Harnessing the private health sector by using prices as a policy instrument: Lessons learned from South Africa

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\textbf{Abstract}

Governments frequently draw upon the private health care sector to promote sustainability, optimal use of resources, and increased choice. In doing so, policy-makers face the challenge of harnessing resources while grappling with the market failures and equity concerns associated with private financing of health care. The growth of the private health sector in South Africa has fundamentally changed the structure of health care delivery. A mutually reinforcing ecosystem of private health insurers, private hospitals, and specialists has grown to account for almost half of the country’s spending on health care, despite only serving 16% of the population with the capacity to pay. Following years of consolidation among private hospital groups and insurance schemes, and after successive failures at establishing credible price benchmarks, South Africa’s private hospitals charge prices comparable with countries that are considerably richer. This compromises the affordability of a broad-based expansion in health care for the population. The South African example demonstrates that prices can be part of a structure that perpetuates inequalities in access to health care resources. The lesson for other countries is the importance of norms and institutions that uphold price schedules in high-income countries. Efforts to compromise or liberalize price setting should be undertaken with a healthy degree of caution.

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\section{1. Introduction}

Most member countries of the Organization for Economic Cooperation and Development (OECD) have implemented universal health coverage (UHC)—in that they have achieved good health outcomes through universal access to care without financial hardship \cite{1}. Rising health care spending, however, has pressured policymakers to maximize all available health resources and reduce waste and inefficiencies. As such, governments frequently draw on the private sector to promote sustainability, optimal use of resources, and increased choice of care.

In doing so, policy-makers face the challenge of harnessing resources and efficiency gains while addressing the market failures and equity concerns associated with private financing of health care. Continental deliberations are underway—across France, Australia, Germany, Israel, the United Kingdom, for example—about whether the private sector should play a greater role, what shape should this take, and the effect this may have on public health care services.

South Africa provides an extreme but interesting counterpoint in this debate. South Africa spent 8.4\% of its GDP on health in 2015—but this aggregate belies a reality of two health systems with very different levels of resources \cite{2}. Just under half of health spending serves 16\% of the population who can afford to access private providers through private voluntary health insurance (called “medical aid”).\footnote{The authors rely on the WHO definition of private voluntary health insurance characterized by voluntary participation and universal access to a public health system.} Starting from a health system characterized by a dominant private sector, South Africa is struggling to find a path towards universal coverage. It shares elements of both National Health Service systems and social insurance (restricted “medical aid” schemes) but, to date, the government has not yet scaled the public system or funded the private system to fully serve its popu-
| 2. Role of private voluntary health insurance |

Private voluntary health insurance (PVHI) performs different roles, typically shaped by the design of the statutory health coverage and delivery systems across different countries (Fig. 1). It can supplement public services to offer amenities, choice, or reduced wait times. The majority of people in Switzerland and Australia, for example, purchase supplementary insurance to enable choice of physicians within hospitals or access single hospital rooms. Other countries utilize PVHI to complement public benefits through coverage for user fees or additional services outside of the benefits package (i.e., Germany and France). Ireland dedicates 14% of total health expenditures on substitute coverage for less than 1% of their population ineligible for public benefits [6]. These variations in drawing on private insurance illustrate the different policy choices that countries have made about how to balance amenities, convenience and equitable access.

Across high-income countries, the public sector is the dominant payer, if not provider, of health care services, employing different policies to achieve a public-private balance. Such policies include public financing to influence outcomes—through, for example, policy decisions about the quantity and structure of public funding and purchasing. Public funding is the basis for advancing UHC in most countries; therefore, the institutions, policies and processes that determine the use of public funds and contracting health care providers (whether public or private) can play a critical role in driving equity, providing incentives for efficiency and quality, and ensuring accountability [6].

Another set of policies focuses on regulating and aligning the scope and incentives of private financing. Governments have intervened heavily to address adverse selection by setting the rules and boundaries for the conduct of PVHI through regulation, i.e., defining the scope of coverage, membership, reimbursement, co-payments and the re-allocation of risk. In OECD countries, governments have used such regulation to shape PVHI into playing specific roles, such as filling a financing gap (France), providing additional services and financial protection beyond the public benefit basket (Germany), or supplement public benefits (Belgium) (Fig. 1). Implicit in their regulatory and funding decisions is a view about how to balance public and private health resources to meet the country’s overall health needs.

Across most OECD countries, price schedules have been used as the basis for public purchasing of services from the private sector and provide benchmarks for private insurers. Regulation in OECD countries generally enables collective bargaining on hospital prices, in particular. Developing credible prices has been common to OECD countries that have then come to draw on private sector facilities and providers to expand access to health services in recent years [7].

3. Development of South Africa’s private health care sector

South Africa has the distinction of spending 43% of national health expenditures on PVHI — the highest share globally (Fig. 2) [2]. This does not reflect social norms of purchasing essential health services from the private health care sector for a large section of the population, as one might find in the US—the only rich country with close to a comparable structure of spending. Rather, it serves a small section of the high-income population who pay premiums for PVHI to access private hospitals and specialists. This unique situation has its roots in the history of South Africa. The origins of today’s medical aid schemes lie with the mining industry and developed in the 1900s into a system of health facilities and services that were racially segregated and allocated different levels of resources [8].

In 1960, 169 schemes provided cover for over 368,000 members and their dependents [9], accounting for approximately 80% of the eligible population of whites (19% of the total population at the time) [10]. Race restrictions were lifted in the 1970s, after which the number of schemes increased, and membership became more racially diverse [11]. Major regulation of the schemes did not occur until the establishment of the Medical Schemes Act in 1967 when aspects of social health insurance were introduced (i.e., minimum benefits, community rating) [12].

The Medical Schemes Act of 1988 and the Amendment Act No. 23 of 1993 deregulated the sector, introducing risk-rated contributions and removing guaranteed minimum benefits. Some of these changes were reversed again after 1994, with a shift back to the pre-1980s principles of solidarity. By 1998, the Medical Schemes Act, No. 131 reintroduced prescribed minimum benefits and community rating [13]. By early 2017, there were 82 medical schemes: 60 employment-based and 22 open enrolment [14]. Among these, two Schemes – Discovery Health Medical Scheme and the Government Employee Medical Scheme (GEMS) – covered over half of total beneficiaries.

Unlike today, medical schemes primarily reimbursed fees in public hospitals before the 1980s [15]. While the poor were exempt from payment, those who could afford the insurance were required to cover the costs of hospital care. Thus, the government extended tax subsidies to employers to encourage them to provide insurance coverage for their employees. Today tax credits continue to be provided to subsidize the cost of medical scheme membership; in addition, public benefits are guaranteed to civil servants as a part of negotiated employment contracts. Some estimates suggest that such subsidies and benefits could amount to upwards of 30% of total medical scheme revenues [16].

Non-profit private hospitals were established by the mining industry and the church alongside medical aid schemes. For-profit private hospitals began to grow in the 1980s, galvanized by pro-market economic policies and declining public health investments accompanied by a sluggish economy following international economic sanctions [13,15]. The number of private hospitals increased more than three-fold between 1986 and 2014, accounting for 31% of total hospitals beds (Table 1) [17,18]. Specialists began working in both public and for-profit private hospitals, and invested as shareholders in the growing private network of hospitals, diagnostics and other support services [15]. As gatekeepers to hospitals, they were able to route patients covered by medical schemes into private hospitals that billed full cost recovery and profit margins on services.
**Fig. 1.** Comparison of private voluntary health insurance as a share of total health spending and population coverage, by type of coverage offered.

Sources: Authors’ summary using data from Sagan and Thomas 2016; WHO Global Health Expenditure Database.

### Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Private</th>
<th></th>
<th></th>
<th>Public</th>
<th></th>
<th></th>
<th>Public as % of total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospitals</td>
<td>Beds</td>
<td></td>
<td>Hospitals</td>
<td>Beds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1976</td>
<td>25</td>
<td>2346</td>
<td></td>
<td>NA</td>
<td>NA</td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>1986</td>
<td>65</td>
<td>6125</td>
<td></td>
<td>NA</td>
<td>117,842</td>
<td></td>
<td>95%</td>
</tr>
<tr>
<td>1989</td>
<td>101</td>
<td>10,936</td>
<td></td>
<td>NA</td>
<td>NA</td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>1998</td>
<td>162</td>
<td>20,908</td>
<td></td>
<td>343</td>
<td>107,634</td>
<td></td>
<td>84%</td>
</tr>
<tr>
<td>2004</td>
<td>NA</td>
<td>35,830</td>
<td></td>
<td>382</td>
<td>100,147</td>
<td></td>
<td>74%</td>
</tr>
<tr>
<td>2007</td>
<td>211</td>
<td>28,834</td>
<td></td>
<td>396+</td>
<td>89,282</td>
<td></td>
<td>76%</td>
</tr>
<tr>
<td>2010</td>
<td>216</td>
<td>31,067</td>
<td></td>
<td>410</td>
<td>88,774</td>
<td></td>
<td>74%</td>
</tr>
<tr>
<td>2014</td>
<td>203</td>
<td>37,869</td>
<td></td>
<td>394</td>
<td>85,362</td>
<td></td>
<td>69%</td>
</tr>
</tbody>
</table>

By the late 1990s, the major hospital groups began purchasing independent hospitals and attracting specialists, resulting in rapid consolidation of the private hospital sector. By 2014, the three largest hospital groups owned 82% of private hospitals compared with approximately 50% in 1996 [19]. Strong interdependencies including cross-ownership and management developed over these decades of medical scheme consolidation, deregulation, and growth of for-profit private hospital networks [20]. The value proposition of medical schemes was access to private hospitals; thus hospitals gained considerable negotiating power while medical specialists became important economic assets. This led hospitals to invest in complex medical technologies and research, and other strategies to attract and retain specialists and safeguard the increasing demand for hospital services [21].

4. Repeated attempts at establishing price benchmarks have failed

For almost two decades, attempts to establish a credible set of price benchmarks in South Africa have not succeeded. The National Health Act provides the Minister of Health with a mandate to regulate the prices of health services and products. In 2004, the process of setting centrally negotiated tariffs was replaced with a set of non-binding guideline prices established by the Board of Healthcare Funders (BHF), representing most of the medical schemes. The guideline prices were intended to help medical schemes negotiate their own prices with providers. At the same time, two provider organizations established competing sets of benchmark fees for medical services – the South African Medical Association and the Hospital Association of South Africa. However, the Competition Commission ruled that the three organizations had engaged in collusive conduct in contravention of the Competition Act, and the three organizations were prohibited from negotiating prices on behalf of their members.

The Council for Medical Schemes (CMS)—an autonomous body that regulates medical Schemes – stepped in to establish a National Health Reference Price List (NHRPL), on the basis they had no commercial gain from setting prices and were outside of the boundaries of the Competition Act. In practice, CMS simply used the BHF guideline prices and adjusted for inflation [5]. These prices were non-binding and medical schemes could set their own reimbursement rates, implying that members could be charged the difference between the NHPRL price and the actual fee billed by each provider (“balance billing”) [22].

In 2007, the National Department of Health (NDOH) established new regulations and a cost-based methodology for setting service prices [23]. However, no consensus was achieved on staffing norms and ratios, and stakeholders did not apply standardized procedural coding or methodologies for data collection. The NDOH published its Reference Price List (RPL) in 2009, which could not withstand legal challenges [24]. Since 2010, the lack of a price schedule has implied that each medical scheme establishes its own reimbursement levels and each provider sets its prices.

A common strand throughout two decades of efforts has been challenges to the credibility and integrity of any price schedule. Physician and hospital groups have continually called into question the process of measuring the resource intensity of clinical activity and benchmarking it. By pointing out the perpetuation of errors implicit in an older schedule, no schedule has been able to stand as the basis from which improvements can be made, as has occurred in other OECD countries. While hospital groups and medical specialists may have the most to benefit from the absence of guidance on appropriate prices, they may have also felt insufficient influence in a process for establishing price benchmarks. Similarly, specialists across the country are divided. Many fiercely defend their right to determine prices; others have expressed frustration at not knowing what is reasonable to charge their patients [25,26].

5. Private hospital price levels and affordability

The evolution of the private health sector in South Africa has resulted in price levels that are multiples higher than those observed across high-income countries, when benchmarked against average incomes. In their paper on comparative hospital price levels using standard OECD-Eurostat methodology, Lorenzoni and Roubal report that prices in private hospitals in South Africa are on par with those in high-income OECD countries such as France, United Kingdom, and Germany (Fig. 3) [27].
Fig. 3. Hospital comparative price levels (100 = sample mean) and GDP per capita, South Africa and selected OECD countries, 2013. Source: Lorenzoni and Roubal, 2016.

Fig. 4. Affordability ranking of countries based on hospital and GDP comparative price levels, 2013. Note: Ranking is based on the difference between the hospital price level and the GDP price level for each country, expressed as a ratio of the GDP price level. This measure should not be interpreted quantitatively as its purpose is to rank countries. Source: Lorenzoni and Roubal, 2016.

As well as benchmark prices, the study measures the affordability of private hospital services. by comparing the difference between the private hospital price level and the price level for all goods and services in the economy—an indicator for how much more expensive hospital services are relative to other goods and services that an individual might buy. This difference is greater in South Africa than in all other higher-income OECD countries studied (Fig. 4). The findings are consistent with analysis done by the South African Council for Medical Schemes citing that continued escalation of private health costs would have an important impact on access to health care [28].

High prices perpetuate the private sector as a center of gravity and attract a disproportionate share of medical resources in a resource constrained environment. There is considerable endogeneity and it is difficult to say whether price flexibility created a large private sector or the inverse – but these are mutually reinforcing. This cycle of higher service prices and flexibility supporting the means to generate income has seen growth in the private sector – despite little or no increase in the share of the population it serves. Thus private health resources today serve a fraction of the population, discriminated on the ability to pay.

High private prices can spill over to the wider public health system and society as a whole. This is most marked with human resources for health [29]. While estimates vary, available data suggest that the majority of general practitioners and specialists work in the private sector [30,31]. It can be noted that public hospitals have the advantage of employing doctors and training positions for specialists; efforts are underway to enable partnerships between public and private service providers to expand access.

6. Discussion

While South Africa remains at a very different starting point to many OECD countries, it does illustrate that prices can influence the
structure of supply over an extended period of time, absent government intervention. With hospital prices and premiums out of the reach of most, the private sector is not contributing to maintaining and improving population health commensurate with its share of resources. Through their regulatory and spending choices, South African policy makers have facilitated the development of a private health care sector, which today limits their path to expanding health coverage by making it too expensive to purchase specialist medical resources that are predominantly in the private sector. Changing this will require coherently reorganizing the combination of regulation and public spending to support broader access to health services.

There are several policy implications for other countries. A price schedule provides certainty for both payers and providers and forms the basis for fees used as reimbursement of health care providers. As such, prices should reflect actual differences in resources—and hence costs—for delivering health services. A schedule of prices that is supported by the clinical community allows the government to make comparisons between public and private providers—thus focusing its decision-making on whether the often higher cost of private sector services is justified given available resources and social demands. Such a schedule helps governments in striking the right balance between basic health services and highly specialized ones that should be procured also from the private sector.

Across OECD countries, price-setting norms and institutions have developed over a long period of time and are, in many cases, a codification of engagement between the health sector and government. The micro-foundations of these systems are in traditional procedural coding systems (i.e., Current Procedural Terminology and Healthcare Common Procedure Coding System in the United States) combined with disease classifications, (i.e., International Classification of Diseases) that serve as the common language by which medical services are recorded and billed in facilities. By aggregating, ranking and bundling these codes, several OECD countries have established hospital pricing schedules that incorporate relative weights and allow for the comparison of resource intensity and complexity of most hospital (and in some cases, outpatient) services.

The technical process of going from codes to price schedules has generally involved technical stakeholders such as physicians associations, hospitals and other health professionals, along with prominent payors. Given that the government is the major payor in most OECD countries and hospital price decisions are very material for public budgets, maintaining the integrity and appropriateness of these schedules has often been delegated to independent statutory agencies such as the L’Agence technique de l’information sur l’hospitalisation in France or the Independent Hospital Pricing Authority in Australia.

The technical process of price setting can be separated from the fee negotiation process used to set reimbursement rates. Once the price schedule is established, schemes and hospitals can focus on negotiating overall price levels, accounting for geography and the underwriting specialized functions (such as emergency departments, trauma and cancer centers)—instead of focusing on thousands of price relativities between different procedures and justification requirements on doctors. Such benchmarks will also allow competition authorities and courts to assess situations of unwarranted and excessive charging behavior, and strengthen patient protection.

Establishing a schedule of prices can improve the functioning of the private sector. Most of the work of South African medical insurance schemes today is contracting with hospitals, negotiating rates with doctors, settling payment disputes when patients go to non-contracted facilities, and reviewing variations in fees to see if they are clinically justified. A shared price schedule provides tools to help tackle all these problems and shift the focus toward improving quality and value for money.

It is important to note that, while important, price benchmarks alone will not improve health system performance. Even under set prices, providers are paid for volumes rather than for delivering better quality care. This still leaves room for over-servicing and should be combined with purchasing mechanisms to achieve a shift in how resources are used to benefit citizens. Price schedules should be combined with other mechanisms and instruments to ensure value for health spending. Price schedules combined with prospective budgets can help counter the tendency for over-provision, just as loosening capitation to incorporate more volume based reimbursement can help counter under-provision. Where transparent and stable fee schedules exist, the determination of the benefits packages, co-payments, and information about quality, can also support consumers to be more informed in their health care decision-making. This requires additional investments in data infrastructure to systematically monitor and report performance and quality.

Policy should also focus on getting the governance infrastructure in place and strengthening information systems and feedback loops to reinforce a culture of accountability. In this context, public and private sectors should be seen as entwined elements of a whole health care system, and regulatory and other policy instruments should be used to ensure that the whole system deliver healthy lives for the population it serves.

7. Conclusion

The growth of the private health sector over the past half-century has fundamentally changed the structure of health care delivery in South Africa. The disparities in resources between the private and public health systems have significantly widened, leading to a situation where nearly half of health spending covers only one in six people. The concentration of resources in the private sector—and the prices they charge – has become a major challenge to expanding capacity to provide publicly financed services. In many ways, South Africa represents the worst fears of public system advocates, where a lightly regulated private sector heads a two-tier health system.

The South African example, although extreme, demonstrates that, over time, unbridled price flexibility can be part of a structure that perpetuates inequalities in access to health care resources. Without pricing benchmarks, the Government of South Africa is struggling to set prices that it should pay to purchase services from the private sector and expand capacity and access. The cautionary lesson here is the importance of norms and institutions that uphold prices in high-income countries today. Experience in OECD countries suggests that price-setting infrastructure, fora and institutions play a critical and undervalued role in holding together health system policies. Efforts to compromise or liberalize price setting should be undertaken with a healthy degree of caution.

References
