Healthcare systems: typologies, framework models, and South Africa's health sector

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Abstract

Purpose – A healthcare system in any country is rarely the product of one logical policy-making experience, but rather a manifestation of many years of historical development. The purpose of this paper is to examine the characteristics, components, and variables of South Africa's healthcare system in the context of global patterns. It leverages a dynamic period in South Africa since 1994, and applies a comparative health systems analysis to explain where the country's healthcare system is, and where it is potentially going.

Design/methodology/approach – This paper reviews literature related to South Africa's healthcare system, outlines its historical development, and discusses three fundamental challenges experienced in the country. This paper also reviews the literature on healthcare system typologies and identifies three framework models that have been used to categorise national healthcare systems since the 1970s. This paper then discusses the categorisation of South Africa's healthcare system in these models, in comparison to Canada and the USA.

Findings – This paper finds that the framework models are useful tools for comparative analysis of healthcare systems. However, any use of such typologies should be done with the awareness that national healthcare systems are not isolated entities because they function within a larger context. They are not static, since they are constantly evolving with many nuances, even with very similar healthcare system categorisations.

Originality/value – This paper charts the trajectory of change in the South African healthcare system, and demonstrates that the change process must keep internal conditions in mind if the outcome is to be successful. Imitating policies of countries with well-functioning systems, without regard to local realities, may not work, as the government attempts to usher in changes within a short span of time.

Keywords Management, Governance structures, Leadership, Health law or regulation, Political strategy, Health insurance plans

Paper type Literature review

1. Introduction

According to the World Health Organization (2000), health systems consist of “all the people and actions whose primary purpose is to improve health. They may be integrated and centrally directed, but often they are not” (p. 1). Among the people involved in modern healthcare are doctors and nurses, as well as allied health professionals such as physiotherapists, nutritionists, or occupational therapists, among others.

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However, a healthcare system is more than just the human-resource component. According to Mayes (2004), a country's system is not simply "the product of one, logical policy-making experience" but rather "the manifestations of many years of historical development" (p. 2). A healthcare system such as the one in South Africa reflects the country's cultural and political administration, as well as its financial and economic capabilities (Van Rensburg, 2004, pp. 3-5). Therefore, this paper explores South Africa's healthcare system by outlining its historical development and discussing a few of the challenges experienced in the country. In the quest to improve or transform healthcare systems, countries tend to benchmark against peer countries. The process of identifying the countries whose systems share similarities can be difficult. This paper draws lessons from using framework models to categorise countries with similarities, and discusses the pitfalls in the categorisation process.

2. South Africa's healthcare system history

The history of health policy in South Africa is intricately connected to the history of the country. In order to outline the development of the health sector, Van Rensburg and Harrison (1995) provide six different phases of history based primarily on developments related to the health policy and legislation:

- (1) Phase 1 was the period before 1919, when the first health legislation was promulgated for the Union of South Africa.
- (2) Phase 2 was the period between 1919 and 1940, which saw the introduction of South Africa's first health legislation that had national jurisdiction.
- (3) Phase 3 was the period between 1940 and 1950, a phase characterised by progressive and forward-thinking activities within the health sector.
- (4) Phase 4 was the period between 1950 and 1990, when apartheid had its greatest impact in the country.
- (5) Phase 5 was the period between 1990 and 1994, a transitional period as the apartheid regime declined, eventually leading to democratic elections.
- (6) Phase 6 was the period after 1994.

However, seeing that Van Rensburg and Harrison published their article in 1995, it would be necessary to split the post-1994 phase into two parts (Katuu, 2009):

- (7) Phase 6 would be the period between 1994 and 2003, culminating in the promulgation of the most recent National Health Act (South Africa, 2003).
- (8) Phase 7 would be the period from 2003 to the present time (Katuu, 2015).

The most fundamental change in South Africa happened in 1994, when the country joined the family of democracies by introducing universal adult suffrage in 1994 (Giaino, 2016, p. 3). This is a critical point because the nation's post-apartheid health sector has fundamentally different constitutional imperatives. The country's new constitution established inalienable rights to health for all South Africans, regardless of race. In addition, children have the right to basic nutrition, shelter, and social services. Schedule 4 of the country's constitution states that national and provincial governments have concurrent legislative authority in the health sector (South Africa, 1996). The most current National Health Act, promulgated in 2003, elaborates on accessing constitutional rights. It provides "a framework for a structured uniform health system within the Republic, taking into account the obligations imposed by the Constitution and other laws on the national, provincial and local governments with regard to health services"

(South Africa, 2003, p. 2). South Africa has 9 provinces that consist of 52 district municipalities, 237 local municipalities, and 8 metropolitan municipalities (Department of Government Communication and Information System (South Africa), 2013). In practice, this means that there are three concurrent systems: the National Health System, the Provincial Health System, and the District Health System (Rapakwana, 2004, pp. 15-18). In order for these systems to function seamlessly, the “administrative, financial and support services, as well as planning and human resources, are provided through negotiated agreements between the province, its districts and municipalities” (Geyer *et al.*, 2009, p. 26). Ultimately, the National Department of Health coordinates all aspects of the public and private healthcare delivery at national, provincial, district, and local levels (Van Rensburg and Pelsler, 2004). This section will explore the historical challenges that face the country in its transition from apartheid to a fully democratic country, and the continuing efforts transforming the health sector.

2.1 South Africa's public health-sector challenges

In the earlier phases of South Africa's history, the governance of the country's healthcare system had been both vertically and horizontally fragmented, its resources poorly managed and focussed primarily on supporting an apartheid state, rather than improving health and providing an efficient and effective health service. This has resulted in at least three fundamental challenges: inequity, fragmentation, and bias towards curative rather than preventive services (Department of Health (South Africa), 2010, p. 5; Katuu, 2017, p. 239).

First, like most countries in the Global South, the country had to grapple with the entrenched legacies of imperialism that took the form of apartheid, “the official system of segregation and political, social, and economic disempowerment of the black majority by the white minority” (Giaino, 2016, p. 3). The apartheid system designated certain privileges based on race, and this resulted in a national healthcare system consisting of 14 different operating health authorities – 10 in Homelands that were self-governing regions for the black population, and the other 4 in what was known as White South Africa. This meant that 14 separate health departments functioned independently in different areas of the country, resulting in inefficiency and wasteful duplication (Gray *et al.*, 2016, p. 36; Katuu, 2011).

Second, the legacy of fragmentation is evident in a healthcare system divided into two parallel sectors – a private and a public sector, with the latter having disproportionately lower amounts of financial and human resources at its disposal than the former (Schneider *et al.*, 2007, p. 290). Even during the first two decades of South Africa's new democracy, there was still a sharp divide between a highly developed private sector and public health services that struggle to address the health needs of the majority of the population (Thiede and Mutyambizi, 2010, p. 190). The private sector continued to become wealthier “whilst the public health sector remains stagnated, largely lacking the necessary human and financial resources to provide good quality care to those who seek its services” (Shisana, 2008, p. 1). The distribution, physical state, and functional design of facilities in the public sector, serving the majority of the citizens in the new nation, has been gravely inadequate. For instance, the delivery of services within the public sector is the responsibility of the nine provincial departments in the country, following overall health-policy guidance from the National Department of Health. Within the provinces, the public health sector is organised by districts, resulting in 52 health districts across all the provinces. The public sector comprises 16 tertiary hospitals, 698 specialised hospitals, 55 regional hospitals, 254 district hospitals, 282 community health centres, and 3,075 primary healthcare clinics (Gray *et al.*, 2016, p. 36). This is in contrast with the 216 facilities in the private sector. In addition, the public sector has seen an average of

“about 4,200 patients to a general doctor compared to 243 patients to a general doctor in the private sector” (Department of Health (South Africa), 2010, p. 5).

Third, the health-service delivery structure has been “doctor-dependent medical services” and biased towards curative services, rather than preventive services such as provision of clean water, sanitation, and education (Cullinan, 2006, p. 3). This legacy goes as far back as the early 1900s, when the responsibility to provide public curative services was kept in one part of the national health department, while local authorities, who were responsible for environmental and preventive health services, reported to a separate section in the same department (Naidoo, 1997, p. 53). In the 1940s, there were efforts to introduce community-based health centres that would incorporate health education and health promotion as essential elements of the health-delivery system, thereby integrating curative care and preventive health services in a comprehensive community-based package (Van Rensburg and Harrison, 1995, p. 98). Unfortunately, over the next decade, reactionary and entrenched elements of the medical establishment opposed the integrated approach, and it was eventually dismantled in 1960 (Hunter, 2008, p. i). This bias towards curative services was carried throughout the apartheid era into the early 1990s. De Haan *et al.* (2005) stated that there was a limited number of registered practising doctors, the majority of them living in urban areas, working in the private sector and concentrating mainly on curative medicine (p. 27). As a result, the current service-delivery structure still leans heavily to wards a curative approach, high-cost care with minimal adherence to any referral system. This implies that “many patients are seen at an inappropriate level, usually by specialists and in hospitals, and this contributes to cost escalation” (Department of Health (South Africa), 2010, p. 5).

In order to address these challenges, the government touted a radical new approach – the national health insurance (NHI) fund, whose implementation began in 2012, and is planned to end in 2025.

2.2 South Africa's NHI fund

The debate about having a comprehensive mandatory health insurance scheme has been ongoing since 1994, and involves various stakeholders, including political parties, government departments, medical schemes, private providers, and civil-society organisations (McIntyre, 2010, p. 23-36). The plan was initially mooted by the African National Congress (ANC) while it was still a party fighting for political freedom in the early 1990s, and was contained in its Health Plan of May 1994 when the ANC led the newly elected democratic government (McLeod and Grobler, 2009). However, the ANC felt that it would have been premature to introduce such a system under conditions of serious fragmentation and financial instability, particularly in the medical-schemes market (Tshabalala-Msimang, 2008, p. 8). The government resuscitated the discussion in the mid-2000s after significant developments to stabilise the national healthcare system (McLeod and Grobler, 2009).

The NHI fund is at the core of the structural change, in order to address the three main challenges facing the nation and ensure equitable service delivery (Tshabalala-Msimang, 2008, p. 8). Through NHI, all citizens of South Africa, as well as legal long-term residents, would be “provided with essential healthcare, regardless of their employment status and ability to make a direct monetary contribution to the NHI Fund” (Bernitz, 2014, p. 75). The motivation is the eradication of barriers limiting access to healthcare, and ensuring “financial risk protection from catastrophic health-related expenditures for households and individuals through a pre-payment system” (Department of Health (South Africa), 2012a, p. 20). Ultimately, the NHI fund would place “the necessary funding and health service delivery mechanisms that will enable the creation of an efficient, equitable and sustainable health system” in the country (Slabbert, 2011, p. 33).

The NHI initiative is being rolled out in three phases between 2012 and 2025. According to the national Department of Health, each of the phases will seek to achieve specific goals:

- (1) The first phase ran between 2012 and 2016, and constituted strengthening of the service-delivery platform and the overall improvement of quality in the public-health sector.
- (2) The second phase would run between 2017 and 2021, and builds the fundamental structures and facilities in which the NHI fund would operate.
- (3) The third phase would run between 2022 and 2025, and focusses on ensuring that the NHI fund is fully functional (Department of Health (South Africa), 2015, pp. 13-15).

The first phase of the NHI initiative began in 2012, with phased piloting in ten health districts chosen using various demographic and socioeconomic factors. The focus was to test various components of the NHI, including “the health service delivery platforms, private provider contracting models and improved health facilities management” (Crisp, 2014, pp. 256-257). The pilot districts undertook real-life demonstration of the key administrative and technical aspects of the NHI to ensure the smooth roll-out of the NHI systems as it matures and, as new information becomes available, to ensure an effective transition process for purposes of creating an enabling environment towards a smooth NHI roll-out (Department of Health (South Africa), 2012a, p. 22).

The activities completed in the first phase include: the establishment of the Office of Health Standards Compliance; the audit of public health facilities aimed at improving quality; appointment of district clinical specialist support teams (DCSST); training of primary health care (PHC) Agents; and improving information management and systems support (Rowe and Moodley, 2013).

The second phase of the NHI roll-out began in 2017. However, a number of lessons had already been drawn from the first phase. In December 2015, the Department of Health noted that the implementation of NHI would require “amendments to related existing legislation and enactment of new laws” to ensure that there was not only “legislative alignment but also policy consistency across government departments and spheres of government” (Department of Health (South Africa), 2015, p. 99). Among the laws that would require review were those related to the management and retention of health records (Katuu and van der Walt, 2016). Precursor activities to the legislative and regulatory review included the launch of the nation’s eHealth Strategy, with its goal of achieving a well-functioning national health information system (Department of Health (South Africa), 2012b, p. 5). Neither the legislative and regulatory review nor the launch of initiatives such as the eHealth Strategy can singularly transform the country’s health system, but when undertaken with other activities, they support the process of transformation (Katuu, 2016, p. 335). Among these activities are “a review of inter-governmental functions and inter-governmental fiscal relations as they pertain to the health sector” (Department of Health (South Africa), 2015, p. 99).

Even though the process is not yet half completed, the NHI initiative is fundamentally changing the country’s health-sector terrain. Nonetheless, a number of commentators have already highlighted weaknesses of the process, including the unreliable utilisation of disease classification within hospitals (Dyers *et al.*, 2016) and the inadequacy of specialist outreach through DCSST necessary to strengthen district health systems (Caldwell and Aldous, 2017). In order to address these challenges, South Africa’s policy makers and practitioners may want to learn from the experiences of other countries. However, the process of identifying which peer nations most closely mirror South Africa’s journey is laden with complexity. Healthcare systems experts have developed typologies used in comparing national healthcare systems, and the next section discusses three such framework models.

3. Healthcare system typologies

Modern health systems are modelled to varying degrees on one or more of a few basic designs that emerged and have been refined since the late nineteenth century (World Health Organization, 2000, p. 13). Experts in comparative healthcare systems have developed typologies based on these basic designs. This section looks at three framework models of healthcare systems, some dating back to the 1970s:

- (1) the Cockerham-Stevens framework model – developed in the 1980s and 1990s (Cockerham, 1992) and further enhanced a decade later (Stevens, 2005);
- (2) the Roemer framework model – developed over the course of the 1970s, 1980s, and 1990s (Roemer, 2001); and
- (3) the Santerre-Neun framework model – developed in the 2000s (Santerre and Neun, 2010).

Each of these framework models is discussed in detail below.

3.1 Cockerham-Stevens framework model

The Cockerham-Stevens framework model includes four types of healthcare systems: free-market medicine, socialised medicine, decentralised national health programmes, and socialist medicine. The framework model was initially developed by William Cockerham in the late 1980s and early 1990s (Cockerham, 1992), and further developed by Fred Stevens more than a decade later (Stevens, 2005). Table I shows the characteristics of each of the four different types, as well as model countries for each.

The free-market medicine system is based on wider free-market principles, particularly the private funding by fee-for-service and private initiative and ownership, and has very little state or third-party intervention. Such a system is characterised by a two-track system of financing and of healthcare delivery – i.e. a private track that is based on individual purchasing power, and a public track that is based on welfare provision (Van Rensburg, 2004, p. 14).

The socialised-medicine system, also known as the Beveridge model system, provides healthcare delivery in the form of a state-supported consumer service financed by taxation. That is, healthcare is purchased, but the buyer is the government, which makes the services available at little or no additional cost to the consumer (Stevens, 2005, p. 165).

The decentralised national healthcare system, also known as the Bismark model, differs from the socialised-medicine system in its indirect government control and management of healthcare delivery. In this sense, the government acts primarily to regulate the system rather than operate it, functioning in the role of a third-party mediating and coordinating healthcare delivery between providers and organisations involved in the financing of services (Stevens, 2005, p. 164).

Finally, in the socialist medicine system, also known as the Samshko model, healthcare is a state-provided public service. The state controls, organises, finances, and allocates healthcare directly to all citizens, free of charge. No third-party organisations or insurance companies are interposed between healthcare providers and patients. The state owns all facilities and pays a salary to all healthcare workers (Stevens, 2005, p. 165).

Table I reveals that South Africa is placed in the same category as the USA, and at first glance, one may believe the countries have numerous similarities. However, as will be demonstrated in the discussion of the Roemer framework model, South Africa has fundamental differences with the USA. In a similar vein, Canada and Great Britain are also placed in the same category in this framework model, but other framework models place them in different categories. However, it is curious that Switzerland is placed in the free-medicine category as well as the decentralised category. The country's classification demonstrates the challenges of classifying a health system that was in transition from the free-market model to the Bismark model during the course of the 1990s (Böhm *et al.*, 2013).

Table I.
A comparison
of health-care
systems using the
Cockerham-Stevens
framework model

Type	Characteristics	Country examples
Free-market medicine systems	Have both private and public systems of financing and organisation of healthcare services Have providers which are mainly private entrepreneurs Have facilities which are privately and state owned Do not guarantee equal access to the general population and are mostly highly inequitable Encourage (even enforce) private care for patients who are able to pay for such services	South Africa, Switzerland, USA
Socialised- medicine systems	Directly controls the financing and organisation of healthcare services in a capitalist economy Directly pays providers Owns most of the facilities (Canada is an exception) Guarantees equal access to the general population Allows some private care for patients willing to be responsible for their own expenses	Canada, Great Britain, Italy, Kenya, Nordic countries, Saudi Arabia, Spain
Decentralised national healthcare system	Indirectly controls the financing and organisation of health services in a capitalist economy Regulates payment to providers Owns some of the facilities Guarantees equal access to the general population Allows some private care to patients willing to be responsible for their own expenses	Austria, Belgium, France, Germany, Japan, Luxembourg, Mexico, Switzerland, the Netherlands
Socialist medicine system	Directly controls the financing and organisation of health services in a socialist (communal) economy Pays providers directly Owns all facilities Guarantees equal access Bans/restricts private care	Former Soviet Union and Eastern Europe-Hungary, Poland, Russia, People's Republic of China, Cuba
Source: Stevens (2005, pp. 164-169) , Van Rensburg (2004, p. 14)		

3.2 Roemer framework model

Milton Roemer developed this framework, reflecting the global healthcare systems of the 1970s, 1980s, and 1990s. It has a matrix of four types of healthcare systems, as well as four economic levels, resulting in 16 different categories, shown in Table II.

Table II.
A comparison of
healthcare systems
using the roemer
framework model

Economic level (GNP per capita)	Entrepreneurial and permissive	Health system policy (market intervention)		
		Welfare oriented	Universal and comprehensive	Socialist and centrally planned
Affluent and industrialised	USA	Canada Japan West Germany	Great Britain New Zealand Norway	Czechoslovakia Soviet Union
Developing and transitional	Philippines South Africa Thailand	Brazil Egypt Malaysia	Israel Nicaragua	Cuba North Korea
Very poor	Bangladesh Ghana Nepal	India Burma	Sri Lanka Tanzania	China Vietnam
Resource rich		Libya Gabon	Kuwait Saudi Arabia	
Source: Roemer (2001, p. 367)				

An analysis of Table II reveals that there are similarities as well as differences with Table I above. Both the Cockerham-Stevens framework model and the Roemer framework model have four categories of healthcare systems, even though the names and titles are different, and the latter has an additional analysis criterion based on economic levels. Therefore, while both framework models place South Africa and the USA in the same categories, the Roemer framework model differentiates them by varying economic levels. As noted in the discussions in Section 2.1, this Roemer framework model also betrays its place in history by having nation names such as Burma, Czechoslovakia, West Germany, and the Soviet Union.

3.3 Santerre-Neun framework model

Santerre and Neun (2010, p. 103) developed this framework model with types and several category criteria: socialised insurance, NHI, public contracting, and pluralistic as shown in Table III.

In the socialised insurance system, healthcare is financed through government-mandated contributions by employers and employees, and healthcare is delivered by private providers (Shi and Singh, 2005, p. 15). The earliest of such systems usually evolved from “small, initially voluntary associations; later versions have sometimes been created *ex nihilo* by public action” (World Health Organization, 2000, p. 13). The government subsidises voluntary mutual-aid societies that insure their members for medical care, death benefits, and, occasionally, some form of old-age assistance, operating entirely independently. These subsidies are in the form of funding or various financial and tax advantages, and government exchanges this funding for the right to regulate the mutual societies (Shi and Singh, 2005, p. 15).

In the NHI system, “governments create public health insurance programmes that citizens are required to join” (Immergut, 1992, p. 44), where government provides finance, but actual care is delivered by private providers. In this context, the system requires a tighter consolidation of the “financing, insurance, and payment functions” coordinated by

	Germany	Canada	UK	USA
Feature	Socialised insurance	National health insurance	Public contracting	Pluralistic
Health insurance coverage	Near universal	Universal	Near universal	84 %
Financing	Payroll and general taxes Single-payer system	General taxes Single-payer system	General taxes Single-payer system	Voluntary premiums or general taxes Multipayer system
Reimbursement	Fixed payments to hospitals Negotiated point-fee-for-service to physicians	Global budgets to hospitals Negotiated point-fee-for-service to physicians	Global budgets to hospitals Salaries and capitation payments to physicians	Mostly fixed payments to hospitals Mostly fee-for-service to physicians
Consumer out-of-pocket price	Negligible	Negligible	Negligible	Positive but generally small
Production	Private	Private	Private but public contract	Private
Physician choice	Unlimited	Unlimited	Unlimited	Relatively limited

Source: Santerre and Neun (2010, p. 103)

Table III.
A comparison of
healthcare systems
using the Santerre-
Neun framework
model

the government, while delivery is characterised by “detached private arrangements” (Shi and Singh, 2012, p. 20).

In a public contracting system, in addition to financing a tax-supported NHI programme, the government also manages the infrastructure for the delivery of medical care (Shi and Singh, 2005, p. 15). This means that health services are provided through institutions that are operated by the government, and most healthcare providers, such as physicians, are either government employees or are tightly organised in a publicly managed infrastructure (Shi and Singh, 2005, p. 15). The key feature that differentiates this system from the NHI system is that healthcare providers are basically public employees. Essentially, this system is a non-profit, publicly funded and delivered service (Hall, 2006, p. 30).

In a pluralistic system, “state involvement is more limited but still substantial, sometimes providing coverage only for certain population groups and giving way for the rest of the population to largely private finance, provision and ownership of facilities” (World Health Organization, 2000, p. 13).

This framework model was developed less than a decade ago, making it the most modern of the three discussed. In developing the model, the authors only mapped four countries, being illustrative rather than comprehensive about similarities and differences. For this reason, South Africa has not been mapped.

4. Discussion

According to Giaimo (2016), the healthcare system in any nation “has institutionalised rules and practices and a particular settlement among the state, health care providers, payers, and patients, about their respective roles, powers, and jurisdictions in health care” (pp. 2-3). The purpose of discussing the framework models in Section 3 is to offer “specific and general characteristics, components and variables of healthcare systems” when contextualising the developments that have taken place in South Africa’s healthcare system (Van Rensburg, 2012, p. 10).

Based on the discussion in Section 3, South Africa’s healthcare system most closely mirrors that of the USA. In the Cockerham-Stevens framework model, South Africa and the USA are placed within the same category. In the Roemer framework model, South Africa and the USA are within the same general category, even though they are differentiated by economic level. However, South Africa is not categorised in the Santerre-Neun framework model. Several commentators have argued that South Africa has a pluralistic healthcare system that would make it similar to the USA (Rowe and Moodley, 2013; Van Rensburg, 2004). Table IV provides a summary of the framework models comparing three countries: Canada, USA, and South Africa.

In Section 2, the discussion of South Africa’s health system reveals a long history, dating back more than a century, and notes that it faces three challenges: equity, the legacy of fragmentation, and emphasis on curative rather preventive health. In order to address these

Table IV.
Mapping healthcare
systems of Canada,
USA, and South
Africa against three
framework models

	Canada	USA	South Africa
Cockerham-Stevens framework model	Socialised-medicine systems	Free-market medicine systems	Free-market medicine systems
Roemer framework model	Welfare oriented (affluent and industrialised)	Entrepreneurial and permissive (affluent and industrialised)	Entrepreneurial and permissive (developing and transitional)
Santerre-Neun framework model	National health insurance	Pluralistic	

challenges, the country has embarked on the NHI initiative, with the goal of ensuring that “all South Africans, irrespective of the socio economic status, have access to good quality and affordable health services” (Department of Health (South Africa), 2012a, p. 20). The initiative demonstrates the steady transformation of the country’s healthcare system from one that shares similarities with the USA healthcare system, to one that is closer to Canada’s.

While health policy makers and practitioners may benchmark against countries such as the USA or Canada, based on typologies, they should maintain a healthy degree of scepticism. That is because healthcare systems are neither isolated nor static entities, and the typology categories are not pure types (Van Rensburg, 2012, p. 11).

First, healthcare systems are not isolated entities because they are developed within a wider societal and environmental context (Van Rensburg, 2004, p. 10). In two of the three framework models, South Africa’s system was explicitly grouped with the USA’s. However, in reality, no matter how many similarities national healthcare systems may have, they continue to have their own national uniqueness because of the complexity within such systems.

Second, healthcare systems are not static entities because they are ever-changing and evolving. This paper has outlined the changes that have taken place in South Africa’s healthcare system for over a century, and most radically since 1994. Van Rensburg (2004) states that during the course of time “and as a result of specific events, a country’s healthcare system can evolve from one specific type to another” (p. 10). In the case of South Africa, one of the specific events is the introduction of the NHI fund, which will likely change the typology of the healthcare system to more closely resemble that of Canada.

Third, typologies of healthcare systems have no pure types. The Cockerham-Stevens framework demonstrated this by characterising Switzerland as both a free-market medicine system and a decentralised national healthcare system. In future, even if South Africa’s healthcare system were put in the same category as Canada’s healthcare system, the two systems would differ on many counts. There are external dynamics, including their histories, development status, political economy, culture, level of technological development, and demographical constitution (Van Rensburg, 2004, p. 10). There are also internal dynamics that demonstrate differences, including organisational functioning and effectiveness (Van Rensburg, 2012, p. 11). For this reason, the closest one could come to drawing similarities is by looking at the category attributes, rather than individual countries. No pure types exist in practice, and the types of healthcare systems are differentiated as ideal types, meaning that they are “simplified abstractions of reality” (Van Rensburg, 2004, p. 10).

Finally, even though the aspirational goal may be to create a national healthcare system similar to countries that already have universal health coverage, such as Canada, Finland, and Sweden, each of these countries is facing its own challenges (Cortje, 2012, pp. 39-52; Department of Health [South Africa], 2015, p. 8; Tshivhase, 2013, pp. 29-38). For instance, while Canada is often touted as a much better healthcare system than the one in the neighbouring USA, critics have often mentioned the waiting time as one of its weaknesses, the result of the gatekeeping referral system (Skousen, 2008, pp. 96-97). “According to Canada’s Fraser Institute, specialist physicians surveyed across 12 specialities and 10 Canadian provinces reported a total waiting time of 18.2 weeks between referral from a general practitioner and delivery of treatment in 2010, an increase from 16.1 weeks in 2009” (Shi and Singh, 2012, pp. 22-23). The long waiting periods are symptoms of systemic weaknesses and require fundamental structural changes – a lesson South Africa should consider whenever benchmarking its system against Canada’s (MacKinnon, 2017).

5. Concluding remarks

A healthcare system in any country is the result of a mix of different components, such as characteristics of the human resources, the unique features of the cultural and political administration, and the financial and economic strengths (Van Rensburg, 2004, pp. 3-5). Using the example of South Africa's healthcare system, this paper demonstrates that healthcare systems of countries are highly vibrant systems that are sensitive to changes in both the external and internal environmental dynamics (Van Rensburg, 2004, p. 10). External dynamics include changes in political structures, and in the case of South Africa, the most dramatic change was in 1994, with its impact on the constitutional imperative to address the nation's legacy of challenges. Internal dynamics in South Africa are demonstrated by the introduction of the NHI fund. The full impact of the NHI changes is yet to be seen, since the project is currently in the fifth year of a 13-year process.

Since individual national healthcare systems display vast differences, typologies such as the framework models discussed in this paper allow the comparison and systematisation of the similarities and differences (Van Rensburg, 2012, p. 10). This paper examines three such framework models: the Cockerham-Stevens framework model, the Roemer framework model, and the Santerre-Neun framework model. Each of these framework models has been informed by a particular historical and socioeconomic paradigm, resulting in grouping countries into particular categories.

A country such as South Africa that is still on its path towards transforming its healthcare system may need to identify peer nations with which it must engage to learn lessons. Since nations have such varied healthcare systems, a framework model helps isolate categories that have criteria and variables most closely related to the system being examined. While this does not result in exact matches, it nonetheless facilitates a country such as South Africa doing due diligence in benchmarking activities.

In Section 4, this paper maps the healthcare systems of Canada and the USA, while noting how they were categorised within different framework models, in comparison to South Africa. The section also notes that the use of framework models comes with a caveat – i.e., there are neither pure types, nor are they are static or isolated entities. A discussion of framework models is a broad stroke analysis in the evaluation process. However, this paper demonstrates that benchmarking efforts should recognise that healthcare systems are moving targets, since they are constantly evolving. In addition, peer countries also face challenges not reflected in the analysis components of framework models, such as the long waiting periods in Canada's referral system.

In July 2017, the Department of Health published its NHI policy, noting that it was laying the foundation for moving the country towards universal health coverage, through the implementation of the NHI (Department of Health (South Africa), 2017a). Among other things, the policy acknowledges the need to strengthen and reorganise the healthcare system. The healthcare system would have to be reorganised in the areas of "strengthening primary healthcare (PHC) including PHC re-engineering, hospital services, and EMS, improving leadership and governance in the health system through reforms to the management and governance of clinics, districts and hospitals" (Department of Health (South Africa), 2017a, p. 2). In this regard, the Department of Health also published its implementation plan, with structures covering both the public and private sectors in four domain areas: financing, provision, regulatory aspects, and governance (Department of Health (South Africa), 2017b). An analysis of the government's efforts suggests a continued awareness that the country should be selective about lessons from other countries (National Consultative Health Forum, 2011). This paper has demonstrated the dangers of simply typecasting a country within a certain model or framework for purposes of benchmarking, especially since the healthcare systems are

constantly evolving. Therefore, a country such as South Africa should not adopt a one-size-fits-all strategy to change the structure of the healthcare system in its quest towards transformation. Policy makers need a nuanced approach that respects the ground realities and limitations within which the system operates.

References

- Bernitz, H. (2014), "Legal aspects related to healthcare insurance, dental practitioners, and forensic odontologists in South Africa", in Rotzsch, K. (Ed.), *Forensic and Legal Dentistry*, Springer, Cham, pp. 75-78.
- Böhm, K., Schmid, A., Gotze, R., Landwehr, C. and Rothgan, H. (2013), "Five types of OECD healthcare systems: empirical results of a deductive classification", *Health Policy*, Vol. 113 No. 3, pp. 258-269.
- Caldwell, R. and Aldous, C. (2017), "The national health insurance, the decentralised clinical training platform, and specialist outreach", *SAMJ: South African Medical Journal*, Vol. 107 No. 1, pp. 39-40.
- Cockerham, W. (1992), *Medical Sociology*, Prentice Hall, Englewood Cliffs, NJ.
- Cortje, G.F. (2012), "Critical factors for the successful implementation of the proposed national health insurance system in South Africa", *Master, Business and Economic Sciences*, Walter Sisulu University, East London, p. 135.
- Crisp, N. (2014), "HIV/AIDS and national health insurance in South Africa", in Omaswa, F. and Crisk, N. (Eds), *African Health Leaders: Making Change and Claiming the Future*, Oxford University Press, Oxford, pp. 249-260.
- Cullinan, K. (2006), "Health services in South Africa: a basic introduction", available at: www.health-e.org.za/2006/01/29/health-services-in-south-africa-a-basic-introduction (accessed 7 October 2018).
- De Haan, M., Dennhill, K. and Vasuthevan, S. (2005), *The Health of Southern Africa*, Juta and Co. Ltd., Cape Town.
- Department of Government Communication and Information System (South Africa) (2013), "Categories of municipalities", available at: www.gov.za/aboutgovt/localgovernment.htm (accessed 26 October 2013).
- Department of Health (South Africa) (2010), "National service delivery agreement: a long and healthy life for all South Africans", available at: www.health-e.org.za/wp-content/uploads/2013/05/3771ccea0610904ff0c3de0f09f210391.pdf (accessed 7 October 2017).
- Department of Health (South Africa) (2012a), "Annual performance plan 2012/13-2014/15", available at: www.health.gov.za/index.php/2014-08-15-12-54-26/category/95-2012s?download=278:human-resource-strategy-for-the-health-sector-2012-13-2016-17 (accessed 7 October 2017).
- Department of Health (South Africa) (2012b), "EHealth strategy South Africa 2012-2017", available at: www.hst.org.za/publications/NonHST%20Publications/eHealth_Strategy_South_Africa_2012-2016.pdf (accessed 7 October 2017).
- Department of Health (South Africa) (2015), "White paper on national health insurance: towards universal health coverage", available at: www.gov.za/sites/www.gov.za/files/National_Health_Insurance_White_Paper_10Dec2015.pdf (accessed 21 November 2017).
- Department of Health (South Africa) (2017a), "National health insurance policy: towards universal coverage", available at: www.health.gov.za/index.php/nhi?download=2257:white-paper-nhi-2017 (accessed 21 November 2017).
- Department of Health (South Africa) (2017b), "National health insurance: implementation structures", available at: www.health.gov.za/index.php/2014-03-17-09-09-38/strategic-documents/category/383-national-health-insurance?download=2143:nhi-implementation-structures-presentation-summary-by-the-dg-ndoh-29-june-2017 (accessed 21 November 2017).

- Dyers, R.E., Evans, J., Ward, G.A., du Plooy, S. and Mohamed, H. (2016), "Are central hospitals ready for national health insurance? ICD coding quality from an electronic patient discharge record for clinicians", *SAMJ: South African Medical Journal*, Vol. 106 No. 2, pp. 181-185.
- Geyer, N., Mogotlane, S. and Young, A. (Eds) (2009), *Juta's Manual of Nursing*, Vol. 1, Juta and Co. Ltd., Cape Town.
- Giaimo, S. (2016), *Reforming Health Care in the United States, Germany, and South Africa: Comparative Perspectives on Health*, Springer, New York, NY.
- Gray, A., Riddin, J. and Jugathpal, J. (2016), "Health care and pharmacy practice in South Africa", *Canadian Journal of Hospital Pharmacy*, Vol. 69 No. 1, pp. 36-41.
- Hall, J.N. (2006), "Mental health delivery systems in Great Britain", in Olson, R.P. (Ed.), *Mental Health Systems Compared: Great Britain, Norway, Canada and the United States*, Charles C Thomas Publisher Ltd., Springfield, IL, pp. 24-80.
- Hunter, J. (2008), "Foreword", in Barron, P. and Roma-Reardon, J. (Eds), *South African Health Review*, Health Systems Trust, Durban, p. i.
- Immergut, E.M. (1992), *Health Politics: Interests and Institutions in Western Europe*, Cambridge University Press, New York, NY.
- Katuu, S. (2009), "Managing records in public healthcare institutions in South Africa – a historical analysis", *InForum 2009 Annual Conference of the Records Management Association of Australasia, Adelaide, 6-9 September*, available at: <http://members.rimpa.com.au/lib/StaticContent/StaticPages/pubs/nat/natcon2009/tuesday/ShadrackKatuu2.pdf> (accessed 26 November 2017).
- Katuu, S. (2011), "Managing records in public healthcare institutions in South Africa", *InForum 2011 Annual Conference of the Records and Information Management Professionals Australasia, Darwin, 11-14 September*, available at: <http://members.rimpa.com.au/lib/StaticContent/StaticPages/pubs/nat/inForum2011/Katuu.pdf> (accessed 26 November 2017).
- Katuu, S. (2015), "Managing records in South African public health care institutions: a critical analysis", PhD, University of South Africa, Pretoria.
- Katuu, S. (2016), "Transforming South Africa's health sector: the ehealth strategy, the implementation of electronic document and records management systems (EDRMS) and the utility of maturity models", *Journal of Science and Technology Policy Management*, Vol. 7 No. 3, pp. 330-345.
- Katuu, S. (2017), "Health information systems, ehealth strategy and the management of health records: the quest to transform South Africa's public health sector", in Moahi, K.H., Bwalya, K.J. and Sebina, P.M. (Eds), *Health Information Systems and the Advancement of Medical Practice in Developing Countries*, IGI Global, Hershey, PA, pp. 237-261.
- Katuu, S. and van der Walt, T. (2016), "Assessing the legislative and regulatory framework supporting the management of records in South Africa's public health sector", *South African Journal of Information Management*, Vol. 18 No. 1, pp. 1-7.
- McIntyre, D. (2010), "Private sector involvement in funding and providing health services in South Africa: implications for equity and access to health care", Equinet Discussion Paper Series No. 84, Health Economics Unit (UCT), ISER Rhodes University, EQUINET, Harare.
- McLeod, H. and Grobler, P. (2009), "The role of risk equalization in moving from voluntary private health insurance to mandatory coverage: the experience in South Africa", in Chernichovsky, D. and Hanson, K. (Eds), *Innovations in Health System Finance in Developing and Transitional Economies (Advances in Health Economics and Health Services Research, Volume 21)*, Emerald Group Publishing Limited, pp. 159-196.
- MacKinnon, J.C. (2017), "Wait times in Canada", *Healthcare Management Forum*, Vol. 30 No. 4, pp. 190-192.
- Mayes, R. (2004), *Universal Coverage: The Elusive Quest for National Health Insurance*, University of Michigan Press, Ann Arbor.

- Naidoo, S. (1997), "Local government restructuring", in Barron, P. (Ed.), *South African Health Review*, Health Systems Trust, Durban, pp. 53-58.
- National Consultative Health Forum (2011), "National health insurance conference: lessons for South Africa", available at: www.health.gov.za/index.php/2014-08-15-12-55-04/category/100-2012rp?download=307:national-health-insurance-conference-report (accessed 21 November 2017).
- Rapakwana, N.J. (2004), *Client Satisfaction With Regard to Accessibility of Primary Healthcare Services in Molemole Municipality of Limpopo Province*, Masters, University of South Africa, Pretoria.
- Roemer, M. (2001), "Health care systems", in Lock, S., Last, J.M. and Dunea, G. (Eds), *The Oxford Illustrated Companion to Medicine*, Oxford University Press, New York, NY, pp. 363-367.
- Rowe, K. and Moodley, K. (2013), "Patients as consumers of health care in South Africa: the ethical and legal implications", *BMC Medical Ethics*, Vol. 14 No. 15, pp. 1-9.
- Santerre, R.E. and Neun, S.P. (2010), *Health Economics: Theory, Insights, and Industry Studies*, Cengage Learning, Mason, OH.
- Schneider, H., Barren, P. and Fonn, S. (2007), "The promise and the practice of transformation in South Africa's health system", in Buhlungu, S., Daniel, J., Southall, R. and Lutchman, J. (Eds), *State of the Nation: South Africa 2007*, HSRC Press, Cape Town, pp. 289-311.
- Shi, L. and Singh, D. (2005), *Essentials of the US Health Care System*, Jones & Bartlett Publishers, Boston, MA.
- Shi, L. and Singh, D.A. (2012), *Delivering Health Care in America: A Systems Approach*, Jones & Bartlett Learning, Burlington, MA.
- Shisana, O. (2008), "A national health system: opportunities and challenges for South Africa", in Botha, C. and Hendricks, M. (Eds), *Financing South Africa's National Health System through National Health Insurance: Possibilities and Challenges*, Human Science Research Council, Cape Town, pp. 1-6.
- Skousen, M. (2008), *Econopower: How a New Generation of Economists is Transforming the World*, John Wiley and Sons Ltd, Hoboken, NJ.
- Slabbert, M.N. (2011), *Medical Law in South Africa*, Kluwer Law International, Bedfordshire.
- South Africa (1996), "Constitution of the republic of South Africa (act 108 of 1996)", available at: www.gov.za/sites/www.gov.za/files/Act108of1996s.pdf (accessed 8 October 2017).
- South Africa (2003), "National health (Act 61 of 2003)", available at: www.acts.co.za/national_health/index.html (accessed 7 October 2017).
- Stevens, F. (2005), "The convergence and divergence of modern health care systems", in Cockerham, W.C. (Ed.), *The Blackwell Companion to Medical Sociology*, Blackwell Publishing, Oxford, pp. 159-176.
- Thiede, M. and Mutyambizi, V. (2010), "South Africa", in Preker, A.S., Zweifel, P. and Schellekens, O.P. (Eds), *Global Marketplace for Private Health Insurance: Strength in Numbers*, World Bank, Washington, DC, pp. 189-209.
- Tshabalala-Msimang, M. (2008), "Health within a comprehensive system of social security: is national health insurance an appropriate response?", in Botha, C. and Hendricks, M. (Eds), *Financing South Africa's National Health System through National Health Insurance: Possibilities and Challenges*, Human Science Research Council, Cape Town, pp. 7-13.
- Tshivhase, T. (2013), *The Impact of HIV/AIDS on the South African Health System, Post NHI Implementation*, Masters, University of Pretoria, Pretoria.
- Van Rensburg, H.C.J. (Ed.) (2004), "National health care systems: structure, types and dynamics", *Health and Health Care in South Africa*, Van Schaik Publishers, Pretoria, pp. 1-44.
- Van Rensburg, H.C.J. (2012), *National Health Care Systems: Structure, Types and Dynamics*, Van Schaik Publishers, Pretoria.

- Van Rensburg, H.C.J. and Pelser, A.J. (2004), "The transformation of the South African health system", in van Rensburg, H.C.V. (Ed.), *Health and Health Care in South Africa*, Van Schaik Publishers, Pretoria, pp. 109-170.
- Van Rensburg, H.C.J. and Harrison, D. (1995), "History of health policy", in Harrison, D. (Ed.), *South African Health Review*, Health Systems Trust, Durban, pp. 95-118.
- World Health Organization (2000), *The World Health Report 2000: Health Systems – Improving Performance*, World Health Organization, Geneva.

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