch; July 2001.
- 27. Light DW. Policy lesson from the British Health Care system. In: Powell FD, AF Wessen AF, eds. Health Care Systems in Transition: An International Perspective. Thousand Oaks, Calif: Sage; 1999:327-365.
- 28. Evans RG, ML Barer, GL Stoddart. User Charges, Snares and Delusions: Another Look at the Literature. Toronto: Ontario Premier's Council on Health, Wellbeing and Social Justice; 1993.
- 29. Rasell ME. Cost sharing in health insurance—a reexamination. N Engl J Med. 1995:332:1164-1168
- 30. Berk ML, Monheit AC. The concentration of health expenditures, revisited. Health Aff. 2001;20(2):9-18.
- 31. Starfield B. Primary Care: Concept, Evaluation and Policy. 2nd ed. New

- York, NY: Oxford University Press; 2000.
- 32. Jarman B. Identification of underprivileged areas. Br J Med. 1983;286: 1705-1709.
- 33. The Pharmaceutical Price Regulation Scheme. London, England: Department of Health (UK): 1999.
- 34. Pharmaceutical Price Regulation Scheme: Fourth Report to Parliament. London, England: Department of Health: December 2000.