<u>ECONEX 15</u>

<u>HEALTH SYSTEM MODELS</u>

1. Introduction

This note **explores several health system models**, **compares health outcomes, costs and patient satisfaction**.

2. Classification of National Health Systems

Healthcare systems can be classified into **four broad models**, based on the **way systems are funded** and the **extent of state involvement.**

2.1 Beveridge models (public service)

Healthcare **is financed through general taxation and provided to the entire population**. Example: NHS in the UK, initially designed by William Beveridge. Services are administered by the state, they control delivery, and facilities, human resources, etc. are owned by them. The system is organised in a **highly centralised way**, while in **Norway and Sweden it** is more **decentralised.**

These healthcare systems **compete with other government spending.** However, they are usually **more efficient in terms of cost containment**.

2.2 Bismarck models (social security based)

Bismarck models derive its name from the Prussian Chancellor Otto von Bismarck "who **invented the welfare state** as part of the unification of Germany in the 19th century. The purist form of this model is a **social insurance model where it is compulsory for all.** Social contributions or premiums are paid in the form of **payroll deductions**. These models are **sometimes "mixed" models since both public and private providers can be used**, and funding are more flexible. These models can be centralised (as in France) or decentralised (like the German and Dutch systems). They provide a **larger degree of choice**, creating **competition between providers**, and i**ncreasing costs.**

2.3 National insurance models

NHI models are built on insurance principles such as risk pooling and cross-subsidisation. Contributions are mandatory and benefits are also enjoyed by those who do not contribute – in a social health insurance (SHI) model, those who do not contribute, do not benefit.

NHI-models may provide **universal coverage** whereas many Bismarck/social insurance models start by providing coverage to only a certain group (usually the formally employed population) before extending insurance to the rest of the population. Examples of NHI: Taiwan and South Korea. NHI (SA) is quite similar to the **Taiwanese model where** a single-payer national insurance programme funded through a system **jointly financed by payroll taxes, governmental subsidies and individual premiums.** It improves the delivery and availability of healthcare while managing to contain costs.

2.4 Out-of-pocket models

Most countries are **too poor and their governments too weak to institute a public health system of any kind and as a result have an out-of-pocket (OOP) system. Patients pay in cash for medical car**e. Often they cannot afford doctors and will see traditional/ village healers.

Both **public and private providers can provide healthcare** services in this type of model, and are often found i**n conjunction with other models.**

2.5 Typology

Health systems can also be categorised based on the **main funding mechanism and the main provider of healthcare services**. Beveridge models would fall in the group where the **system is mainly funded by taxation and care is mainly provided by public providers**.

The proposed NHI in SA, for instance, will be **publicly funded, but through contributions and taxation, while care will mainly be provided by public providers and/or private providers.**

Most countries reflect mixes of characteristics in finance, provision and governance.
In a 2007 study by Van der Zee and Kroneman (V&K) **all health systems were divided in only two broad categories** i.e. **national health services** (Beveridge type models) and **social security healthcare systems** (SSH/SHI or Bismarck type models).

3. Comparing the Different Models

Public service type healthcare models are usually associated with **lower levels of spending on health** (as a percentage of GDP or per capita health expenditure) and **greater access or higher levels of coverage. Administration costs tend to be higher in insurance-based models**, making them **more expensive** than systems funded through taxation and provided as a public good.
Health systems can also be divided into **national health services** (Beveridge type models) and **social security healthcare systems** (SSH/SHI or Bismarck type models). NHS/Beveridge type models are usually **cheaper,** while **SSH/Bismarck systems may provide greater patient satisfaction and enjoy larger public support.**

3.1. Health outcomes

The three indicators used to compare health outcomes by V&K were overall (age standardised) **mortality rates, infant mortality rates and life expectancy.** While both overall and infant mortality declined over the study period, there were no convergence in overall mortality rates between the two systems and SSH (Bismarck/insurance-based) systems had on average a 5% lower mortality rate than NHS (Beveridge/public service) models over all the years. The trend for infant mortality did however converge over the years. From 1999 onwards the differences became negligible.

3.2. Healthcare expenditure

Considering data on health expenditure per capita and as a percentage of GDP confirms that **public service models are generally cheaper** than social security or insurance-based systems.

3.3. Satisfaction

Satisfaction levels in the group of countries with **SSH systems remained fairly constant**. However, **satisfaction varied in NHS countries.**

3.4. General results and other research

For the most part, the V&K analysis shows that there was not any convergence over time in the indicators examined (except for infant mortality) between the two groups of systems.

3.4.1. OECD countries

A paper comparing social health insurance (SHI) and tax-financed health systems in the OECD countries over the period 1960-2006, concludes that an **insurance-based (or SHI) type model "raises per capita total health spending by 3-4%**, and **reduces the formal-sector share of employment by 8-10%".**

3.4.2. Europe and Central Asia

In a similar study to the one on OECD countries discussed above, Wagstaff and Moreno-Serra1 considers the effect of **introducing insurance-based (SHI) systems in Central and Eastern European and Central Asian countries** between 1990 and 2004. Again they find that government health spending per capita is increased (13-15% in this case) without improvement to health outcomes.

3.4.3. Canada and the United States of America

In another study, health outcomes in the USA and Canada are compared: Canada has a universal healthcare system which **is mostly publicly funded through general taxes**, although care is mainly provided by the private sector. **Private insurance may only be bought for services not covered** by the public health system.

The USA government on the other hand, **only provides public health coverage for the elderly and low-income families**. Although the **majority of US citizens have private health insurance** (mostly through their employers) many people do not have health insurance of any kind.

Canada's health expenditure per capita is half of that of the USA. However, "free" care in Canada often results in long waiting lists, certain services being unavailable and unmet demands

The question arises: **What would be the most efficient allocation of limited resources in South Africa and is there any specific healthcare system that outperforms the rest?**

4. Application to South Africa

If an insurance-based solution is introduced for SA, the **entire population will be grouped in one risk pool.** The **more affluent** people currently belonging to medical schemes are theoretically also **healthier** than the rest of the population (the so-called health income gradient). Therefore **cross-subsidisation between the rich and the poor**, as well as the **healthy** and the **sick,** would be **more effective** – possibly leading to **reduced spending on healthcare** overall. However, with medical schemes not expected to disappear overnight– mainly because of large quality differences between the public and private sectors – one might be inclined to think that this rationale no longer applies.

According to the ANC's **NHI proposal, contributions will be mandatory.** Those people still belonging to medical schemes in addition to contributing to the NHI, would then still form part of the overall risk pool even though they will not be using NHI accredited facilities. Hence**, while subsidising the poorer, less healthy part of the population, they will not place any additional burden on resources in terms of utilisation** – an ideal situation from a risk pooling perspective.
But, this would **increase wastage in the system**, specifically around administration costs.

A **tax-based system might be better suited for SA at the moment** since it entails only **an expansion of the current public sector system and not the overall restructuring of the entire health system** that may turn out to be very costly and without similar improvements in health outcomes. The challenges include introducing **a purchaser-provider split** and **giving providers and appropriate degree of autonomy.** A tax-financed system has the **three great merits**: not leaving a large portion of the population with inferior insurance coverage while the health system

staggers slowly down the road to universal coverage; avoiding many of the labour market distortions associated with payroll financing; and raising revenues in an equitable fashion.

5. Conclusion

There is only a small variation in terms of health outcomes between the two systems.

Tax-based systems appear to perform better when it comes to **cost containment**, whereas **patient satisfaction rates are generally higher in insurance-based systems.**

Whether a NHI system would be best for South Africa and why this is the preferred model at the moment, may be questioned in light of the above evidence. The **additional financial burden** could distort the market and may be too costly for the economy. **Expanding the existing public health system** (which is tax-based) may prove to be **more efficient than implementing an insurance-based system. T**he solution may not be a choice between one of the two systems discussed in this note, but could well be **a mix of pluralistic financing mechanisms.**