Summary and Policy Implications 1

International comparisons of administrative costs are one result of the debate over health care reform in the United States. Advocates of a single-payer health care system (in which a single organization reimburses health care providers for all health services provided to patients) have compared the administrative costs of the United States with those of countries like Canada to support their contention that the administrative simplicity of a single-payer approach would yield savings that could offset the cost of universal coverage.

This background paper examines administrative costs in the health care systems of the United States and other countries. In addition to exploring the types of activities that constitute administration in the health care systems of several developed countries, it reviews attempts to measure and compare these activities, and it explores the potential usefulness of such comparisons.

IMPLICATIONS FOR POLICY

OTA's analysis suggests several conclusions for public policy:

- Most of the empirical literature on administrative costs compare the U.S. and Canadian health care systems. These studies indicate that administering the Canadian system consumes a substantially smaller proportion of health care spending than does the U.S. system. Imposition of a Canadian-style system in the United States would substantially reduce administrative costs, although estimates of those savings range widely (from $47 billion to $98 billion in 1991 U.S. dollars).
- Analyses of the administrative costs in countries other than Canada suggest that health care systems with more than a single payer, entailing a choice of insurance plans along with decentralized cost control measures and payment of providers,

involve higher administrative expenditures than does a single-payer system.

- International comparisons of specific administrative activities may suggest ways in which the United States can achieve worthwhile but more modest savings or greater efficiency in the way it manages its health care system without moving to a single-payer system. For example, as electronic technologies are used more extensively to administer the health care system, the experience of other countries may help the United States manage those technologies more appropriately or cost-effectively. Unlike the U.S.-Canadian comparisons that have dominated the empirical literature to date, this approach to international comparisons would focus on how well administrative investments achieve their goals, rather than just tallying the costs.
- Qualitative and quantitative evidence indicates that among developed countries with pluralistic, multiple-payer health care systems. the United States invests a greater proportion of its health care expenditures in administration. Little information exists on which to judge whether any extra benefits accrue in the U.S. system from these additional expenditures.
- International comparisons of administration can be useful in understanding the detailed management of other countries' health care systems, how individual patients and providers interact with that system on a day-to-day basis, and differences in the numbers and types of workers who administer different countries' health care systems.
- The experience of U.S.-Canadian comparisons underscores the robustness of overall estimates of administrative costs using imperfect data gathered for other purposes, especially when comparing single-payer and multiple-payer health care systems. While primary data collection to study administrative costs might yield more accurate estimates, the added confidence in the results is probably not worth the added cost and logistical difficulties of carrying out such efforts. For detailed looks at specific components of health care administration, however, a bottom-up approach may be necessary to understand why costs differ among systems that are more similar, and to identify potential modest administrative cost-savings or efficiencies for the U.S. health care system.

WHAT IS HEALTH CARE ADMINISTRATION?

Although most people understand administration to include the paperwork necessary to run a health care system, more comprehensive and precise definitions are needed to measure and compare administration internationally. Thorpe (38) has suggested for the United States a classification of administrative costs according to the functions they serve and the type of individual or organizat ion performing these functions. This scheme considers administrative expenses as investments that help deliver medical services more efficiently or equitably.

However, for the purposes of international comparisons, this typology alone is not sufficient. It does not include the many functions found in health care systems outside the United States, such as the setting of budgets, the negotiation of reimbursement rates with providers, and the process for deciding whether to purchase expensive medical equipment. It also does not take into account that different countries might use different types of staff or technology or face different prices in carrying out the same administrative functions. Finally, it is not detailed enough to guide researchers in the direct measurement of administrative expenses.

Glaser (15) has developed a detailed protocol for a bottom up measurement of administrative expenses in any country's health care system. As a practical matter, however, gathering data from different countries following this approach would entail enormous expense, time, and logistical difficulties (if, indeed, it is even possible). To date, it has not been done. Furthermore, development of a consensus about the precise definition of administration may be only of academic interest at this time. More useful analyses might look at specific administrative functions in different countries to

identify aspects that might be adopted in the United States to improve efficiency in the health care system.

AGGREGATE NATIONAL ESTIMATES OF ADMINISTRATIVE COSTS

Glaser (15) has applied his general protocol for measuring administrative costs to make qualitative, descriptive estimates of the nature and magnitude of expected administrative expenses in the health care systems of the United States, and of three countries often pointed to by proponents of U.S. health care rcform: Canada, the United Kingdom, and Germany. Even without numbers, his analysis suggests that the U.S. health care system requires a more complicated administrative apparatus than do other systems. However, the magnitude of many specific administrative activities can vary from country to country. For example, the German system relies heavily on negotiations among payers and providers to allocate health care resources, while U.S. payers increasingly attempt to control costs by scrutinizing the appropriateness of medical services prescribed. Nevertheless, Glaser's analysis provides useful insights into the day-to-day management of these countries' health care systems.

The Organization for Economic Cooperation and Development (OECD) annually publishes data on health expenditures and outcomes, including administrative spending, collected from its member countries. Relying on a definition developed by the U.S. Health Care Financing Administration (HCFA), the OECD includes only the administrative cost of public and private insurance, leaving out the administrative costs of hospitals, other providers, expenses borne by consumers, health services research, and the share of general governmental administration or tax collection devoted to health. In addition, not every OECD country has provided data on health administration, and the comparability of data from reporting countries varies,

Even with these limitations, the OECD data do provide some insights into the administrative burdens of member countries' health care systems. Administrative expenditures vary substantially, between 1 and 7 percent of total health expenditures. Countries like the United States, Germany. and the Netherlands with multiple. segmented sources of health insurance tend to spend more of their health budgets on administration. And trends in administrative costs tend to reflect changes in nations' health care systems. All else being equal, the per-unit administrative costs have tended. on average, to decline over time due to economies of scale and technological changes. Data from the 1980s on the entire health care systems of Sweden and Australia and the public sector insurance programs of Canada, the United Kingdom, and the United States are consistent with this trend. On the other hand, new insurance benefits, increased patient coinsurance payments. and other cost-containment measures tend to raise administrative burdens, as evidenced in France in recent years.

COMPARISONS BETWEEN THE UNITED STATES AND CANADA

In recent years a literature has emerged comparing the magnitude of health administration in the United States and Canada. All use various existing data sources to estimate the administrative costs of the insurance, hospital, and physician sectors of the U.S. and Canadian systems. These studies extrapolate their estimates of Canadian administrative costs to estimate the potential administrative savings of adopting a Canadian style system in the United States.

Himmelstein and Wool handler offered the first quantitative comparison using 1983 data (20) and updated their analysis using 1987 data (54). The U.S. General Accounting Office (GAO) (43,44) and Sheils and Young (36,37) have offered their own studies, using similar approaches, but differing in some data sources and assumptions. Taken together, these comparisons suggest that a Canadian-style system in the United States could have reduced administrative costs by between $47 billion (36,37) and $98 billion (54) in 1991. an amount equal to between 6 and 13 percent of total health expenditures in the United States that year. Although this range is wide. the conclusion that,

all else being equal, adoption of a Canadian-style system in the United States could yield substantial administrative savings is robust.[1]

Although the data used in all of these studies are imperfect, they remain a reasonable approximation of reality. Furthermore, the estimated differences between Canada and the United States are large enough to conclude that substantial differences in administrative costs exist between the two nations. It is less clear whether the Canadian experience is predictive of administrative costs in the United States under a single-payer plan. For example, there could be a general cultural tendency in the United States towards more complex administrative structures leading to higher administrative costs, even if the United States adopted a Canadian-style system.

In a more general critique of these U.S.-Canadian comparisons, Danzon (6) argues that the insurance overhead figures for the United States include significant expenses such as premium taxes, investors' return on capital, and investment income that are not really administrative, making the U.S. data not comparable to the administrative data for Canada's public insurance programs. In addition, she suggests that the Canadian system has unmeasured costs associated with excessive patient waiting time and the loss in overall economic productivity as employers and consumers change their behavior to avoid activities that are taxed to finance the country's health care system. Furthermore, she points out that strict comparisons of administrative cost data do not capture the benefits of the U.S. system associated with consumers' ability to choose providers and insurers.

Critics of Danzon's approach suggest that she does not measure costs in the U.S. system associated with consumers trying to understand and evaluate the benefits, costs, and complex reimbursement rules of alternative health insurance plans, workers locked into jobs for fear of losing health insurance, and employers who must manage their employees' insurance benefits and who may avoid hiring employees they believe may be costly users of health services. Other critics have also questioned whether medically significant queues actually exist for health services in Canada.

PERSONNEL AS A MEASURE OF ADMINISTRATION

A significant component of a country's health care expenditures are personnel costs, including the salaries of people who carry out administrative duties. In work commissioned by the Office of Technology Assessment (OTA), Himmelstein and colleagues have attempted to use occupational data from national censuses and surveys to investigate trends and differences in the U.S. and Canadian health care systems. For the United States they calculated "full-time equivalents" (FTEs) employed in the health care sector between 1968 and 1992 using the U.S. Census Bureau's Current Population Survey (CPS), an annual survey of 60,000 households representative of the civilian, noninstitutionalized population. Data on Canadian health care workers come from the 1971 and 1986 Canadian censuses.

Between 1968 and 1991, the number of health care workers in the United States grew from 3.98 million to 9.79 million (about one and one-half times), although the number of administrative workers grew at a much faster rate—from 718,000 to 2.60 million (more than two and one-half times).

Comparisons with Canada show significant divergences over time. In 1971 the United States employed 22,000 FTEs per million population, while Canada employed 26,565. By 1986, the total number of U.S. health FTEs had grown 53 percent, while Canada's had grown only 19 percent. Nearly all of the U.S. excess in health personnel as compared to Canada is attributable to the greater number of managers and support personnel in the

[1] These estimates Of U.S. savings do not take into account the cost of increased utilization by insured consumers who would use more health services as their out-of-pocket expenses decreased under a Canadian-style system, a complex issue beyond the scope of this paper.

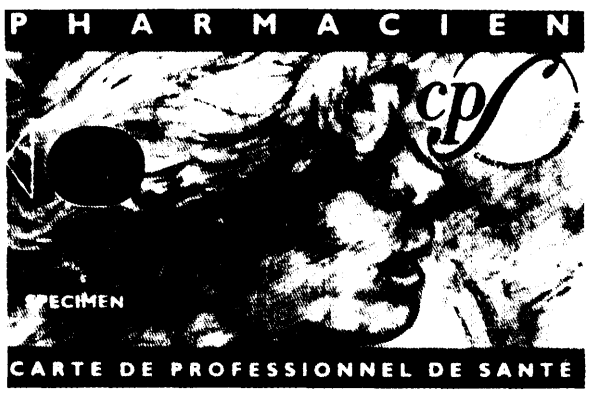
United States. In 1971 the two countries were almost identicail in the number of administrative personnel per capita, but in 1986 the United States employed 8.226 administrative health personnel per million population, versus Canada's 5,807—that is, the United States had 42 percent more administrative personnel per capita in 1986 than did Canada. Among other categories of health workers in 1986, the United States had more technologists and technicians (2,423 vs. 1,988), and more licensed practical nurses (1,333 vs. 1,002), but fewer registered nurses per million population (5.41 9 vs. 6.948).

This analysis provides policy makers with a useful means of examining trends in the Canadian and U.S. health care systems. Its results are consistent with other studies finding that the United States spends more on measurable health care administration than does Canada. However, labor force analyses such as this one do have limitations. They do not offer a solution to the problem of the potential] y unmeasured costs of public] y financed systems suggested by Danzon. In addition, the CPS data used by Himmelstein and colleagues cannot be used to identify non-medical personnel in the United States who perform health care duties in nonhealth care settings, such as administrative personnel in private firms who administer their employees' health insurance benefits and management consultants. Inclusion of these workers would only increase the disparity in the number of administrative workers between the United States and Canada. The analysis also excludes private insurance employees in the United States and government employees in both countries because of the difficulty in distinguishing those workers who administer health insurance from those who perform other functions in these organizations.

TECHNOLOGY TO SIMPLIFY ADMINISTRATION

Standardization of insurance claims forms, electronic submission and payment of insurance claims, and the use of card technology to store administrative and medical information are three technological innovations that may have the potential to reduce administrative costs in the U.S. health care system. Estimates of potential savings from standardization and computerization of insurance claims vary widely, but in the case of card technology, it is possible to examine the experience of other countries to help understand their potential implications for the United States.

Health cards can take several forms, including simple paper or plastic cards, cards with magnetic strips (like automated bank teller cards in the United States), or smart cards, which embed a silicon microchip within a plastic, wallet-sized card.[2] These cards can have several uses: **health insurance cards** that include information about patients' health insurance coverage to simplify claims and reimbursement procedures or hospital admittance; **medical cards** to store limited patient



Technologies with the potential to simplify the administration of health care include smart cards that can store and process administrative and rnedical infromation

[2]Severalless commonly used card technologies also exist including optical cards similar to compact disks, cards with embedded holograms, and cards designed to fit into standardized slots on personal computers. Several of these technologies can be combined in a single card.

medical records: **emergency cards** that include essential medical information for medical emergencies; and **health professional cards** that limit access to confidential, computerized records to authorized personnel only.

OTA commissioned a study of several health card systems used in France. This analysis pointed out that health cards are only one piece of an overall system for administering health care and maintaining records. The decision to use cards, or to choose a specific type of card technology, is dependent on the intended application, the intended users, and the cost. In France, implementation of card systems was hindered by concerns over the confidentiality of medical information and difficulties in getting physicians, administrators, and patients to keep information on cards or other computerized medical records. These issues are likely to arise in the United States should a card system be implemented.[3] However, concerns arising from French physicians' tradition of not sharing diagnostic or therapeutic information with other health professionals or payers should not cause problems in the United States. The French experience suggests that protection of such privacy has less to do with the choice of magnetic strip or smart card technology than the privacy safeguards built into the overall computer system. Any kind of system has the potential to limit the amount of information in the system and access to it (29).

Although recent estimates suggest that standardization and automation of the insurance claims process would lead to cost savings after initial investments, no estimates exist for the cost implications of health card applications by themselves in the United States. The French experience indicates that health card systems involve significant start-up costs, but that standardization of the technologies used for different health care applications offer opportunities for economies of scale since several applications can use much of the same infrastructure.

CONCLUSION

The recent debate over health care reform has revolved, in part, around the desire to control costs and to find resources to cover the uninsured. If a reformed system were cheaper to run, money would be freed for other purposes. It appears that only by a dramatic change to a single-payer system can great savings be realized. But even in the absence of a single-payer approach, it may be possible to achieve modest, yet worthwhile savings and more efficient means of providing health coverage and services. The search for these savings and efficiencies may be aided by the study of administration in other countries.

[3]The Clinton Administration's proposed Health Security Act (S.1757) would issue every American citizen and legal resident a Health Security Card, although the Administration has not suggested that use of such a card would necessarily reduce administrative costs.