

REPORT 4 OF THE COUNCIL ON MEDICAL SERVICE (I-09)  
Comparability of the Cost Estimates of Health Care Systems

EXECUTIVE SUMMARY

At the 2009 Annual Meeting, the House of Delegates adopted as amended Resolution 124, which calls for the American Medical Association (AMA) to undertake a careful examination of the reported cost estimates of the health care systems of comparable developed countries, clarify the services and attendant expenses which are included in such estimates, publicize any estimates which ignore costs shifted to other parts of national budgets, and use this information in our efforts to ensure that the true cost of all of the services provided by the United States health care system are appropriately figured into any system redesign. The House amended the resolution to request a report back at the 2009 Interim Meeting.

This report focuses on comparisons between the United States and the United Kingdom, Canada, Germany and Switzerland. The UK and Canada are classic examples of “single payer” health care systems. Germany and Switzerland have more market-based health care systems, although the government is still responsible for a large portion of health care expenditures.

As noted in the whereas clauses of Resolution 124 (A-09), there is a wide variation in the type and scope of data collected with respect to health system expenditures. In recognition of the need for consistent and comparable health care cost data, the Organization for Economic Cooperation and Development (OECD) proposed a standardized health system accounting framework that could be used by countries to facilitate data reporting and comparisons. The *System of Health Accounts* (SHA) is based on an International Classification for Health Accounts (ICHA), which highlights three specific dimensions of health care measurement: health care functions, health care service providers, and sources of funding of health care. Tracking and stratifying data along each of these dimensions allows policymakers to more closely examine the interrelationships between different components of health care systems, and to answer more detailed questions about how resources are distributed across services and functions.

OECD’s most recent expenditure data shows the US outpacing similar countries in health care expenditures, even after the reporting data is harmonized using the SHA methodology. It is important to note, however, that there is limited value in highlighting cost comparisons between countries without also considering the socioeconomic and cultural context in which a health care system operates. The Council believes that international comparisons of health system expenditures offer only limited value in terms of helping countries identify strengths, weaknesses, or potential efficiency improvements. Individual countries face unique realities shaped by history and culture that make it unlikely that large scale “successes” in one country could translate into similar successes in another. However, the Council is optimistic that improving the nature of health system accounting will improve the ability of health policy experts to carefully analyze health care systems and identify improvements that are appropriate in the overall context of health care system redesign.

# REPORT OF THE COUNCIL ON MEDICAL SERVICE

CMS Report 4-I-09

Subject: Comparability of the Cost Estimates of Health Care Systems

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1 At the 2009 Annual Meeting, the House of Delegates adopted as amended Resolution 124 (Policy  
2 D-155.991, AMA Policy Database), which calls for the American Medical Association (AMA) to  
3 undertake a careful examination of the reported cost estimates of the health care systems of  
4 comparable developed countries, clarify the services and attendant expenses which are included in  
5 such estimates, publicize any estimates which ignore costs shifted to other parts of national  
6 budgets, and use this information in our efforts to ensure that the true cost of all of the services  
7 provided by the United States health care system are appropriately figured into any system  
8 redesign. The House amended the resolution to request a report back at the 2009 Interim Meeting.

## 10 BACKGROUND

12 Even before federal health system reform became a top priority for the nation, reports of rising  
13 health care costs in the United States and the number of uninsured Americans were frequent  
14 features in the news. Reports that US health care expenditures far exceed those of comparable  
15 countries, combined with some studies suggesting that the US gets relatively less for its health care  
16 dollar, have led some policymakers to speculate that the US health care system is less efficient than  
17 that of other countries. This has resulted in increased scrutiny of the decentralized, market based  
18 health care system in the US, with some arguing that centralized health care systems are more cost-  
19 effective and equitable.

21 At the 2006 Annual Meeting, the Council presented Council on Medical Service Report 5,  
22 “Comparison of Selected International Health Care Systems.” This informational report was  
23 intended to provide a snapshot of how some countries organize their health care infrastructures, and  
24 the challenges that arise from different funding structures and delivery systems. The report  
25 highlighted the health care systems of the United Kingdom (UK), Canada, Germany, and  
26 Switzerland, all of which have nearly universal health insurance coverage. The Council selected  
27 these countries because in addition to some fundamental similarities between their governmental  
28 structures and economies and those of the US, their health care systems represent a variety of  
29 frameworks that offer unique opportunities and challenges for meeting the needs of their  
30 populations.

### 32 *Summary of Selected International Health Care Systems*

34 The Council again focused on the UK, Canada, Germany and Switzerland in the development of  
35 this report. The UK and Canada are classic examples of “single payer” health care systems, and  
36 health insurance coverage is available to all residents free of charge. Health care expenditures are  
37 financed primarily through general tax revenues, and the private insurance market plays a relatively  
38 insignificant role in both systems. In the UK, health care financing and budgeting are controlled at  
39 the national level, although local service delivery is coordinated by more than 300 Primary Care  
40 Trusts, which together control approximately 80% of the National Health Service (NHS) budget.

1 The Canadian health care system was modeled after the NHS, but is more decentralized because of  
 2 the strong, independent nature of the Canadian provinces. Funding responsibility is shared  
 3 between the federal and provincial governments, and the provinces assume significant  
 4 responsibility for directing and funding the health insurance plan in their regions.

5  
 6 Germany and Switzerland have more market-based health care systems, although the government  
 7 is still responsible for a large portion of health care expenditures. Most health insurance in  
 8 Germany is funded through taxes paid by employers and employees, who choose from a wide  
 9 range of independently-operated health insurance plans. In Switzerland, individuals are  
 10 responsible for obtaining private insurance from one of several private insurers who offer benefits  
 11 mandated by the Swiss government. Individuals who cannot afford health insurance are eligible  
 12 for means-tested subsidies provided by the government.

13  
 14 It is beyond the scope of this report to evaluate the merits of various health care systems, although  
 15 Council on Medical Service Report 5-A-06 included a discussion of the tradeoffs associated with  
 16 the various organizational structures represented by the US and the other countries. Council  
 17 Report 5-A-06 concluded that, “it will be critical to maintain a pluralistic health care system that  
 18 emphasizes patient choice...The Council believes it will continue to be in the best interests of  
 19 patients and physicians to advocate for long-term health system reforms that are primarily based on  
 20 consumer-driven and market-based principles.”

21  
 22 **COMPARABILITY OF HEALTH CARE COST ESTIMATES**

23  
 24 As noted in the Whereases of Resolution 124 (A-09), there is a wide variation in the type and scope  
 25 of data collected with respect to health system expenditures. National health accounts maintained  
 26 by some individual countries allow domestic policymakers to track funding sources and health  
 27 expenditures, and provide a snapshot of the resources used to support the health care system.  
 28 Depending on the level of detail of the accounts and the data sources available, countries can use  
 29 information from their national health accounts to analyze spending or resource-use trends that  
 30 reflect specific policy concerns, which are often influenced by the structure of the particular health  
 31 care system. For example, the fragmented financing structure of the US health care system has  
 32 resulted in a national health account structure that emphasizes the role of financing agents. In  
 33 contrast, most European health care systems rely primarily on public financing, so the dominant  
 34 policy issue for European nations has been how health care resources are used, rather than how  
 35 they are funded (Orosz, 2005).

36  
 37 The content and structure of national health accounts is often dictated by the availability of relevant  
 38 health accounting data. Countries rely on available administrative information (e.g., claims data  
 39 from public and private insurers) and on surveys that may target specific information not otherwise  
 40 available from administrative records (*A System of Health Accounts* [SHA], 2000). Examples of  
 41 data that may need to be supplemented by surveys include private out-of-pocket health care  
 42 spending or health care spending by charities. The extent to which countries collect and maintain  
 43 accurate records of certain health expenditure data depends on the resources available and on the  
 44 perceived relevance of the data for analytical purposes.

45  
 46 Even if all countries were collecting the same basic set of health care expenditure information,  
 47 estimates of total health expenditures are dependent on what each country includes in its definition  
 48 of “health expenditure.” Identifying the “boundaries” of health care expenditures is critical to  
 49 establishing a degree of comparability among international health care cost data. From country to  
 50 country, health care expenditure data may or may not include such categories as medical education

1 costs, research and development on health-related issues, environmental health, home health  
2 services, long-term care, or administrative costs (Orosz and Morgan, 2004).

3  
4 A particular source of variability among countries is the overlap between services that could be  
5 classified as either social welfare or health care costs. For example, services for people with  
6 physical or mental disabilities, or substance abuse problems often include medical and social  
7 service components, and there is a lack of consistency about how these services are categorized.  
8 The classification of long-term care expenditures is especially problematic and has a significant  
9 effect on the comparability of health care expenditure data. In the US, a large portion of long-term  
10 care costs are reported as health care expenditures (primarily through the Medicaid program),  
11 whereas many other countries classify long-term care as a social welfare expenditure (i.e., it is not  
12 included in health care cost estimates) (Orosz and Morgan, 2004). The distinctions between  
13 medical support services and social support services in long-term care delivery are easily blurred,  
14 and in the absence of a standardized reporting format, countries vary in how long-term care costs  
15 are classified. It has been estimated that the lack of comparability in long-term care reporting may  
16 affect total expenditure reporting by as much as 10% (Orosz and Morgan, 2004).

## 17 18 A SYSTEM OF HEALTH ACCOUNTS

19  
20 Along with the US, the UK, Canada, Germany and Switzerland are among the 30 member  
21 countries of the Organization for Economic Cooperation and Development (OECD) that “share a  
22 commitment to democratic government and the market economy.” In 2007, OECD countries spent  
23 an average of 8.9% of gross domestic product on health care expenditures, up from around 7% in  
24 1990. Rising health care costs and the need to define and ensure adequate levels of health care  
25 resources are pressing problems for most of the OECD member countries. Accordingly, OECD  
26 has devoted significant resources to providing meaningful data on health system expenditures that  
27 analysts can use to help identify appropriate and effective health policy solutions.

28  
29 In recognition of the need for consistent and comparable health care cost data, the OECD proposed  
30 a standardized health system accounting framework that could be used by countries to facilitate  
31 data reporting and comparisons. In 2000, the OECD published *A System of Health Accounts*,  
32 “designed to meet the needs of analysts of health care systems and policymakers. [The proposed  
33 accounts] provide a common framework for enhancing the comparability of data over time and  
34 across countries. They are intended for use in international comparisons that include a broad range  
35 of countries with different ways of organizing health care and its financing” (SHA, 2000).

36  
37 The SHA is based on an International Classification for Health Accounts (ICHA), which highlights  
38 three specific dimensions of health care measurement: health care functions, health care service  
39 providers, and sources of funding of health care. Tracking and stratifying data along each of these  
40 dimensions allows policymakers to more closely examine the interrelationships between different  
41 components of health care systems and to answer more detailed questions about how resources are  
42 distributed across services and functions.

43  
44 The concept of health care function is generally not captured in national health accounts, and  
45 provides a basis for identifying clear, uniform boundaries for health care expenditure classifications  
46 and sub-classifications. Standard boundaries are especially important for harmonizing international  
47 cost reporting data, and also add an important informational dimension for domestic policy  
48 analysis.

1 Under the ICHA framework, health care is divided into specific functional categories that are  
 2 defined according to the goals and purposes of health care. Examples of functional categories  
 3 include curative care, rehabilitative care, and services of prevention and public health. ICHA also  
 4 defines a set of health care-related functions, which includes education and training of health  
 5 personnel, and research and development. A complete list of the ICHA categories is available on  
 6 the OECD Web site (OECD.org).

7  
 8 Under the SHA, total health expenditures – a figure commonly quoted in health policy literature –  
 9 is defined by the sum of expenses related to core health care functions. SHA distinguishes between  
 10 core health care functions that are provided directly to individuals (or collectively as in the case of  
 11 public health), and health care-related functions. Although health care-related functions are  
 12 “closely linked” to core health care functions, SHA recommends tracking them separately, since  
 13 many of them (e.g., medical education, environmental health) represent separate “parameters under  
 14 health policy” (SHA, 2000).

15  
 16 The SHA proposes the use of distinct ICHA classifications for providers (e.g., hospitals, providers  
 17 of ambulatory care, nursing care facilities) and financing sources, as well as function. The ICHA  
 18 classification system includes sub-categories to further refine health care system reporting.  
 19 According to OECD, because implementation is ongoing, data comparability is likely to be more  
 20 reliable for broader categories, rather than the sub-categories. However, the ultimate goal of SHA  
 21 implementation is that the level described will enable “a multifaceted analysis of how financial  
 22 resources in health care systems are raised..., and allocated among functions and service  
 23 providers” (Orosz and Morgan, 2005).

24  
 25 OECD HEALTH DATA 2009

26  
 27 The most recent *OECD Health Data* edition was released in July 2009. The full database is  
 28 available for purchase, but a limited amount of data and detailed information about the sources and  
 29 methods of data collection are publicly available. According to OECD, “the overriding aim of the  
 30 OECD Secretariat is to ensure that data presented in *OECD Health Data 2009* is as comparable as  
 31 possible, both across countries and over time...The structure and definition of the variables in  
 32 *OECD Health Data 2009* are consistent with the concepts presented in the SHA manual.” OECD  
 33 notes that because countries are at “varying stages” of implementing the SHA, the comparability of  
 34 the data is not exact. OECD data include individual notes on each member country that provide  
 35 specific information about the consistency between the country data and SHA definition and  
 36 boundaries.

37  
 38 The Council contacted the OECD for clarification regarding the comparability of cost data reported  
 39 in the latest OECD publication. The US, Canada, Germany and Switzerland currently use SHA  
 40 methodology to compile the data they submit to OECD for inclusion in the database, so that the  
 41 format and content of the information in the OECD database for these countries is generally  
 42 consistent. However, in some cases, lack of available data at the national level, or structural  
 43 differences in reporting boundaries or sub-classifications, compromise the degree of comparability.  
 44 These issues are noted in the *OECD Health Data 2009*’s explanatory notes for each country.

45  
 46 The UK has not yet adopted the SHA methodology and reports health expenditures based primarily  
 47 on their national account structure. The implications of this departure from SHA methodology are  
 48 noted in the OECD’s explanatory notes for the UK.

49  
 50 Data from *OECD Health Data 2009* is publicly available for the following macro-level statistics  
 51 (for survey year 2007): total health expenditures as a percentage of gross domestic product (GDP),

1 percentage of total health expenditure from public sources (defined as state, regional and local  
 2 government bodies and social security schemes), and per capita health expenditures in US dollars  
 3 adjusted for purchasing power parities (which helps standardize exchange rates and the relative  
 4 costs of goods or services). Based on the OECD explanatory notes, the overall comparability of  
 5 these macro-level statistics appears to be high.

6  
 7 *United States*

8  
 9 In 2007, health expenditures accounted for 16% of GDP; 45.4% of total health expenditure was  
 10 from public funds, and per capita spending was \$7,260. Expenditures as a percent of GDP and per  
 11 capita spending were significantly higher than those of the other four countries. Percent of public  
 12 spending on health care was significantly lower.

13  
 14 The main data source for US data is the National Health Expenditure data, which are compiled by  
 15 the Centers for Medicare and Medicaid Services. OECD notes regarding data comparability  
 16 identify several differences in national data reporting that affect the comparability of some of the  
 17 sub-categories reported in the OECD database. For example, data estimates for some  
 18 classifications were not available (e.g., curative and rehabilitative care, separate state and local  
 19 spending figures), and hospital estimates include some nursing home and home health spending.  
 20 This results in an over-reporting of hospital spending, and an under-reporting of home health  
 21 spending according to the SHA framework.

22  
 23 *United Kingdom*

24  
 25 In 2007, health expenditures accounted for 8.4% of GDP; 81.7% of total health expenditure was  
 26 from public funds, and per capita spending was \$2,992. Expenditures as a percent of GDP and per  
 27 capita spending were lower than those of the other four countries. Percent of public spending on  
 28 health care was higher.

29  
 30 As noted, the UK does not use SHA methodology to report its data. However, OECD indicates  
 31 that “total health expenditure data for the UK includes funds spent by health administrations,  
 32 prisons, the armed forces, households, and not-for-profit institutions and investment in medical  
 33 facilities by all sections of the economy. These figures are considered fit for the purposes of  
 34 analyzing health expenditure in the UK and for making international comparisons.” Of note,  
 35 however, is the fact that health expenditure data do not include non-National Health Service  
 36 spending on nursing care in nursing homes, occupational health care, and household production of  
 37 health care (i.e., home care delivered by lay people as a substitute for formal nursing care). These  
 38 spending categories are included in health care expenditures as defined by the SHA, therefore the  
 39 UK’s health expenditure figures may be underreported relative to the other countries whose  
 40 statistics include these costs.

41  
 42 *Canada*

43  
 44 In 2007, health expenditures accounted for 10.1% of GDP; 70.6% of total health expenditure was  
 45 from public funds, and per capita spending was \$3,895.

46  
 47 Factors that may influence the comparability of Canadian health care expenditure reporting include  
 48 the inclusion of expenditures not included in SHA boundaries (e.g., care for non-Canadians in  
 49 Canadian hospitals; expenditure on in-patient facilities for drug/alcohol addiction [SHA notes that  
 50 residential drug/alcohol treatment facilities include a large social service component]; and  
 51 expenditures on personal health care items, such as toothbrushes, medicated shampoos and

1 deodorant), and the exclusion of expenditures that fall within SHA boundaries (e.g., spending on  
2 school health, private sector expenditure on occupational health, expenditures of voluntary health  
3 associations).

4  
5 *Germany*

6  
7 In 2007, health expenditures accounted for 10.4% of GDP; 76.9% of total health expenditure was  
8 from public funds, and per capita spending was \$3,588.

9  
10 The OECD notes on data comparability note that the German Health Accounts were revised in  
11 2006 in order to better harmonize with SHA. Although some differences remain, OECD finds the  
12 definition of health expenditures consistent with the SHA definition.

13  
14 *Switzerland*

15  
16 In 2007, health expenditures accounted for 10.8% of GDP; 59.3% of total health expenditure was  
17 from public funds, and per capita spending was \$4,417.

18  
19 OECD notes on data comparability indicate that Switzerland's expenditure on investment is likely  
20 to be under-estimated, and that data is unavailable for several categories, including health  
21 administration and health insurance, nursing and residential care, and health care-related goods and  
22 services.

23  
24 **US HEALTH CARE EXPENDITURES IN CONTEXT**

25  
26 OECD's most recent expenditure data shows the US outpacing similar countries in health care  
27 expenditures. Although it is possible that the magnitude of the difference could be inflated as a  
28 result of persistent data comparability issues, it appears likely that US health care expenditures are  
29 generally higher than those of comparable countries. However, this observation in itself is  
30 insufficient to conclude that the US is spending an inappropriate amount on health care. There is  
31 limited value in highlighting cost comparisons between countries without also considering the  
32 socioeconomic and cultural context in which a health care system operates. The demand for health  
33 care in the US is uniquely affected by national assets such as a high gross domestic product per  
34 capita that indicates an overall "ability to pay" for health care services, and national liabilities such  
35 as high rates of homicide, suicide, and domestic violence. Economists note that labor-market  
36 dynamics also contribute to health care costs in the US. Health care professionals are paid  
37 relatively more in the US than in other countries, in part because the US health care sector is  
38 competing with other fields such as law, finance and engineering to attract the highest levels of  
39 talent (Reinhardt, 2004).

40  
41 A March 2009 paper released by the National Center for Policy Analysis notes that comparisons  
42 based on tangible resources rather than monetary accounts offer a different perspective on  
43 comparative health care resource use. The US uses fewer physicians, nurses, hospital beds,  
44 physician visits and hospital stays than the median OECD country (Goodman, 2009). Similarly, an  
45 analysis of global health care spending by McKinsey & Company notes that the US has relatively  
46 higher levels of spending on outpatient care than similar countries, in part because the US health  
47 care system delivers a higher percentage of care on an outpatient basis (Farrell, 2008).

48  
49 A final consideration often obscured by comparisons based exclusively on health system  
50 expenditures is the extent to which health care supply is limited by policies or practices in a  
51 particular country. Wait times for certain health care services are generally much higher in the UK

1 and Canada than they are in the US, in part because the resources are not available to meet the  
2 demand generated by the national insurance schemes operated in those two countries. Britain has  
3 far fewer computed tomography scanners and magnetic resonance imaging scanners as the US, and  
4 lower rates of heart surgery, hip replacements, and treatments for kidney failure (Goodman, 2009).  
5 It is difficult to quantify these restrictions on supply in monetary terms, but it is appropriate to note  
6 that expenditure levels will correlate with the level of services accessible to a country's residents.  
7

## 8 DISCUSSION

9

10 The US often compares unfavorably with other countries in terms of per capita expenditures and  
11 total health care spending. Addressing methodological issues associated with the comparability of  
12 health care data is important to ensure that expenditures in the US are not over-reported relative to  
13 other countries. Although OECD efforts to promote the use of the SHA have resulted in significant  
14 improvements in the comparability of international health care cost data, more work is necessary to  
15 ensure maximum comparability. Importantly, OECD's efforts have increased the transparency of  
16 health care cost reporting data and methods and have raised awareness about the variability among  
17 national health accounting systems.  
18

19 The Council believes that international comparisons of health system expenditures offer only  
20 limited value in terms of helping countries identify strengths, weaknesses, or potential efficiency  
21 improvements. Individual countries face unique realities shaped by history and culture that make it  
22 unlikely that large scale "successes" in one country could translate into similar successes in  
23 another. However, the Council is optimistic that improving the nature of health system accounting  
24 will improve the ability of health policy experts to carefully analyze health care systems and  
25 identify improvements that are appropriate in the overall context of health care system redesign.  
26

27 Council on Medical Service Report 1-A-06 studied health expenditures within the US and, in its  
28 comparison of public and private health care expenditures, concluded that use of consistent,  
29 detailed and relevant health care cost accounting methodologies across all payers and sectors of the  
30 health care system is critical to efforts to meaningfully analyze US health care spending. After  
31 studying the SHA framework, the Council believes that a key benefit of improving the  
32 comparability of health care data is that it will enable analysts to examine multiple dimensions of  
33 resource use and to identify patterns and relationships between the different elements of a health  
34 care system. Regardless of the level of spending across countries, important policy decisions can  
35 be guided by an increased knowledge of how countries use the resources they have.