# Comparative Healthcare Systems

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# **Comparative Healthcare Systems**

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# **Synonyms**

Comparative healthcare delivery systems; Comparative health financing systems; Comparative health systems; Health system analysis

#### **Definition**

The comparison of two or more healthcare systems operating within broadly similar jurisdictions using qualitative and/or quantitative methods for the purposes of deepening understanding, clarifying differences, identifying possible reforms, and/or accomplishing political objectives.

#### Introduction

Health systems – the ensemble of all organizations, institutions, and resources, set within the political and institutional framework of a jurisdiction and mandated to improve, maintain, and restore health (World Health Organization Europe 2008) – are of great interest to the public, policymakers,

and public administrators at all levels at which they operate (national, subnational, and local) because they have considerable impact on individual and population health and the economy. Due to their significant variation, scholars, practitioners, and politicians frequently compare them, or their component parts, for purposes ranging from classification to identifying reform possibilities to scoring political points.

This chapter describes health systems, summarizes their comparative study, discusses its effectiveness, and suggests a new approach.

## **Health Systems**

#### **Health Definition**

According to the World Health Organization (International Health Conference 1946), health is "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Many factors related to a person's individual characteristics and behaviors and physical, social, and economic environments combine to determine health. Specific factors include: income; employment; social supports; education; literacy; the physical environment, such as the availability of water, food, and housing; biology; genetics; and health services.

#### **Health System Dimensions**

Health systems have three main dimensions: financing, service provision, and regulation

(Böhm et al. 2013). Financing consists of raising money for health insurance and care through mechanisms such as direct taxation, social insurance contributions, or private payment. Service provision encompasses their delivery location, providers, and technologies. Regulation refers to governance of relationships between financers, providers, and beneficiaries, including how patients access services, what service they can receive (e.g., emergency room visits, physical exams, prescriptions, dental surgery, psychotherapy, and nursing home care), and how financers pay various care providers for them. State, societal (private nonprofit), or private actors can perform financing, service delivery, and regulatory functions.

## Levels of Health Systems

Health systems operate at many levels – national, subnational, regional, and local – sometimes congruently. A country's health system may be run centrally by the national government or, particularly in federal political systems, be delegated in whole or in part to substates who further delegate to regional authorities. Or, in both unitary and federal countries, a system may function primarily at the regional or local levels.

# **Health System Types**

Bohm et al. (2013) classified the health systems of 30 Organisation for Economic Co-operation and Development (OECD) countries by the extent to which each type of actor dominated each dimension. They determined that 28 of them fit into four clusters:

- National Health Service = State domination of all dimensions
- National Health Insurance = State financing and regulation with private service provision
- Social Health Insurance = Societal financing and regulation with private service provision
- Etatist Social Health Insurance = Societal financing, state regulation, and private service provision

England, where the National Health Service (NHS) employs 1.5 million people, is the model for the first "command and control" type (Government of the United Kingdom 2015). Canada, where most physicians contract privately with provincial/territorial health systems that operate under five principles stipulated by the federal Canada Health Act, including "public administration," is a strong example of the National Health Insurance type. Germany, where the majority of citizens contribute to selfgoverning "sickness funds" through payroll taxes, is the prototype for Social Health Insurance (SHI) systems. Etatist Social Health Insurance systems, which function like SHI systems with more state regulation, cluster near Germany in Central and Eastern Europe.

The US health system is uniquely "private" because private sector actors dominate each of the three dimensions. In fact, due to the predominance of private financing, the USA is the only one of the 30 countries that does not provide universal healthcare coverage (Camillo 2016).

## **Development of Health Systems**

Most modern health systems in industrialized Western nations began to develop in the late nineteenth century when progressive social reformers, trade unions, and health professionals with new understandings of epidemiology pushed to improve living conditions in increasingly populated urban areas. In 1883, German Chancellor Otto von Bismarck implemented Europe's first compulsory Social Health Insurance system (which is commonly known as Bismarck systems). Health insurance and hospital systems continued to develop through World War II, after which Sir William Beveridge recommended that the UK adopt the NHS (often called the Beveridge Model) as part of a package of reforms to promote social welfare and economic growth after the Great Depression and war. Canada and the USA established the framework of their systems in the mid-1960s after considerable debate concerning the role of medical professionals. Several non-Western nations with significant economies, such as India, developed their health systems along a similar timeline, particularly after World War II.

Demographic changes, like the aging of the population of certain countries, new disease outbreaks, treatment advances, innovations in medical technology and information processing, and political demands prompt new reforms. For example, between 2003 and 2010, the USA adds prescription drug coverage to its national social health insurance program for elderly and disabled individuals (Medicare), expanded its federal-state public health insurance program (Medicaid) for low-income individuals, and instituted federal subsidies for the purchase of private coverage by otherwise uninsured middle-income persons.

Despite the WHO's expansive definition of health, the aforementioned systems pursued a biomedical approach to care that emphasized the restoration of individuals' physical health. For instance, the USA did not require mental health parity in private insurance coverage until 2010. In Canada, access to psychotherapy is limited (Marchildon 2013). Additionally, nations with sizable indigenous populations, like Canada, did not incorporate traditional healing methods into their systems. Only recently have some acknowledged the value of doing so.

In 1974, Canada's Minister of National Health and Welfare Marc Lalonde introduced the concept of "population health," "an approach to health that aims to improve the health of the entire population and to reduce health inequities among population groups....it looks at and acts upon the broad range of factors and conditions that have a strong influence on our health." (Health Canada 2012). The approach was soon embraced in principle by health system leaders; however, while multiple gatherings of nation-states, such as the 2011 World Conference on Social Determinants of Health, have subsequently adopted charters pledging to promote it by addressing factors and conditions (i.e., social determinants) such as poverty and poor housing, implementation has lagged. Government organizations remain siloed and programs unintegrated – typically, separate health, social service, housing, and education agencies do not coordinate in delivering services to clients. Most resources are spent on restoration of individual health. In 2014, 29.5% of Canadian health expenditures went to hospitals, whereas

only 5.6% went to public health (Canadian Institute for Health Information 2016).

Generally, so-called Third World nations have prioritized building public health infrastructure over an insurance system meaning that they have focused on surveillance, health promotion, prevention, infectious disease control, environmental protection and sanitation, and disaster preparedness and response.

## **Health System Components**

No matter the type, modern OECD health systems have the following components: patients; patient advocates; hospitals; long-term care institutions; hospices; clinics; pharmacies; laboratories; morgues; medical schools; nursing schools; physicians, nurses, and providers representing dozens of other healthcare professions, including dentistry and occupational therapy; alternative providers, such as reflexologists and acupuncturists; provider associations; emergency and nonemergency medical transportation companies; nonprofit and insurance plans; lobbyists; research institutes; drug and medical device manufacturers and salespeople; blood banks; information technology systems, including those that pay claims and maintain electronic medical/health records; accountants; quality reviewers; data analysts; administrators; financers; and a wide range of organizations, public, societal, and private, that make health policy and direct and/or monitor implementation.

Health systems that embrace a population health approach might also include school systems, teachers, food banks, grocery stores, social service agencies and providers, environmental engineers, urban planners, bicycle shops, justice officials, correctional institutions, and many other public, societal, and private entities that directly or indirectly affect well-being.

## **Health System Importance**

Health systems have great economic impact. They consume a large proportion of the gross domestic product (GDP, the value of all goods and services produced) of OECD nations – in 2013, health spending accounted for 8.9% of GDP on average, including 16.4% in the USA (OECD 2015). Per capita spending averaged almost \$3,500 (OECD

2015). Additionally, in most nations the health and social (social work) workforce comprises a substantial proportion of all civilian employment, including 13.2% in Ireland and 20% in Norway in 2014 (OECD 2016).

# **Comparing Health Systems**

#### **Purposes**

Comparing health systems entails examining two or more for similarities and differences and evaluating any found. Those who compare systems do so for a range of reasons – negative, neutral, and positive.

The most basic reason is to perform "policy warfare," which Marmor et al. (2009) describe as misrepresentation to win policy debates. In the USA policymakers often dub the British healthcare system "government medicine" or "socialized medicine" to dissuade Americans, who generally prefer less government, from supporting a single-payer (public financing) approach.

Sometimes comparison improves understanding. By comparing one system to another, we can essentially see the first in relief, meaning we can recognize previously indistinct features. When Canadians compare provincial and territorial health insurance programs, they discover that they differ significantly in their coverage of certain populations or services, like abortion, which might reflect little understood regional economic and cultural differences.

Classifying systems, as Bohm et al. (2013) did, help to identify dimensions and variables that researchers can study and policymakers can consider when constructing or reforming systems. Classification also aids in identifying patterns that illuminate what may or may not be possible. For example, regional clustering of national health systems by type, such as National Health Service systems in Nordic countries, suggests that the underlying culture might determine what system a country adopts.

Comparing systems on their performance is a means of holding them accountable. Health leaders do not want their systems to perform worse on standard measures than other systems. It also facilitates negative learning – the identification of undesirable or unworkable components or characteristics.

Relatedly, comparing systems generates ideas for transplantation by policymakers and system leaders.

#### **Levels of Comparison**

Facilitated by cultures of learning, convening organizations and data, health system comparisons are made at all levels.

At the national level, the WHO, the OECD, and the Commonwealth Fund, a private foundation based in New York City that promotes highperforming healthcare systems, are three notable organizations that collect and publish comparative data. The WHO maintains the Global Health Observatory, a publicly available database with interactive visualizations of more than 1,000 indicators from almost 200 countries. Similarly, the OECD maintains a comprehensive online database of health statistics to foster comparative analyses. The Commonwealth Fund conducts annual cross-national surveys to capture physicians' and patients' perceptions of system performance. These, and other, organizations regularly convene symposiums and other forums to facilitate learning.

While not as prominent, in federal states with multilevel health systems, such as Canada and the USA, political leaders, policymakers, and/or health system managers have formed associations like Canada's Premiers' Health Care Innovation Working Group and the National Academy for State Health Policy to enhance capacity through the exchange of experiences and ideas and the provision of technical assistance. On a daily basis, much sharing takes place across provinces and states through informal networks formed at association events for the purposes of developing health system reforms.

Comparative work is also done at the local level. The US-based Robert Wood Johnson Foundation (2017) annually publishes county health rankings "to provide a starting point for change in communities." This work is often very practical in nature. The Institute for Healthcare

Improvement (IHI) has formed collaboratives of health systems, public health departments, and provider groups to assist them in planning and implementing comprehensive care designs to serve patients with complex needs.

#### **Variables for Comparison**

Health systems can be compared on contextual factors, inputs, outputs, and outcomes. Contextual factors describe a system's setting, effectively outlining the type of system and the reforms that are possible. Political scientists argue that institutions (e.g., political systems and government organizations), ideas (to include political ideologies and principles, such as accessibility, sustainability, and comprehensiveness), and interests (stakeholders) shape policy decisions. So do policy legacies (previous policies).

Inputs consist of the resources – human, financial, physical, and virtual – invested in a system by organizations and individuals. The processes a system uses are inputs. They are of particular interest to policymakers, health system leaders, and financers (taxpayer and private payer alike) because of their magnitude, as previously discussed. Inputs influence the outputs and outcomes of the system, although not always positively or directly or in well-understood ways.

Outputs are the work and waste produced by a system. Given their complexity, health systems generate a vast range of outputs from dollars spent to surgeries performed to syringes discarded to medical record entries made. To patients, they represent goods and services received. They are typically quantifiable, so they are often measured to evaluate systems, although there is not necessarily a direct relationship between outputs and outcomes.

Outcomes are the effects of the system, or components thereof, on the health of the population or population subgroups. Examples include infant mortality, life expectancy, and happiness.

## **Comparative Methods and Study Forms**

Quantitative, qualitative, and mixed methods are used to compare health systems.

Marmor et al. (2009) identified four categories of comparative health literature at the national level:

- 1. Descriptive documents providing statistical data, including some drawn from surveys, about a number of similar countries. Occasionally these documents include rankings.
- 2. Parallel case studies describing the health systems of multiple nations using a common template. The WHO European Observatory's Health in Transition series is an exemplar.
- 3. Books that employ a common framework to explore a particular health topic, such as privatization, in a number of individual countries.
- 4. Cross-national studies with a fundamental theoretical orientation that examine a specific health topic or question, sometimes utilizing empirical data.

Grounded theory and sophisticated regression techniques are commonly used in the third and fourth categories.

Comparative literature at the subnational and regional/local level falls into the same categories, although it seems to skew even more heavily toward the first two.

No single peer-reviewed academic journal is devoted to the comparative study of health systems, although numerous journals focus on health and publish special issues featuring comparative research.

It is important to note that much comparative health system analysis is conducted informally by practitioners for the purposes of applying lessons in the near future, not for contributing to the literature. For example, when considering system reforms, state health analysts frequently reach out to colleagues in other states to gather information about their experiences with similar reforms. They rarely publish these analyses.

## Challenges

Comparative health system study presents a few special challenges above and beyond regular health system study. Collecting data from multiple jurisdictions/sites requires more approvals and paperwork. Collected data typically needs more standardization because jurisdictions/sites usually develop codes independently. All data, especially

qualitative, require more interpretation because underlying contexts differ significantly. Physical distance and differences in language/terminology (even health systems in neighboring US states use starkly different terminology) can hinder communication unless study teams include representatives from each jurisdiction/site, which is more costly. Yet, due to comparative study's seeming irrelevance, financial and other support can be difficult to obtain, especially from public officials who must justify it to taxpayers.

#### **Findings**

After analyzing the comparative study of health policy conducted at the national level over the last three decades of the twentieth century, Marmor et al. (2009) concluded that the field is growing, partly because supply induces demand, but has yet to fulfill its promise, especially in the Western world. They blame a disconnect between practitioners and academics, which keeps policymakers from reading the most sound studies (those that fall into their third and fourth categories of comparative literature, as described above).

At the subnational and local levels, scholars in the USA and Canada have largely evaluated the success of comparative study by assessing policy diffusion and the spread of innovation. In summarizing a special issue (2017) of the Journal of Health Politics, Policy, and Law devoted to understanding the diffusion of Affordable Care Act (ACA) policies in the USA, editor Colleen Grogan drew a similar conclusion as Marmor et al. - there is a desire for information about other jurisdictions but its usage is dictated by the political aspects of the policymaking process. Specially, she wrote: "...those who want the reform are busy implementing and learning from similarly reform-minded states, and those who are against reform are busy fighting to stop it and learning from similarly resistant states." Writing around the same time, the editor of one of Canada's leading health policy journals was inspired by evidence that health innovations had scaled and spread in several settings (Zelmer 2015).

#### Conclusion

It seems unquestionable that comparative health system study will continue to grow as the health sector of most economies expands and technological advances improve information dissemination.

Suggested next steps for the field of study are to accept that politics within all health organizations – public, societal, and private – limit the application of learning and to focus on documenting how practitioners gather and use comparative information in order to enhance their effectiveness. In addition, comparative health system scholars can identify the lessons learned by First World countries as they developed their health systems about how to efficiently promote, maintain, and restore health and share those with nations that are beginning to develop their systems.

#### **Cross-References**

► Comparative Health Policies

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