



A medical student's review of the *British National Health Service*

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The health care system in the United States is ailing. As a medical student, I am reminded of this fact each day by the frustrations of attending physicians, the anecdotes of desperate patients and the stories of doom-and-gloom in the news media. What do I hear and read? Over 41 million are uninsured; infant mortality is 7.1 per 1000 live births, one of the highest among industrialized nations; and health care costs currently stand at 13.5 percent of our GDP, two to three times those of other industrialized nations.^{1,2,3} We occasionally look beyond our borders to Canada, Sweden, and Great Britain; these nations operate their health care systems with far more government involvement than the United States. This paper describes Great Britain's National Health Service (NHS) from the perspective of an American medical student searching for some answers in a sea of health care dilemmas. What is the NHS in terms of its origins, politics, patient access to care, utilization of health resources, preventive services, medical ethics, and its validity assessed by

several key health outcome statistics? To search for answers, I traveled to Great Britain to interview several physicians and a clinical pharmacologist.

The NHS was created in 1948 with the goal of providing all British citizens with free health care at the point of access.⁴ The NHS does not require patients to pay for inpatient stays or outpatient visits and requires only a small copayment for prescription medications and some other services. The British government funds the NHS's free, universal access through taxation.⁵ In 1997, health care spending in Great Britain was approximately \$1,347 per person per year, while the figure in the United States was almost three times as much, \$3,925 per person per year.³

In terms of physicians, there are two parts to the NHS: (1) hospitalist and specialist care and (2) primary care. For hospitalist and specialist care, the NHS allocates funds to hospital trusts, which are the administrative arms of the government that run either a single hospital or a small group of hospitals. These trusts then use the funds to pay for physician salaries, hospital staff, utilities, maintenance, and new equipment. The trusts are relatively autonomous, but the NHS reserves the power to control their activities. All specialists—called consultants in Great Britain—are paid a yearly salary. For primary



By and about the author

I grew up in the Washington, DC, area and at age 16, was offered a summer internship at the NIH by Nancy Dwyer, a laboratory researcher there. For the next three summers under her guidance and that of Dr. Joan Blanchette-Mackie, I became very interested in biological science.

Fours years studying at Northwestern University as an economics major and two years working at a hospital finance consulting firm taught me there is more to medicine than patients and disease—for better or for worse, money is a major issue.

I am currently a fourth-year student at the University of Illinois at Chicago College of Medicine, where I am a member of the College's James Scholar Program for Independent Study. This paper was made possible by the guidance of the program's director, Dr. Truman Anderson and the editing skill of Julie Eisengart. I owe them both deep thanks and gratitude.

care, the government pays independent general practitioners (GPs) a capitated amount for each patient, along with some fee-for-service payments for a few procedures.⁵ Patients are free to choose their GPs, but are not free to see specialists of their choice. GPs refer patients to assigned specialists. How this system, which is far different than our own, came to be is deeply rooted in British political history and culture.



The NHI Act of 1911

The creation of the NHS in 1948 was the result of years of incrementally increasing government involvement in medicine. During the nineteenth century, the British government's role in medicine was limited to providing hospitals for the poor, apparently the only benevolent provision in the otherwise harsh Poor Laws that generally discouraged anyone from seeking support from the government. The first expansion of the government's role came in 1911 with passage of the National Health Insurance Act, which provided primary care for low-paid workers (but not their dependents) in an effort to ease social unrest among the poor. During the 1920s and 1930s, the government made several other small steps in expanding its involvement in providing care, but by far the greatest leap forward was during World War II. It was then that the government took over and upgraded existing hospitals to operate the

Emergency Medical Service, which treated casualties from the many bombings by German forces. Near the end of this war, physicians, the government, and the public were ready to accept the creation of the National Health Service: Prime Minister Winston Churchill announced his administration's intent to do so as World War II ended. It was generally accepted that the provision of health care was part of the state's responsibility to its citizens and that the right to health care was an essential part of any reasonable life.⁴ Just as World War II did much to foster the provision of private health insurance by employers in the United States, so too did it have a very different, yet equally profound effect on the British means of providing health care.



Privatization? in the NHS?

While many in Britain share the same vision for the NHS, how the government should execute this vision changes with each new government. The first major political change for the NHS came in the late 1970s, with the Conservative Party administrations of Margaret Thatcher and John Major. These administrations commercialized many aspects of government, including the NHS, by eliminating an entire level of management, attempting to hold physicians more accountable for the resources they use and, finally, creating a free-market within the NHS.⁵

This last change took place in 1990, when the government experimented with giving GPs much greater autonomy. To improve service delivery, the government gave GPs funds to contract with specialists and hospitals for certain health services for their patients.⁶ Through the NHS and Community Care Act, the GPs who received additional funds became known as "fundholders." Essentially, these fundholding GPs became their own HMOs, bearing the financial risk of their patients becoming sick and requiring health care services. Not all services were funded through the fundholding GPs. For example, emergency hospital admissions and surgery costing more than \$10,000 were still paid directly by the NHS. GPs were not required to join this program, and only 30 percent participated.⁷ The hope was that competition among specialists and hospitals for GP contracts, combined with financial restraint on the part of the GPs, would improve patient care and cut costs.⁶

This attempt at partial privatization of the NHS was a complete failure. Most GPs lacked the skill or energy to set up contracts effectively or to manage the additional funds. For GPs, the increased control over their practices was more of an administrative hassle than it was worth. The government repealed the act in the mid 1990s, leaving the NHS in a period of uncertain transition.⁶

To remedy this uncertainty, the more liberal administration of Prime Minister Tony Blair proposed another reorganization of the NHS in 2002. This newest proposal included dramatically increased funding for the NHS with a rearrangement in NHS bureaucracy. Certain levels of administrative control were eliminated and new ones were created.⁸



NHS: Don't move to a U.S. system!

All of this change comes at a cost. According to some NHS policy analysts, “endless prescriptions for change involving unprecedented micromanagement from the centre, . . . has the effect of constraining and undermining the ability of [NHS] managers to manage.”⁸ John Radcliffe Hospital Trust Medical Director Dr. James Morris (in a personal interview on January 29, 2002), told me that one of his top wishes for the NHS would be a “moratorium on organizational change.” Clearly, although the highly decentralized U.S. health care system has its shortcomings, so too does its centralized British counterpart.

The central planning of the NHS also has its advantages, allowing the NHS to allocate resources where health experts, rather than the free market, feel they belong. Oxford pulmonologist Dr. Chris Garrard (in an interview on January 29, 2002) said that he believes the government allocates resources correctly in the area of critical care. Dr. Garrard and other specialists working in critical care settings were part of an NHS advisory group that decided the appropriate number of nurses and other resources per ICU bed. Their recommendations resulted in over \$280 million in new funding for critical care in the NHS. The government also sets Great Britain's public health focus through an initiative called the National Service Framework (NSF). The NSF targets cardiovascular disease, diabetes, mental health, and the elderly as major public health priorities.⁹ Dr. Morris agrees with the NSF's priorities and believes they will benefit the general health of the nation.

On the other hand, government medical decisions can be highly political and influenced by the news media. In January 2002, 94-year-old Rose Addis was allegedly neglected during her hospital stay, and kept in a temporary holding area for many hours while waiting for a permanent bed. Mrs. Addis's experience attracted national media attention and became the focus of intense debate for Prime Minister Tony Blair on the floor of Parliament.¹⁰ Dr. Garrard believes that this single event could bring more funding to the NHS than any carefully planned or systematic initiative. London clinical pharmacologist Dr. Simon Thom (interviewed on January 30, 2002) said, “NHS policy should not be dictated by politicians, economists and sensationalist media coverage of bed availability—it should be determined by epidemiologists with detailed

knowledge of public health.” In addition to affecting health care managers, public health priorities, and the media, the British government's central planning of the NHS also plays a role in patient access to care.



aiting . . . waiting . . . waiting

Even though the NHS provides universal health coverage, this does not mean patients have all their health care needs met immediately. To control costs, the NHS rations the supply of health services by limiting the number of physicians, nurses, hospital beds, and other resources necessary for diagnosis and treatment. As a result, patients must be triaged, either in the emergency department or by their GP.

If their health problems are not urgent, the NHS puts patients on a waiting list. London GP Dr. Richard Stock (interviewed on January 31, 2002) sees waiting lists in his practice. If he suspects that one of his patients has cancer, the appropriate consultant sees the patient within a week. According to statistics kept by the NHS, 85 percent of cancer referrals in England were seen within four weeks during the first quarter of 2002.¹¹ Dr. Stock added, however, “If I find a benign dermatologic lesion on one of my patients, that patient may have to wait up to 18 months to see a dermatologist.” Only 29 percent of dermatology referrals were seen within four weeks early in 2002.¹¹ In 1996, nonurgent procedures such as elective cholecystectomies and cataract surgery had waiting lists of 18 months to two years.⁷ As of January 2002, there were just over 1 million patients on NHS waiting lists, almost 30,000 of whom had been on the list for more than one year.¹²

Waiting lists may harm patients and create additional treatment challenges for physicians. London psychiatrist Dr. Tom Sensky (interviewed on January 30, 2002) told me, “Waiting lists for psychiatric services can come back to haunt you because people generally deteriorate over the course of waiting. [As a result] patients become more complicated to manage in the long term.” A Dutch study found that patients waiting an average of 100 days for coronary artery bypass grafts suffered complications, and that these complications often occurred relatively early in their wait.¹³

Patients and physicians can circumvent NHS waiting lists by using private health insurance. Approximately 13 percent of the British population has private insurance purchased individually. The government allows British physicians to earn up to 10 percent of their income from seeing privately insured patients, although this limit is rarely enforced. Patients and physicians use private insurance to avoid waiting lists for elective surgeries such as hip replacements, hernia operations,

hemorrhoid repair, and gynecologic and ophthalmologic surgery. A 1996 study found that the wait for an NHS orthopedic consult ranged from three months to two years for the study's sample of physicians, whereas a privately insured patient could be seen by the same physicians within one to seven weeks. Patients with private insurance receive care more quickly, and physicians with private patients can earn an additional \$15,000 to \$75,000 per year.¹⁴ With such financial incentives, NHS waiting lists may be becoming even longer because physicians are caring for private patients rather than NHS patients.

The British public has voiced great frustration with NHS waiting lists and, as a result, the government created the NHS Plan to decrease the length of these lists. The NHS Plan calls for a 33 percent increase in government spending over the next five years. These additional funds will be used to build 100 new hospitals and add 7,000 new beds by 2010. Further, the NHS will fund 7,000 more consultants and 2,000 more GPs, and will create 1,000 new medical school slots. With these additional beds and personnel, the NHS hopes to reduce the maximum wait time for an inpatient visit to six months and for an outpatient visit to three months.¹⁵

NHS waiting lists are the result of government-regulated rationing of health care resources, whereas in the United States, uninsured patients who are unable to pay for care suffer a similar fate. Given the scarcity of health resources on both sides of the Atlantic, how does the NHS maximize its resources to treat the greatest number of people possible?

The NHS has taken several measures to increase the efficiency of health care delivery. The NHS uses a restricted drug formulary for GPs and has used its purchasing power to negotiate lower rates for medications from pharmaceutical companies. Additionally, the NHS sets medication budgets for GPs and monitors their prescription practices. Those GPs who are consistently over budget are reprimanded. Mirroring a similar trend in the United States, the NHS also encourages more outpatient surgery. From 1978 to 1991, outpatient surgery doubled from 10 percent of hospital procedures to 20 percent. This increase in outpatient surgery has come at the cost of increased GP visits to care for patients that would normally have been cared for in the hospital.⁵



I need a bed!

One paradoxical hindrance to efficient delivery of health care is the scarcity of NHS hospital beds. In 2000 and 2001, the average NHS hospital occupancy rate was 84 percent.¹⁶ Dr. Garrard told me that his 18-bed intensive care unit is rarely at less than 90 percent capacity and that John Radcliffe Hospital where he works is "absolutely full" three or four days out of

the week. According to NHS statistics, John Radcliffe Hospital was at almost 90 percent occupancy on average during 2000 and 2001.¹⁶

The high level of NHS hospital occupancy leads to two distinct challenges for physicians treating inpatients. First, it makes moving patients within the hospital difficult. Dr. Garrard stated that he often wants to move a stable patient from an ICU bed to a medical bed but finds no medical beds available. The patient must stay in the ICU, unnecessarily holding an ICU bed that another more seriously ill patient could use. Second, it makes moving patients from hospital to step-down facilities difficult. Dr. Sensky described this challenge in regard to psychiatry patients: A psychiatric patient may be temporarily discharged for a trial outpatient period and have his or her vacant hospital bed filled by a new psychiatric patient. If the original patient's trial period does not go smoothly, he or she must be readmitted, causing an immediate conflict in hospital bed availability. Dr. Sensky believes more hospital beds are needed to allow for fluidity in the system.

One criticism of the U.S. health care system is the excess of hospital beds and the associated duplication of expensive technology: total U.S. hospital occupancy rate was 66 percent in 1999.¹⁷ The United States has an average inpatient length-of-stay of 7.8 days compared to Britain's 9.8 days.³ The excess capacity and duplication of resources in the U.S. health care system allow physicians to move their patients more freely and have tests performed in a more timely fashion than in the bottlenecked NHS system, and this may be one of the reasons for shorter hospital stays in the United States. However, this reasoning is only a possible explanation and requires more study.



Preventive medicine will help

The NHS has various preventive medicine programs. It encourages GPs to perform preventive measures through financial incentives, and gives monetary bonuses if they reach specific targets for their practice, i.e., percentage of children immunized or percentage of women screened for cervical cancer by an annual Pap smear. The NHS also requires that GPs provide yearly check-ups for patients older than 75, and it offers mammograms once every three years to women ages 50 to 64, with older women having mammography if requested.^{5,18}

In addition to creating physician incentives and disease screening opportunities, the NHS also has community programs to reach those who may be at most risk for future disease. The First Parent Health Visitor Scheme actively enrolls first-time mothers from low-income areas for scheduled home visits from a specially trained health visitor. This health visitor trains mothers in parenting skills, child safety, and disease

prevention for their babies. A 2002 study found that mothers involved in the program had higher breast feeding rates and increased use of electric socket covers, while their children had lower accident rates in the second year of life.¹⁹ These preventive measures make sense for the population and for the NHS as it tries to maximize health and minimize costs, but sometimes the decisions concerning the health of an individual versus the health of the nation are not so clear-cut.



How much rationing is too much?

The explicit rationing of health care services in the NHS accentuates a major ethical dilemma faced by the medical profession and societies everywhere. How does society reconcile the ideal that doctors must do everything in their power for the well-being of a patient with the reality of limited resources to distribute among all people? As an example, in the mid 1990s, public outcry arose when a hospital refused a third transplant attempt for a child because the cost was not justifiable when weighed against the probability of a successful outcome.²⁰ This decision could be interpreted to mean that the hospital would allow the child to die so it could save money. Using the slippery slope argument, such a decision could be extrapolated to refusal to treat the disabled on the grounds that their treatment is also a waste of resources.²⁰

The current NHS solution to this dilemma is to handle each decision openly on a case-by-case basis, keeping in mind personal and local circumstances.²⁰ While NHS policy toward this key ethical challenge in medicine is by no means definitive, it shows a willingness on the part of the NHS and the British people to confront a very difficult issue openly. Arguably, openly confronting the issue may bring the British closer to an acceptable solution for their society.



Measurable outcomes: not so bad

With the many differences in how the NHS delivers health care in comparison to the United States, it is of interest to examine the results of these two systems' efforts. However, before making comparisons it is important to point out that it is widely accepted by research authorities that life expectancy and other such measures are questionable indicators of a nation's health. Further, these measures are a product of many different variables including diet, accidents, education, and poverty rate, among others, with only one of these variables

being the form of a nation's health care delivery. Caveats aside, in 1997 life expectancy at birth in Great Britain and the United States was virtually the same for women at 79.3 years, and higher for men in Britain at 74.4 years, compared with 72.7 years in the United States. If a woman reaches the age of 65 in Great Britain, she can expect to live an average of 18.4 more years, with the value for women in the United States being the same. If a man reaches the age of 65 in Great Britain, he can expect to live an average of 14.7 more years, and a statistically similar man in the United States can expect to live an average of 15.7 years.³ This last statistic illustrates that the lower U.S. male life expectancy from birth is due to mortality before the age of 65. At the opposite end of the age spectrum, U.S. infant mortality rate is 7.1 per 1000 live births, with British infant mortality rate considerably lower at 5.8 per 1000 live births.²



Where to . . . now?

So where does this analysis of the British National Health Service leave a medical student evaluating the U.S. health care system? Had the United States been heavily bombed in World War II, necessitating a government takeover of hospitals, perhaps the country would have a national health service. The U.S. health care system may unfairly and inefficiently distribute its resources as dictated by capitalism, but Britain's model of central control leaves decisions on health care resources to politicians and the news media. The United States has its uninsured; Britain has its waiting lists. Centralizing health care confers bargaining clout with pharmaceutical companies for lower prescription drug costs—certainly a topic of interest for U.S. seniors—but centralizing health care also means slow response to the need for more hospital beds when they are obviously necessary. The United States often gives preventive medicine lip service, and U.S. insurance companies rarely reimburse for it, whereas the British make a concerted effort to keep their population well, a clear advantage to being responsible for a patient's entire life. Both systems wrestle with the same moral dilemma of the good of the individual versus the good of society. And when it all comes down to the final score of life and death, the outcomes are similar with the unacceptable exception that the United States fails to provide adequate care to pregnant women and newborns. In the end, perhaps the choice between the U.S. and the British health care systems is a choice between the lesser of two evils.

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Commentary

"A Medical Student's Review of the British National Health Service" was written with the thoughtful concern of a young man alert to the realities of trying to provide quality health care. It draws the reader to look more closely into the historical, social, and ethical forces that shaped the provision of health care in the United Kingdom, and their expression in that most humane legislation, the National Health Service (NHS) Act of 1948. The Act was the culmination of an ideal present in the program of reforms in health and in general public policy that began 100 years ago, and fully expressed when the 1948 Act enshrined the view that there should be free access to services on the basis of clinical need, and that the service should be funded by the state, from general taxation.

The NHS described so ably in Mr. Bricker's paper has served well at a level commensurate with the resources allocated to it. But for many years its development has not matched the demands made upon it. Among the responses have been restructuring, reorganization, and the introduction of market mechanisms to improve efficiency, effectiveness,

and quality. These approaches have not been conspicuously successful, not least because they were not supported by the level of investment now accepted as necessary.

The reforms that preoccupy government, the NHS, and the professions today put patients at the center of service thinking and action. They embody national clinical and access standards, accountability, local delivery of services, independent inspection, and a small but growing element of patient choice; and they promote contestability, to drive efficiency and reward innovation.

To contain the costs of growing needs and expectations for health and care services, there is an increasing emphasis on the clinical and cost effectiveness of health care, with evaluation of procedures and technologies, targeting of resources to services and interventions of proven effectiveness, and emphasis upon health promotion and the prevention and early detection of disease.

To give better access with greater choice there must be increased capacity—more trained staff, more facilities. There

must also be changes in the way clinicians work, in which removal of traditional professional boundaries extends the scope of clinical practice. There must be new ways of providing services, with integration of the health and care components and unifying care between community and hospital. There is also another explicit aim—to remove the inequalities in health and in health outcomes, and of access to and uptake of health care, across the nation.

There are important implications for the medical profession. The Medical Royal Colleges in the United Kingdom have set and stood by independent standards for postgraduate medical education and practice for many years. But government wishes other stakeholders to have an increasingly influential voice in medical education and training, to bring them into closer alignment with its service priorities.

Clinicians regard their service with a sense of ownership. This follows naturally—it is at once a great strength of the service and an impediment to change. Inherent in such

ownership is acceptance of accountability for practice, for service improvement, and for the reforms needed to bring about cost effective improvements for patients and for society. It is no surprise that doctors and their clinical colleagues resist change unless they see benefits for their patients, and an improvement in the standard of care. Strategies that appeal to this motivation are more likely to attract commitment than those based on control. Yet the NHS depends on the leadership of clinicians to achieve the desired changes. At the same time, clinicians have a responsibility to ensure the most effective use of limited resources.

Authorities in many countries face similar problems, each against the background of its own historical and cultural heritage. We should learn from each other how to do things better, for all our populations.

Carol M. Black, C.B.E.
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VA April 2002

*Old men supine on metal beds,
White sheets and covers mauve or blue,
Doors open wide so passing aides can view
The resting, breathing, heavy heads.
Next to each bed a five-toed stand
With plastic tubing hanging loose,
Delivering a measured dose
Drip by drip into each hand.*

*And you, dear man, eyes softly shut,
Cheeks sunken, bearded, grey,
What thoughts go through your subtle mind?
What mortal deal have you cut
With Life to let you stay
Or Death to let life's thread unwind?*

Sheila Kaplow, D.Phil.

Dr. Kaplow received her D.Phil. in pharmacology from Oxford University. She is retired from teaching physiology at Quinnipiac College in Hamden, Connecticut. Her husband, Dr. Leonard S. Kaplow (AΩA, University of Vermont College of Medicine, 1958), was the author of "Thirty-seven Days on a Hospital Ship," published in the Summer 1999 issue of *The Pharos*. Leonard Kaplow died recently of multiple myeloma at the Veterans Administration Hospital in White River Junction, Vermont. Dr. Sheila Kaplow's address is: P.O. Box 929, Bradford, Vermont 05033. E-mail: sheilakap@together.net. The photograph is courtesy of Sheila Kaplow.

