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# THE SOUTH AFRICAN PRIVATE HEALTH SECTOR: SUBMISSION TO THE HUMAN RIGHTS COMMISSION

Thank you for opportunity to make this submission on access to the care provided by the private health care system.

The South African private health sector is a very complex and costly system. This submission does not cover all the technical details or concerns, in part due to the limited time given for the submission, and the knowledge immediately at hand.

Nonetheless, in this document, we provide a: brief overview of the principles of any health care financing system that improve access to care; summary of incentives in the private sector and the role of regulation; a family example of access to quality and integrated care denied; and elements of a well-functioning health care financing system

We propose that the most important step is to establish a regulator with access to the necessary information, the capacity to analyse, and the authority and capacity to intervene, and to adjust the regulatory interventions as the sector responds to regulations. Providing training in micro-economics, and building the skills necessary to staff an effective regulator will be essential.

# PRINCIPLES OF ANY HEALTH CARE FINANCING SYSTEM THAT IMPROVE ACCESS TO CARE

Improving access to health care in the private sector requires the following features within its financing system to be fully functional:

- 1. A pre-payment financing system so that individuals are not expected to pay when ill, but can make smaller contributions over time when they are healthy;
- 2. The pooling of risk to allow cross-subsidisation between members. (For example members of the same medical scheme are pooling their risk of incurring the costs of ill health; all members pay in every month, but only those that are ill draw on the funds of the scheme). Effective risk pooling

requires large groups of individuals with a broad spectrum of income and health profiles; risk pools with a small number of members, limits the extent of possible cross-subsidisation.

3. Effective strategic purchasing of care from providers to ensure cost containment and encourage improvements in the quality of care.

When fully functional, these principles should ensure that no insured individual cannot access care due to the costs. The principles of pooling risk and cross-subsidisation is now fully accepted internationally, due to the recognition of the societal benefits of ensuring broader access to health care<sup>1</sup>. It is important that private sector insurers and providers contribute to risk pooling and cross-subsidisation, and in OECD countries government regulation of the private sector is now well established, to ensure that these principles are adhered to as far as possible<sup>2</sup>.

In comparison to OECD countries, the South African private sector is partially regulated, and hence this submission focuses on how government regulation of the sector could be strengthened to improve access to care for insured individuals. We do not have any information on the extent to which insured households do not get access to the care to which they are entitled<sup>i</sup>, or on whether currently uninsured households could afford insurance, if the cost of care was lower. However, we are of the view that a submission on how to strengthen regulation to improve access would be a useful contribution to the commission's deliberations. We are aware that this submission is relevant to the Competition Commission's Inquiry into the private health sector. However, as Human Rights Commission's Inquiry is not confined to looking at the effect of competition, or the lack of it, this submission also deliberates on a wider range of possible future regulations and the resulting shifts in incentives in the sector.

# INCENTIVES IN THE PRIVATE SECTOR AND THE ROLE OF REGULATION

Without regulation, the private health care sector (insurers/medical schemes, providers and the individuals that receive care) face incentives that encourage actions that limit access to care. Regulation is designed to change these incentives. It is important to understand these incentives, how they limit access to care and the weaknesses of existing regulation, in order strengthen regulation. The main incentives are:

- 1. **Individuals** may choose not to purchase insurance until they are ill (possibly due to the cost of the premium). As a result the costs of ill health are then not shared with the healthy , making the cost of the monthly premium even higher.
- 2. In order to maximise profit, **open medical schemes** (schemes not restricted to an employment group) have an incentive to recruit members with a low health risk (a strategy called adverse selection), as well as limiting their liability for the costs associated with high risk patients. Strategies that achieve these aims also lead to a reduction in sharing the costs of ill health, as they have to be carried by the individual ill patients.

<sup>&</sup>lt;sup>i</sup> The Council for Medical Schemes has data on co-payments made by members to providers (the amount not covered by the scheme). However, this is not available by income level of the member. If it were, it would be possible to draw some conclusions about whether their size and frequency is likely to unaffordable or not to members.

- 3. **Medical scheme administrators** have an incentive to maximise health expenditure as their fee is calculated as a percentage (not more than 10%) of health care expenditure made by the scheme.
- 4. As **private sector physicians** in South Africa are generally paid a fee for each service (rather than a salary), they have a financial incentive to maximise their income, by over servicing, although this is balanced by professional and moral ethical codes. This leads to cost escalation rather than cost containment, further reducing the numbers of people who can afford coverage and hence care.
- Quality care requires co-ordination between providers, ensuring care is obtained at the appropriate level at the appropriate time. As sole practitioners, physicians have little ability to ensure this coordination – if regulation could create an environment that encouraged better co-ordination, the quality of care is likely to improve.

# AN EXAMPLE OF ACCESS TO QUALITY CARE DENIED

This is the story of a family in Johannesburg who have insurance through a very reputable employmentbased medical scheme, whom I (Professor Jane Goudge) was asked to assist.

#### Daughter (24 years)

- 1. The daughter had been diagnosed with borderline personality / bi-polar disorder by a GP who prescribes medication, but doesn't provide anything else. No psychotherapy is recommended;
- 2. Two acute episodes (attempted suicides) both lead to admission to emergency rooms, and then two weeks in the psychiatric ward occur over a period of 18 months;
- 3. During the first admission, the daughter sees a young psychologist , who doesn't provide adequate care, but the psychiatrist is helpful.
- 4. None of the doctors or the medical scheme suggest filling in the 'out of hospital management of prescribed minimum benefit' forms, so all the costs (visits and medication) go on to the day-to-day component of the medical scheme plan, which, because of the other illnesses in the family (see below), quickly runs out, leaving the family without access to care or medication;
- After the second admission, the psychiatrist fills out chronic medication form, but forgets to send it to the medical aid – so family are still drawing on day-to-day cover. The new year begins and so the family are able to seek care from the GP again, as a new set of visits is now allowed for 2015;
- 6. However, the psychiatrist prescribes a drug that requires a large co-payment. As a result the patient is without any medication for 3 weeks, until the mother puts in an appeal to the medical scheme. (She has external support for this to help her navigate the complex system). The medical scheme doesn't have a similar drug on its formulary list, but the mother persists, and then the medical scheme recommends another drug, and so the patient switches to this new drug, which doesn't require a co-payment;
- 7. Family subsequently learnt that daughter's condition is covered by 3 items on the PMB list, and has put in an appeal into medical aid to re-consider all previous co-payments. (This required external support from myself and an additional expert who was involved in writing the medical scheme

regulations- clearly not available to your average person.) However, the real loss to the family is all the care they didn't seek, and medication they didn't purchase, because of the associated costs. Mother

- 1. The mother is clearly very distressed by the daughter's condition, and she feels unable to cope with the daughter at home because there is considerable of conflict.
- 2. The GP prescribes valium. The mother is lethargic and not coping at work. The GP could have prescribed family counselling to help deal with issues, but there are no visits left allowed on the medical scheme package, and GP has no engagement with specialists that the family is seeing as result of inpatient stays;
- 3. The mother has hypertension, but often doesn't take her medication , because getting a new script requires paying for another doctors visit, and paying a co-payment to obtain the medication itself.
- 4. Several months later the mother develops pneumonia. She sees the GP several times, but the family is unclear as to whether she is actually getting better. Daughter panics and takes her to the psychiatric unit where she herself was treated, because she doesn't know where else to take her. Mother receives anti-biotics, but does attend some of the classes the daughter attended, and so increases her understanding of her daughter's condition. A week later mother goes to normal hospital for treatment of her pneumonia only in for one night from the opinion of the hospital doctor this could have been treated by the GP;
- 5. Mother also has endometriosis, a large cyst in her womb, which causes very painful periods. The GP gives her a powerful injection, that knocks her out for 36-48 hours (The mother's words: "I have to get home within 10-15 mins 'cos it just knocks me out"). She has been told to go to a gynaecologist but is afraid of the costs, and having to take time off work, because she has used up her 3 year allowance for sick leave in one year), for her own ill-health, and to care for her two children.

Second daughter

6. Younger daughter (7 years) has asthma – that requires to regular trips to the doctor

# Summary:

**The GP** is acting alone, rather than organising effective specialist care. S/he doesn't organise counselling care for the daughter, or assist with the mother's depression. The explanation for this might be that the GP doesn't refer the family to specialist care because s/he understands the mother's fear of incurring co-payments she can't afford, and/or that the patient is a source of income.

**The specialist** – The mother has to negotiate between specialist and medical aid in order to ensure daughter gets affordable medication. Specialist has no incentive find out what medication the medical scheme will cover, or to register the daughter's condition as PMB condition. Result is the daughter is without any medication for 3 weeks (thankfully this doesn't lead to yet another acute episode).

**The medical scheme** - This family is generating a high level of expenditure for the medical scheme, and yet some assistance from the scheme, such as a greater allowance of day-to-day costs as well as coverage under PMBs, for counselling and consistent access to medication, may have prevented several

hospital admissions. The family could have made an appeal the scheme's board, but this requires the member to know that this is a possibility and the ability to put forward a well-argued case.

**The scheme administrator** - It is the administrator, that has no incentive to minimise health expenditure, that manages the every-day interaction with members. The administrator could have identified this as a high risk family and establish strategies to ensure the family obtain the cover to which they were entitled, and to ensure that preventative, effective primary care was received rather than hospitalisations, but did not.

**The Family** regularly delay seeking care, and purchasing medication, because of the co-payments, and day-to-day expenditure allowance on the medical scheme package has been used up, so additional visits have to be paid for. The mother asks the company who employs if she can de-register from the medical scheme because she can't afford the monthly premium and the co-payments, but she is told it is compulsory for all employees. The result is that the mother regularly borrows money from her line manager and other staff.

This is a combination of ineffective primary health care, lack of co-ordination between physicians, medical scheme systems that limit expenditure, and a medical scheme administrator and physicians with incentives to maximise expenditure, rather than ensure access to cost-effective care. The result is unsustainable expenditure on the part of the family, for care that often doesn't meet their needs.

# A WELL-FUNCTIONING HEALTH CARE FINANCING SYSTEM

In this section we discuss the possible regulations that might change incentives to improve access to health care in the private sector. The following functions are central to any health care financing system<sup>3</sup>, and provide a useful framework to discuss regulation:

- 1. Collection of funds;
- 2. Pooling of the risk of having to pay for health care (in South African's case through medical schemes); and
- 3. Purchasing of health care, in this case defined as a set of benefits.

In addition we will consider whether the private sector health system works to provide co-ordinated and cost-effective care.

#### 1. Collection Of Funds

Funds for health care can be collected via various government taxes, and/or mandatory, and/or voluntary health insurance. In the private sector in South Africa, collection is via voluntary payment of monthly premiums to a medical scheme. As outlined in the recent white paper (2015) the policy intention is that the NHI fund will collect funds to purchase health care<sup>4</sup>. The white paper states that, as the scope of NHI fund increases to cover the whole population, medical schemes will only provide coverage for additional complementary care not covered by the NHI benefit package. Hence, making

membership of medical schemes mandatory in the short term would be in conflict with the long term national policy vision. We are also of the view that with the current costs of premiums relative to income, it may not lead to a significant increase in membership (See below).

## 2. Pooling Of Risk

As discussed above, open schemes have an incentive to select low risk individuals, by pricing strategies to segment the market, or excluding high risk individuals from joining a scheme. Moreover individuals have an incentive only to join a medical scheme when they are ill.

As a result current legislation prevents a medical scheme from:

- a) charging a risk-based premium (based on the health risk of the individual), and requires a community-based premium (based on the average cost of a patient).
- b) preventing individual from joining a scheme;

The current legislation also allows a medical scheme:

c) to impose a waiting period if an previously uninsured individual wishes to join a scheme;

This legislation isn't sufficient to maximise risk pooling and cross-subsidisation. For example, schemes are able to segment the market through providing various benefit options within the scheme, that have differing levels of health care benefits, so that a higher risk individual is likely to choose an option with a high level of benefits. The result is schemes are effectively able to charge a higher premium to higher risk individuals, leading high risk / sick individuals having to pay more than low risk / healthy individuals, and hence reducing the extent of cross-subsidisation. Below are the various regulatory strategies used to increase risk pooling and cross-subsidisation.

#### Mandatory membership

The purpose of mandatory membership is to prevent individuals from only registering when they are ill. However, the costs of implementation of compulsory registration would need to be weighed against the actual increase in number of registrations that would be gained. Given the high levels of unemployment in South Africa, the number of people who are currently not–registered but who could afford membership of a medical scheme, may not be very large. Moreover, recent work has shown that aversion to the risk of being without health insurance when ill, leads to some individuals to enrol in scheme, despite good health – suggesting that the effect of the incentive not to register may be exaggerated<sup>5</sup>. (Moreover, as discussed above mandatory registration is not compatible with the current white paper on health systems reform in South Africa.)

#### Risk equalisation

In risk equalisation scheme prospective payments are made by schemes with low risk members to schemes with a profile of higher risk members. It is a vehicle for cross-subsidisation - sharing of the costs

of ill health between schemes. Risk equalisation schemes are common in OECD countries. The success of risk equalisation schemes depends on the ability of the regulator to determine risk<sup>6</sup> (using patient data provided by the providers and insurers). In the last 10 years European health systems have significantly improved their risk equalisation schemes, with relatively sophisticated formulas including health-based risk adjusters<sup>7</sup>. The latest evidence suggests that insurers respond to risk adjustment models by reducing their screening efforts along the dimensions of the model, but continuing to select patients on the basis of characteristics not in the model. Despite the improvements in risk modelling, the incentives for insurers to continue to risk select is substantial, and there is circumstantial evidence of continued risk selection<sup>8</sup>.

# Bundling of benefits

The bundling together catastrophic cover, through mandatory benefits, with other benefits creates a powerful incentive to purchase coverage. To access emergency (and maternity-related) insurance an individual must buy the rest – or use the public sector.

#### Facilitating competition between insurers

Another possible mechanism to improve the insurance function is to allow individuals to vote with their feet and move easily between insurers, by facilitating competition between insurers. However, competition is likely only lead to the insurer facing the risk of losing low-cost individuals, which will stimulate strategies to retain them, rather than improve cover for higher cost individuals. Moreover, for individuals to be able to make informed choice about their insurer, they need to be able to easily compare the numerous complex details of the schemes. This requires regulation to ensure published information follows a standard, easy to understand format.

**In sum**, it is unlikely that mandatory membership or competition will improve access to care. However a risk equalisation scheme will improve cross-subsidisation (sharing of the costs of ill health across the different medical schemes), and is important for the sustainability of the sector.

#### 3. Purchasing

All health systems require the purchase of a wide range of goods and services from hospitals, laboratories, pharmaceutical companies, doctors, and other caregivers. The purchasing function may be carried out by government agencies, medical schemes, or patients themselves. In the South African private health sector, medical schemes are the primary purchasers of services.

#### What care is covered?

In third party payer systems (when an individual doesn't pay directly for care) there is little incentive for individuals to limit the care that they seek. As a result medical schemes have several practices that limit their liability for the health care expenditure, which in turn can limit access to appropriate care:

Prior to the current regulation, schemes limited their liability by limiting what type of care (or benefit) is covered by the scheme. Current regulation sets out a list of prescribed minimum benefits (PMBs), including chronic care, that schemes are required to include as part of the insurance cover. (However, it should be noted that the PMBs are predominately hospital focused in South Africa, and need to be widened to include primary health care i.e. preventative rather than just curative.)

## At what price?

The requirement for schemes to cover the costs of the PMBs, without any regulation of the prices that providers can charge for providing that care, effectively means the sector is partially regulated. Knowing that schemes have to cover for these benefits, providers have an incentive to increase the cost of the services, and as might be expected, this has resulted in the schemes limiting their liability through the strategies described below, as well as increasing their premiums.

Many OECD countries overcome this problem by setting prices administratively, either through agreement of the various stakeholders, or regulation<sup>ii 9</sup>. This can be complex as providers may refuse to accept the set prices. Where there is one sufficiently large purchaser (either private insurer or public sector purchaser such as Department of Health) that has monopsony power agreement is more likely. (Monopsony power is when a purchaser is purchasing on behalf of a sufficiently large pool of recipients of care that the provider doesn't want to be excluded from providing care to that pool, and so will accept the set prices set by the purchaser),

In South Africa there is currently not a purchaser with sufficient monopsony power. The NHI fund may over time be able to take on this role. However, there are numerous obstacles to overcome before the NHI fund is established:

- i. the constitutionality of the NHI fund purchasing health and so taking over (at least some of) the provincial role of managing health care expenditure;
- ii. adequate governance arrangements of the fund to prevent misuse of the procurement and tender processes;
- iii. Establishing effective procurement and reimbursement processes with providers such that they are prepared to accept NHI patients, (or that patients are confident that the NHI will refund claims submitted).

In the meantime, it would be advisable to strengthen the capacity of the medical schemes council, or similarly independent regulator, to set prices administratively. It is also possible to prevent providers

<sup>&</sup>lt;sup>ii</sup> There have been various attempts to set prices in South Africa, however, these were deemed illegal ("uncompetitive") by the competition commission. It is expected that the current commission of inquiry will overturn this ruling.

from providing care as outlined under the PMBs, unless they agree to the regulated prices, while not challenging their right to practice. In establishing such a regulation it would be important for the regulator not to be influenced by providers to reduce the scope of the PMBs.

## How the cost is shared between patient and medical scheme?

Schemes require patients to share the cost of the care through the following strategies:

- i. The size of the co-payment (This could be regulated, once the price is regulated (See above);
- ii. Limits on the total cost of care that can be reimbursed in any one year;
- iii. Medical saving accounts where an individual's monthly premiums are retained in order to pay for out of hospital health costs. Medical savings accounts run counter to the principle of pooling risk across a wide and diverse group of people. Instead, the savings account is a pool of a single family, who, once their savings have been drawn down, have to pay directly out of pocket for health care, until a further threshold is reached.
- iv. The complex layers of administrative procedures and expenditure thresholds required to obtain cover e.g. moving from medical savings accounts to a greater level of coverage when needed; applications for chronic medication; knowing which conditions are covered under the PMBs and therefore should be covered in full; putting in an application for PMB coverage. When sick, or caring for a family member, these processes are complex to understand and negotiate, leaving many people without cover to which they are entitled (as illustrated by the example above)

Given these strategies, and possibly others, it is important to monitor patient outcomes, as well as risk, severity of the condition(s) and expenditure and compare this data across medical schemes – this way it would be possible identify which schemes are excessively limiting their liability for the costs of care. Statutory re-insurance ensures that schemes themselves have insurance cover should the costs of covering members' health care be above that covered by the pooled premiums.

# Using purchasing strategies to improve the quality of care?

The mechanism used to pay providers influences how they provide care. If prices are set by a regulator, purchasing strategies can generate incentives to encourage doctors to focus on particular activities (e.g. common illnesses that require on-going consistent care such as diabetes or chronic asthma), and as a result possibly improve the quality of care. Recently OECD health systems have experimented with hospital competition, activity-based payments and linking payment to performance (pay-for-performance P4P). These experiments provide some useful lessons for South Africa.

#### Hospital competition

If prices are set by regulators, economic theory suggests hospitals could compete with one another on the basis of quality. The theory suggests that: a) the improvement in quality would be greater the greater the number hospitals that are competing; and b) quality will improve as regulated prices increase<sup>10</sup>. So under tight budget conditions quality improvements are unlikely to occur. Evidence from the UK supports this conclusion, where increased competition led to higher mortality<sup>11</sup>. In the early

1990s, the creation of an internal market through a purchaser-provider split allowed district health authorities to purchase care from a range of hospitals who would compete to provide services. Hospitals in areas with greater competition had higher death rates, when controlling for observable differences in patient and hospital characteristics<sup>11</sup>. In a follow up study, where hospitals had to compete on both price and quality as measured by waiting times, competition led to improvements in waiting time<sup>12</sup>, suggesting the competition mechanism only works for the easily observable measures, not more distal patient outcomes. Further evidence from Australia, in a setting where public and private hospitals compete on both price and quality, suggests that competition had mixed effects with a small increase mortality and a decrease in unplanned admissions<sup>13</sup>. Anecdotal evidence from the South African private sector suggests that the ability to compare patient outcomes across hospitals, and rewarding physicians for engaging in collective discussions about the comparative data to identify the reasons for differences in outcomes, can lead to subsequent improvements in practice and hence quality.

#### Provider payment - hospitals

The use of diagnostic related groupings (DRGs – payment based on patient's illness and its severity) is now common in hospitals across Europe, and is used in the South African private sector. The benefits of the DRG activity based payments are greater transparency, efficiency, and providing mechanisms to incentivise the increase of certain priority services, as well as cost containment<sup>2</sup>. Comparison across OCED countries suggests that greater use of DRGs led to an increase in admissions rates and a decline in average length of stay, suggesting improvements in quality<sup>14</sup>. In South Africa, there is a regulation that prevents doctors from being employed other than in the public sector, and as a result the costs covered by the DRG payment only include nursing and hotel-type costs, and not the costs associated with the doctors' time, hence which unnecessarily reduces the scope of this effective payment mechanism.

#### Provider payment - physicians

The fee for service payment, the predominant methods of physician reimbursement in the South African private sector, leads to higher costs, as the provider carries no risk for the provision of unnecessary care. In contrast, a salary payment may encourage insufficient provision of care<sup>15</sup>. In the UK, there have been some interesting experiments using performance based payments (P4P). In 2003 P4P was introduced, with 25% of GP income tied to meeting quality targets known as the Quality and Outcomes Framework (QOF), consisting of 65 indicators. Payments are linked to the proportion of patients who achieve the indicator relevant to their condition. Those not suitable for the indicator can be excluded as exceptions. A study found that 90% of GP practices achieved the highest level of performance, therefore maximising possible income, with only one 1% of patients recorded as exceptions<sup>16</sup>. However, a follow up study found evidence of gaming behaviour, with GPs increasing the numbers of patients treated successfully, and decreasing the numbers of patients with asthma, coronary heart disease and type 2 diabetes, long term improvements started prior to the introduction of P4P, and the QOF was associated with a mild acceleration in improvements in outcomes for asthmatic and diabetic patients.

**In sum**, regulation of the South African private sector needs to be strengthened in two specific ways: a) expanding the PMBs to include preventative primary health care; and, b) setting prices, and the proportion of the co-payment administratively. The latter will require an effective regulator, until the NHI fund has sufficient monopsony power. Allowing the private sector organisations to employ doctors may be a first step away from fee-for-service, although it will be important to ensure that sufficient doctors remain in the public sector (see below). It is unlikely that stimulating competition between hospitals, or P4P, will yield significant improvements in quality. Encouraging physicians to engage in a conversation that compares patient outcomes over time seems more likely to improve practice and hence quality. Citizens could play an important role in this conversation.

Monitoring patient risk profiles, illness severity, expenditure and patient outcomes by the regulator, to hold both providers and insurers to account, is crucially important. This would have the added benefit of enabling on-going effective regulation of the sector, as the sector is likely to respond to any new regulation with further innovative strategies, the effects of which need to be monitored. The regulator will require the necessary data, as well as the capacity to analyse and interpret the data, and to ensure regulations are adhered to. Large schemes in South Africa (e.g. Discovery) already collect and analyse patient risk profiles, illness, and severity. The International Consortium for Health Outcome Measurement (ICHOM) is establishing standardized ways of measuring and reporting patient outcomes in enable such comparison (http://www.ichom.org/)

# 4. Achieving a Co-Ordinated and Cost-Effective Service?

In the current South African private sector, the oversupply of doctors, including specialists, and the lack of gatekeeping by GPs, results in patients going directly to specialists, and specialists providing care well below their capabilities (e.g. paediatricians immunising new born babies). If the PMBs were expanded to include primary health care, the effect may be to: a) make insurance for primary health care more affordable, and reduce the numbers of individuals with only a hospital plan; and, b) it would increase the feasibility of the gatekeeping role by GPs, by ensuring that initial visit to the GP is covered by the insurance.

The removal of the regulation preventing employment of doctors in the private sector would allow experimentation with different types of provider organisations. For example, by employing non-specialist doctors, a private hospital is likely to provide a much cost-effective service, reducing the cost of caesarean sections, for example. In Canada and the US, Health Managed Organisations (HMOs) employ doctors, and some, through a range of strategies, are able to achieve greater control over costs (e.g. <u>https://healthy.kaiserpermanente.org</u>).

Moreover, as doctors work as sole practitioners, rather than in teams with complementary skills, patients with complex illnesses or co-morbidities often shuttle between one specialist and another, not receiving full diagnosis, without the opportunity for a collective expert discussion as to what might be the best treatment. There is a new initiative, started in Jan 2016, whose aim is to bring together teams

of specialists to provide integrated, comprehensive care (http://pposerve.co.za/); it will take some time to see if this initiative will be successful.

**In sum**, expanding the PMBs to cover primary health care, introduction of the GP gatekeeper role, and allowing the employment of doctors is likely to encourage the provision of better co-ordinated, cost-effective service. However, as mentioned monitoring patient outcomes will be important to assess the benefits of any private sector initiative.

# CONCLUSION

The most important step is to establish a regulator with access to the necessary information, the capacity to analyse, and the authority and capacity to intervene, and to adjust the regulatory interventions as the sector responds to regulations. Providing training in micro-economics, and building the skills necessary to staff an effective regulator is crucial to this end.

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# REFERENCES

1. World Health Organization. The World Health Report: Health systems financing: the path to universal coverage Geneva: World Health Organization 2010.

2. Stabile M, Thomson S. The Changing Role of Government in Financing Health Care: An International Perspective. *Journal of Economic Literature* 2014; **52**(2): 480-518.

3. Kutzin J. A descriptive framework for country-level analysis of health care financing arrangements. *Health Policy* 2001; **56**(3): 171-204.

4. South African National Department of Health. National health insurance for South Africa: Towards universal coverage. Pretoria: National Department of Health, 2015.

5. Einav L, Finkestein A, Levin J. Beyond testing: Empirical methods of insurance markets. *Annual Review of Economics* 2010; **2**: 311-36.

6. van de Ven W, Ellis RP. Risk adjustment in competitive plan markets. In: Culyer A J, Newhouse J P, eds. Handbook of health economics. Amsterdam and New York: Elsevier; 2000: 755-845.

7. Thomson S, Russe R, Crivelli L, Van de Ven W, Van de Voorde C. Statutory health insurance competition in Europe: A four-country comparison. *Health Policy* 2013; **109**(3): 209-25.

8. Van de Ven W, Beck K, Van de Voorde C, Wasem J, Zmora I. Risk adjustment and risk selection in Europe: 6 years later. *Health Policy* 2007; **83**(2-3): 162-79.

9. Kumar A, De Lagasnerie G, Maiorano F, Forti A. Pricing and competition in specialist medical services: An overview for South Africa: Health Division, Directorate for Employment, Labou and Social Affairs, OECD, 2014.

10. Gaynor M, Town R. Competition in health care markets. National Bureau of Economics Research Working paper; 2011.

11. Propper C, Burgess S, Green K. Does competition between hospitals improve the quality of care?: Hospital death rates and the NHS internal market. *Journal of Public Economics* 2004; **88**(7-8): 1247-72.

12. Propper C, Burgess S, Gossage D. Competition and quality: Evidence from the NHS internal market. *Economic Journal* 2008; **118**(525): 138-70.

13. Palangkaraya A, Yong J. Effects of competition on hospital quality: An examination using hospital administrative data. *European Journal of Health Economics* 2013; **14**(3): 415-29.

14. Busse R, Geissler A, Mason A, Or Z, Scheller-Kreinsen D, Street A. Supplement: Diagnosis-related groups in Europe (EuroDRG): Do they explain variation in hospital costs and length of stay across patients and hospitals. *Health Economics* 2012; **21 (Supplment 2)** 1-140.

15. Lagarde M, Powell-Jackson T, Blaauw D. Managing incentives for health providers and patients in the move towards universal coverage. Background paper for the global symposium on health systems research 16-19 november 2010, Montreux, Switzerland, 2010.

16. Doran T, Fullwood C, Reeves R, Gravelle H, Roland M. Exclusion of patients from pay-forperformance targets by English physicians. *New England Journal of Medicine* 2008; **359**(3): 274-84.

17. Doran T, Campbell S, Fullwood C, Kontopantelis E, Roland M. Performance of small general practices under the UK's Quality and Outcomes Framework. *British Journal of General Practice* 2010; **60**(578).