A new paradigm for increased access to healthcare in Africa

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1. Introduction

At the Copenhagen Consensus in 2004 a panel of Nobel Prize winners concluded that investments in health are the most productive the global community can make. In this regard, Africa offers the biggest opportunity. With only 14 percent of the world's population it bears 44 percent of the global burden of communicable diseases¹: the continent is home to 60% of the world's malaria cases, 30% of tuberculosis cases and two-third of HIV/AIDS cases² ³. The proportion of deaths is higher than in other regions suggesting the failure of African health systems to cope with these epidemics. In spite of this, Africa spends one per cent of total global health expenditure while sub-Saharan Africa (excluding South Africa) only spends 0.3 percent ⁴. This underlines the need for great efficiency.

African public systems have been unable to efficiently deliver health care. As a result, almost 60 percent of health care, often obtained in the private sector, is paid by patients out-of-pocket⁵, causing many to fall into a poverty trap. Private equity investments in the health care supply chain do not take place because the risk is considered too high. This has resulted in doctors being unable to invest in their clinics, extremely inefficient distribution systems, lack of equipment to perform laboratory tests and a lack of capital for insurance companies to invest in administrative capacity.

The necessity to re-think the way in which health care is delivered is evident in the near-certain knowledge that the Millennium Development Goals, including cutting poverty by half by 2015 and halting the spread of deadly disease, will not be met. The resulting economic and social damage wrought in Africa is incalculable.

How this situation evolved, and what can be done about it, is the subject of this essay. We argue for a health care reform in which government and private sector work together and in which the development of pre-paid private insurance coverage for low-income people plays a major role.

2. The old paradigm and its consequences

Equality in health ("Health for All") has been high on the international policy agenda for decades. This, together with market failures on the supply side inherent to the health sector, such as externalities and asymmetry of information, has prompted African governments to seriously intervene in the health care market. Out of a variety of options for intervention, including financing, subsidization, taxation, regulation and public provision, African governments without exception see their role as the dominant provider of health care aiming

for universal access. Conform this paradigm, most donor funding is channeled to the public system in the form of input-financing directed to the supply side.

Opposition to private sector involvement in health among donor agencies and African governments is fierce. It is partly fuelled by a suspicion of profit motives and concerns about regulation, high costs, prices and inequity.

But the aversion to private-sector involvement also reflects a misunderstanding of the term itself, which is mistakenly interpreted as an approach that pays no heed to the needs of the poor, but in reality includes GPs, pharmacists and administrative/ insurance companies.

In a 2006 report, Oxfam, the international aid agency, said: "market-led solutions have often undermined the provision of essential services and have had a negative impact on the poorest and most vulnerable communities"⁶. It calls for rich countries to "support public services....... where possible through sectoral and direct budget support". The argument is that Africa's crisis can be resolved by political will. "Governments must feel the heat," said Oxfam. "They must be pressured to spend more on essential services and to spend it better."

The argument is based on the belief that state-led initiatives work. However, that view has proved fanciful. While in theory there is much to say for such a model, in reality things have not turned out well. "Health for All" has proved an illusive goal, because governments have been unable to deliver adequate health services. This is not surprising, given that certain critical preconditions for this model to work are not present. These include a high per capita GDP, state capacity to collect taxes and to implement health policy nationwide. With a low per capita GDP, a big informal sector (the share of informal employment in non-agricultural employment in Africa, excluding South Africa, is 78%)⁷ and very low tax revenues, per capita government funding available for health is low. Therefore health is severely underfunded and careful spending is of even of greater importance. Sub-Saharan Africans spend on average only \$18 per capita on health care (excluding South Africa), compared to \$3,641 in the developed world⁸. This includes donor spending, which in some African countries amounts to up to 50 percent of national budgets⁹.

With few exceptions African public healthcare systems border on dysfunctional. They lack the medical and administrative capacity to produce services efficiently and of adequate quality. A 1994 World Bank study found that 88 percent of every dollar of public expenditure on medication is lost to inefficiencies, with only 12 percent benefiting the consumer¹⁰. The situation does not appear to have improved. Public systems lack transparency, making them subject to corruption and fraud and are not able to produce (actuarial) data on issues such as

health care consumption and key performance indicators for costs of services. Worse, the public health services that are produced benefit the rich far more than the poor¹¹ ¹².

With the overburdened public system unable to deliver, people have no option but to pay for health care out-of-pocket. As stated, almost 60 percent of total health expenditure in Africa is financed this way. This trend has been accompanied by a rapid growth (by default) of the private health sector over the past decades¹³. The high share of out-of-pocket expenses is the most expensive, least efficient and least inclusive financing channel. It weighs heavily on households budgets and forces many into a poverty trap due to unpredictable catastrophic health expenditure. This exacerbates inequity.

The high share of out-of-pocket expenditure also means that no regular, predictable revenue flow is available for health providers to improve the supply chain and deliver good quality services. As a consequence the willingness to prepay for health care remains low. This makes the development of risk pools difficult and creates an environment that is not conducive to commercial investment. As a result, the private health sector, which does have the potential to deliver good quality care, remains underutilized. In 2006 it received just four percent of Global Fund financing in Africa¹⁴.

In sum, at the heart of Africa's crisis is a circle of the most vicious variety, perpetuating low supply of good quality care and low demand for such care (figure 1). Trapped within it are the poor.

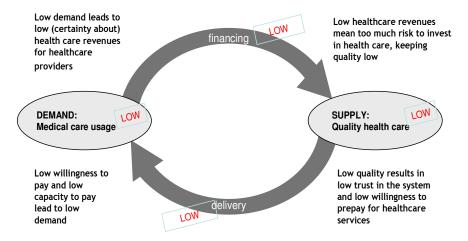


Figure 1. The poor are stuck in a vicious circle for health care

In addition, the focus of the current paradigm on equity induces a second vicious circle: without efficient delivery, costs and prices remain high, again hurting the poor. Finally, a poor

reputation for risk-solvency among African insurance companies makes it very difficult for them to attract capital and long-term paying customers creating a third vicious circle. Simply put, an insurer requires a reputation for financial solidity in order to run a business but cannot gain that credibility without demonstrating efficiency through operations.

Given this situation, the question is what to do when (i) there is a chronic shortage of funds for universal coverage; (ii) the state does not have the supply chain capacity to deliver the services and enforce risk pools; and (iii) the supply chain is extremely inefficient.

3. The way forward: a new model

The evidence suggests that after more than 25 years it is time to rethink the strategy that focuses on governments as the dominant financer and provider of health care and discourages private sector initiatives.

A new paradigm is essential to develop viable healthcare systems in low income countries and improve access to health care for the poor. This strategy consists of the following elements:

i) Health care is a service industry: all elements – financing, administrative systems, clinics and hospitals, medication, and laboratories – need to be present and functioning, with health insurance as the overarching mechanism. The demand (financing) side and the supply (delivery) side should be aligned and managed to deliver care and treatment to the patient, who will therefore be willing to prepay for the availability of quality services. In this way both the demand and supply of health care are strengthened.

PUBLIC FUND

Risk pooling

Third party admin (TPA)

DELIVERY

Clinic / Hospital

Low/high income patients

Figure 2. Strengthening financing and delivery

Mobile telecoms companies such as Celtel and MTM have demonstrated that the willingness to prepay for services does exist in Africa, and by first targeting those who can pay and focusing on efficiency in the supply chain, near-universal coverage can be realized.

The net present value (NPV) formula, which is used in business to assess whether an investment case is viable, can shed further light on what is happening¹⁵. This formula says that investment will only occur when the investment's net present value is positive. That is when the total return minus the total costs, discounted for a risk factor, is greater than the initial investment made. Applying this formula to the health sector in Africa, we see that governments intervene in the volume of the benefit package (V) and the price payable by users (P), making the package larger and setting the price lower than is justified by the limited resources available. In addition, as government delivery is very inefficient, costs (C) are high. As a result the risk is too high and no investment case can be made.

(ii) The existing private resources for health care (the 60% out-of-pocket payments) should be used more efficiently through bottom-up risk pooling schemes in order to realize solidarity at the demand side and protect scheme members from unexpected financial shocks due to ill health. At the same time they generate financial resources to build-up an efficient supply chain, and empower members to insist on high quality care systems creating a snowball effect. Those who can pay must pay into risk pools thereby creating stable health care demand. Improving efficiency in the supply chain will lower costs and raise quality, increasing the willingness to pay. As more people buy health insurance, schemes grow, resulting in larger cross-subsidization (between the rich and the poor and the healthy and the sick), which enhances equity. Through volume effects the costs and premiums can be further reduced. These schemes are not in competition with government programs but complementary, avoiding crowding out effects. Beneficiaries should be involved in determining who has access to the schemes, the design of the benefit package, the level of premiums, and which costs should be covered. Donor funds should be used to finance these demand-based schemes by subsidizing the premiums. Disease specific donor programs (such as for HIV/AIDS, malaria, tuberculosis) should support the risk pooling schemes through risk equalization mechanisms. This reduces the investment risk and makes investments in the health care supply chain feasible.

(III) To ensure adequate delivery of care, where regulatory capacity of the government is weak, quality standards must be enforced. Output-based contractual agreements provide a good opportunity to do this¹⁶.

This new model will spur a virtuous circle, resulting in an increased amount of funds for health, more efficient delivery, improved quality of care, and a higher willingness to pay for health care.

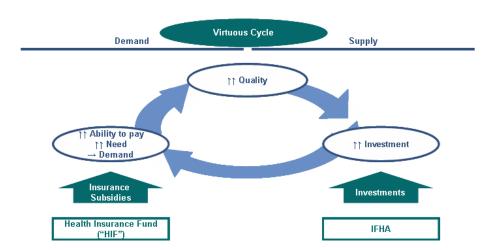


Figure 3. The virtuous circle

4. The "laws of health economics"

Underpinning this approach are the "laws of health economics". Figure 4 shows the tight relationship between health expenditure and GDP per capita. This was first discussed by Newhouse (1977)¹⁷ and has proved so stable over time that it could be considered the first law of health economics. The relationship between a country's income and its expenditures on health care is so tight that it leaves little room for the impact of policy variables. Even foreign aid and debt relief do little good. Indeed when those two variables are added to the equation, debt relief shows no impact, and foreign aid shows a very small impact¹⁸.

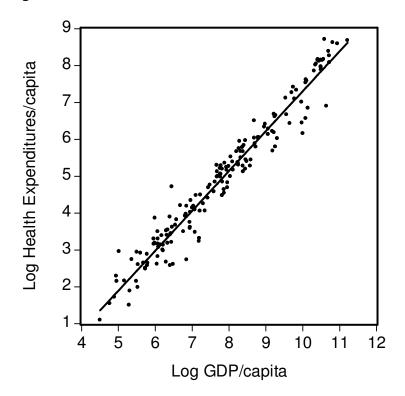


Figure 4. The first law of health economics

A plausible explanation as to why it is so hard to increase per capita health expenditures above the level predicted by a country's GDP per capita, is that government financing efforts crowd-out private financing. In addition, foreign aid efforts either increase government spending (thereby crowding out private resources), or crowd-out government spending (so that total spending remains the same). Whatever the mechanism is, when GDP per capita is known, health expenditures per capita can be predicted with more than 95 percent accuracy.

A second observation is that in low-income countries, private uninsured out-of-pocket expenditures on health care make up a larger share of total financial resources than in richer countries¹⁹ (see Figure 5). In other words, when countries grow richer health insurance coverage increases and the share of out-of-pocket payments decreases. This can be called the

second law of health economics. It is important because a recent study shows that about 150 million people annually suffer catastrophic financial shocks due to uninsured health care expenditures²⁰. Many of them are Africans. Policies that increase the speed with which health insurance coverage expands, will therefore greatly contribute to the reduction of global poverty.

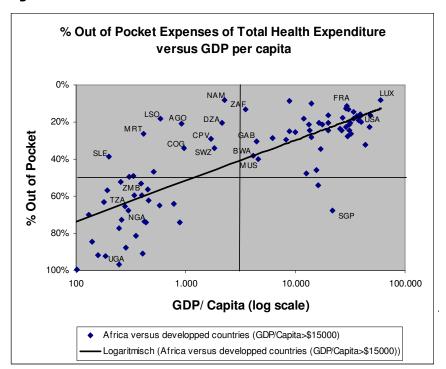


Figure 5. The second law of health economics

These two observations lead to the following conclusions. In the future, in low-income countries, total resources available for health care will be small, and a large part of those resources will consist of private out-of-pocket expenditures. Conventional efforts to increase total resources for health will not change this. The main challenges are (i) to increase overall resources without crowding-out the existing private resources and (ii) to increase risk sharing for poor households to bring down out-of-pocket expenses.

5. Lessons from OECD countries

The historical development of health systems in the countries of the Organization of Economic Cooperation and Development (OECD) holds some important lessons that are useful for tackling the issues at hand. The development path of OECD health systems can be roughly divided in three phases, as presented in the box below.

In the first phase which took place more than a century ago before social security laws were put in place, the income per head in the OECD was low, the financing base and executive power of the state was weak, and the informal sector was large. Within this context, the share of out-of-pocket expenses was high, only few people had health insurance, solidarity was on the basis of risk, the benefit package was limited, administrative capacity of the state was limited and inequity in access to care was *de facto* (temporarily) accepted. Under these circumstances, both financing and delivery of health care were private (group) or faith-based.

In the second phase, when state capacity increased with growing income and the economy was increasingly formalized, health financing and delivery remained predominantly private or faith-based, but with increasing government involvement to counterbalance market failures and inequity (although this interference often failed due to lack of funds and government capacity). Private risk pooling increased and the share of out-of-pocket expenses decreased, but solidarity remained largely on the basis of risk. The benefit package was expanded, and administrative capacity evolved. As government extended its influence, increasingly fights over the structure and content of the schemes ensued between beneficiaries, providers and employers on one side and government on the other.

In the third phase, when income per head became high, the state was strong, and the informal sector negligible, public financing and regulation prevailed, together with mixed public and/or private delivery depending on which model (social insurance or national health system) was followed by the country. In this phase, there was a high degree of risk pooling, often enhanced by government who took over and consolidated private risk pools into a national risk pooling scheme. Increasingly, a shift took place from solidarity on the basis of risk to that based on income. The private insurer/provider market professionalized and developed a strong administrative capacity, but increasingly faced cost-induced challenges. The benefit package was expanded and risk equalization was installed, with the system reaching (near) universal coverage. This is where most OECD health systems are today, having achieved a low out-of-pocket share in total health expenditure, a high quality of care, and high private equity investments in health.

While the historical development of OECD national insurance systems is not a blueprint for Africa, it does hold some valuable lessons.

It demonstrates that risk pooling through private prepaid health insurance schemes for well-defined groups has been a crucial element in the development of these systems²¹ ²² ²³ ²⁴. The social insurance schemes of many OECD countries today evolved through a bottom-up process from pioneering voluntary private health insurance schemes of professional guilds and communities²⁵. These schemes initially offered solidarity based on disease risk (not income), while enabling the development of an efficient private supply chain through insurer-provider contracts, which allowed the willingness to prepay for health care to increase. As a result, over time a shift took place from systems with a large share of expenditure financed out of pocket (see box above phase 1) towards systems with a high risk pooling and prepayment element (see box above phase 3), in line with the increase in GDP per capita and state capacity. This

has been a long process of continuous incremental adjustments; jumping instantly to large national schemes proved too complex and expensive.

The process was accompanied by bitter fights between scheme beneficiaries, doctors and stakeholders such as employers on one side, and the government on the other side. The decentralized approach empowered scheme members, who determined who had access to the schemes, the design of the benefit package, the level of premiums, and which costs would be covered. This led to schemes that were tailored to the resources available in the community.

The schemes first targeted those who could afford the insurance premium. The poorest of the poor were covered by the State or the church. Hence, the state accepted a *de facto* two-tier system, while allowing private risk pools and an efficient supply chain to develop as the building blocks needed to make universal coverage possible.

6. The new paradigm in practice

6.1. The Health Insurance Fund (HIF)

In 2005 the Health Insurance Fund was established. It is a foundation dedicated to increasing access to quality basic health care through providing private health insurance to low income African workers. In 2006 it received a \in 100 million grant from the Dutch Ministry of Foreign Affairs to launch demand-driven output-based insurance programs in four African countries.

In this public-private partnership, donor funds are linked to African Health Maintenance Organizations (HMOs), insurance companies, or third party administrators through performance based contracts. These organizations are responsible for the execution of the Fund's insurance programs, and contract a network of public and private providers where scheme members can get their health services. Payment of insurers and providers is related to performance, measured as the medical care delivered and the number of people enrolled in the schemes. Prices and profit margins of the insurers are contractually fixed. The insurance package consists of primary and limited secondary care, including HIV/AIDS treatment and care, and medication. The programs are always complementary to regular public sector health programs.

The programs create stable healthcare demand by subsidizing insurance premiums for target groups of African workers that enroll with the HMOs, such as farmers and people with micro loans. It concerns groups with at least some income, who must pay part of the (reduced) premium themselves. A growing number of studies has shown a significant willingness to pay for such insurance schemes.

The Fund's resources are also used to upgrade medical and administrative capacity of the insurers and health providers contracted under the program. Quality and efficiency are further pursued by strictly enforcing medical and administrative standards through independent audits. This reinforces the output-based approach: payment only takes place if the patient has received a package of treatment that meets the agreed quality requirements. In addition, independent bio-medical and socio-economic operational research measures the effectiveness of the programs at population level.

The program will lead to lower costs and improved quality of care which will in turn attract more people to the insurance schemes. This increases the risk pool resulting in further downwards pressure on the costs. The (initially small) contribution to the premium by the beneficiaries will increase in time while the subsidy element is reduced. In the long run, the aim is that governments will take over (part of) the premium payment.

The Health Insurance Fund is supported by a number of multinationals with operations in Africa. The first program started early 2007 in Nigeria, where Hygeia, the largest health care services group in the country, was contracted to establish the sickness fund covering over 100,000 market women and farmers and their families.

6.2. The Investment Fund for Health in Africa (IFHA)

Following and in close connection with the creation of the Health Insurance Fund, the Investment Fund for Health in Africa (IFHA) was established early 2007. IFHA is the first private equity fund to invest in private healthcare delivery in Africa. Investors include a number of investment banks and multinational companies.

Its primary targets are health management organizations (HMO) and health insurance companies, in particular those that have been selected as executing partners by the Health Insurance Fund for its health insurance schemes. IFHA will also invest in the supply of pharmaceuticals and the distribution of hospital and laboratory products.

In March 2007 IFHA made its first investment by acquiring a significant minority stake in the share capital of Hygeia in Nigeria.

7. Conclusions

The current models for healthcare provision have not delivered. The fact that the enormous potential of the private sector to deliver healthcare solutions in Africa is untapped represents a missed opportunity of epic proportions. No other continent has seen its life expectancy and per capita income decline in the past 50 years. The combination of private collective health insurance schemes for low-income groups and commercial capital investments in healthcare delivery is compelling. Support for such solutions is growing. However many obstacles remain, in particular the stubborn insistence of the donor community to support only government initiatives in health, to the exclusion of the private sector.

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 $^{^{15}}$ NPV = I - (V x P) / ((1/1-r)2), whereby I stands for investments, V for volume, P for price, and r for investment risk. NPV must be positive for an investment case to be viable

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