



Strategic Purchasing Policy Brief Series

Brief 4: Matching supply and need

About this series

National Health Insurance (NHI) refers to a wide-ranging set of reforms of the South African healthcare system, including the establishment of the NHI Fund as a new entity tasked with the *strategic purchasing* of healthcare.

The broad aim of the NHI reforms is to achieve universal health coverage (UHC) in South Africa. UHC offers “all individuals and communities the health services they need without suffering financial hardship. It includes the full spectrum of essential, quality health services, from health promotion to prevention, treatment, rehabilitation, and palliative care. UHC emphasizes not only what services are covered, but also how they are funded, managed, and delivered” (World Health Organization 2019).

Much of the discussion in South Africa on how we achieve these aims has been divisive and polarised. For many, it is difficult to engage in the debates meaningfully without understanding the jargon and myriad of complex concepts. In support of meaningful discourse, we offer this series of briefs to deepen public awareness and enrich discussions on one particular aspect of the proposed reforms: the notion of strategic purchasing. What is strategic purchasing? Who will do the purchasing? How do we hold the purchaser(s) accountable?

The providers of healthcare services, both public and private, are important stakeholders in a healthcare system. The ways in which the proposed reforms are likely to impact on providers is an often-neglected perspective, one which we hope to consider here.

Seven briefs explore what a purchaser-provider split in a healthcare system is, what strategic purchasing is, the nuances of matching the need for care with the supply of services, how to ensure quality and access and how to balance all this with affordability.

At the time of writing these briefs, NHI as a concept was informed by the framework as set out in the draft NHI Bill (2019) which was preceded by a previous draft version of the Bill (2018), two White Papers (2015 and 2017) and a Green (Policy) Paper (2011).

This work was funded by the Hospital Association of South Africa, although the views presented here are the authors' own.



In this brief...

In this research brief we will explore rigidities in the supply-side including the geographical maldistribution of resources and structural impediments to innovation. Given that the Fund is intending to purchase additional services from providers who are currently working predominantly or exclusively in the private sector, understanding the need and how the existing supply across sectors can meet this (if at all), is critical to building the right framework, figuring out who to contract and how best to pay them.

Why it matters

The transformation of the health system ultimately rests on the ability to deliver the services that are needed in a way that is accessible, timely, responsive, efficient and high-quality. Figuring out how best to leverage our resources to do this lies at the heart of the function of a strategic purchaser.

Introduction

We will first take you through the current supply of healthcare services across the public and private sectors together with the factors that influence it. We then explain some of the systems issues that make reorganisation challenging – necessary recognition in order to focus on the adaptations required to allow for an agile and responsive supply of services. Lastly, we explore ways in which the NHI Fund can incentivise and support supply-side innovation and reorganisation.

Current supply of healthcare services

Public sector

The public sector provides healthcare services predominantly to the population without medical scheme cover – approximately 84% of the total population (Davén et al. 2017). The public service comprises community-outreach services, primary healthcare (PHC) services and hospital services. Community-based and PHC services are free for all South Africans, irrespective of income (Burger and Christian 2018). Hospital services are subsidised depending on a financial means test, with majority of the population paying no fees to receive hospital-based care (Ranchod et al. 2017). The fees that are billed are often not recovered, given the public sector's inexperience with billing and revenue collection. There is also little financial incentive because recovered funds are not always returned to the hospital that incurred the cost.

In theory, we already meet some definitions of universal health coverage. However, resource shortages, poor infrastructure, long waiting times, supply-chain failures and staff attitudes act as limiting factors in terms of access to quality care.



The PHC service delivery platform consists of:

- non-fixed facility services, such as mobile units, satellite clinics that are up for a discrete period of time and household outreach services **(1,112 of these facilities)**
- fixed facility services, which consist of clinics which are predominantly nurse-driven as well as community health centres (CHC)/community day centres (CDC) and midwife obstetric units (MOU) which provide slightly more sophisticated care than clinics and generally have access to at least one doctor. Both CDCs and MOUs are supposed to have been phased out and incorporated into the CHC model, however not all provinces have done so. Clinics render eight-hour services and are mostly open five days a week, with a few exceptions that are open up to seven days a week. **(3,758 of these facilities)**

The hospital service delivery platform consists of

- Level 1 hospitals (district hospitals). These have basic specialist services (obstetrics and gynaecology, and/or family physicians) and general medical and surgical wards. **(255 district hospitals)**
- Level 2 hospitals (regional hospitals). These provide secondary care and should have a fuller complement of general medical specialists. **(47 regional hospitals)**
- Level 3 hospitals (provincial tertiary hospitals). These provide tertiary care and there is at least one in each province. The full complement of specialists should be available with some more general subspecialties. **(18 tertiary hospitals)**
- Level 4 hospitals (central hospitals). These provide quaternary care and should have access to the full complement of specialist and subspecialist services. **(9 central hospitals)**
- There are also specialised hospitals such as psychiatric, TB and orthopaedic facilities.

Hospitals are by nature capital intensive, making shifts in geographic distribution difficult to achieve.

In theory, clients are supposed to be triaged in the public system, entering healthcare services at clinic level and referred to hospitals for more serious conditions. In reality, there is bypassing of the clinic system, and clients often go directly to hospitals to avoid long waiting times or to ensure they are seen by a doctor rather than a nurse (Mojaki, M.E., Basu, D., Letskokgohka, M.E., Govender 2011). The NHI Bill re-emphasises the need for referral pathways¹ in the system.

The supply of facilities and staffing is varied across the provinces. The ratio of public hospitals per 100K uninsured population by province is shown in the table below. The highest number of hospitals per 100K

¹ At present, these are the same for all patients regardless of their health needs. Hopefully in future there will be differentiated care pathways through the system.

uninsured population is in the Northern Cape, a sparsely populated province. Even though this ratio may in theory imply high relative access to hospitals in the Northern Cape, in reality the large geographic spread of the population implies limited access due to travel distances. Gauteng has the fewest public hospitals per 100K uninsured population, due to its very dense population and the large size of those hospitals. The majority of the facilities were built during the Apartheid era and therefore the spatial planning reflects the racial segregation of the time. South Africa has for the most part only maintained existing hospitals, for reasons varying from limited budget to poor planning, which has resulted in this skewed picture of access across the provinces.

Gauteng hospitals are skewed towards large facilities and higher levels of care. Gauteng also tends to have more supply of doctors given that people tend to prefer to work in urban centres. The impact of this is that there are, for example, low numbers of anaesthetists in Mpumalanga and Limpopo, driving cross-border usage of Gauteng hospitals for surgical patients. Given that we only look at verified uninsured population per geographic region, the beds per 100K does not reflect the in-migration and cross-border usage that places further pressure on the demand for services.

Table 1: Geographical differences in hospital supply (Massyn et al. 2017)

Province	Total hospital beds	Uninsured population (2016/17)	Hospital beds per 100K
EC	14,039	6,101,187	230
FS	4,765	2,377,080	200
GP	18,026	10,033,839	180
KZN	22,701	9,562,858	237
LP	7,687	5,313,820	145
MP	4,764	3,722,276	128
NC	1,890	1,005,715	188
NW	4,661	3,263,719	143
WC	11,086	5,012,140	221
Grand Total	89,619	46,392,634	193

Private

The private health sector is made up of clinicians (including nurses, allied health professionals and doctors), hospitals and specialists (Econex 2013). The private sector is mainly funded through medical scheme contributions, via the 'insured population', however there are significant out-of-pocket/cash payments made by those without insurance who choose to use the private sector or those whose benefits have run out. Up to a third of the South Africa population consult private providers for outpatient services (Burger et al., 2012). These



consultations take place in general practitioner (GP) and specialist consulting rooms. Private hospital services are mostly accessed by medical scheme users, as the costs are too high and unpredictable for most people to afford to pay out of pocket (although uncovered clients may choose to pay for certain procedures or events, e.g. childbirth, on an out-of-pocket basis). Private hospitals also tend to be concentrated in major metropolitan areas, although access in underserved regions has been increasing in recent years.

PHC services are mainly provided by general practitioners (GPs) in the private sector – as compared to nurses in the public sector. Gatekeeping is generally weak, with GPs being bypassed and clients often accessing specialist care directly (Van den Heever 2012). Clients also access primary care services at pharmacies, optometrists and dentists, whereas in the public sector these are all housed within the PHC facility (where available). This drives up cost in the private sector, and results in a fragmented experience for the client.

Recent research on medical specialists estimated fewer than 10 000 full-time equivalent medical specialists in South Africa in 2019 (Wishnia et al. 2019). Of these, 62% work primarily in the private sector and 38% primarily in the public sector.

The South African private health sector has been described as hospi-centric, with the curative (rather than preventative) nature of prescribed minimum benefits (PMBs)² covered by medical schemes playing a strong role in determining its nature (Council for Medical Schemes 2016). Furthermore, referral arrangements tend to be of an informal nature rather than stipulated by the scheme and are therefore difficult to enforce and vulnerable to being influenced by financial incentives related to a fee-for-service environment (Econex 2013).

The South African health sector as a whole

South Africa is currently operating two health systems that partially overlap (both in terms of clients using both systems, and in terms of health workers working across both).

Recent research (Wishnia et al. 2019) found that 35% of specialists employed in the public sector also do some private-sector work. This is referred to as remunerated work outside the public services (RWOPS) and was set up as a policy to allow public medical personnel to work in the private sector but attempted to regulate the extent to which that is possible. RWOPS is a useful example of the need for good data collection, monitoring and management control in enabling a more integrated health system. At present, the policy is inconsistently implemented and managed across provinces with no routinely collected data to enable an understanding of its impact on the health system. RWOPS is important to monitor for several reasons:

- To ensure that the public sector is getting sufficient services for the salary it is paying;

² PMBs focus on providing cover for catastrophic and chronic conditions.

- To ensure that medical specialists are given the opportunity to expand their practice or improve their expertise through a bigger or more varied pool of clients – and thereby to improve retention; and
- To be able to accurately estimate the actual available resources in each sector when planning. There is a risk that public sector capacity would be over-estimated if those doing RWOPS were not scaled down to their actual availability.

The incoming NHI reforms aim to allow both public and private providers of services to serve the entire South African population. It is likely that, given the shortages in human resources for health in the country, that even pooling all resources may still not be adequate for the need, particularly given the metropolitan slant to the location of private providers. The only way to ascertain whether this is true, is to look at data and use it to guide resource planning decision making (see brief 3 for more on quantifying the need).

That being said, it is well established that the insured population has better access to both facilities and to healthcare workers than the uninsured population. This is largely driven by a wide range of factors including financial incentives, working conditions and personal preferences of healthcare workers. For example, there are 69 specialists per 100K insured population as compared to 7 per 100K uninsured population (Wishnia et al. 2019). However, it is important to note that even the average for the country as a whole (16.5 specialists per 100K) is very low when compared to that of OECD countries which have a level of economic development not too different from South Africa's. The overall medical specialist ratio for Turkey is 124 per 100K, while it is 151 per 100K for Mexico (Wishnia et al. 2019).

In the private sector there are approximately 3.9 beds per 1K insured population, while only 1.9 per 1K uninsured population in the public sector (Ranchod et al. 2015). Looking at the availability of surgical beds in particular in each sector, we see that there are 4.5 times the beds in the private sector on a per capita basis (see table below). The variation between provinces is also striking. The apparently lower variation between provinces in the public sector masks the impact of variations in access to surgical specialties and anaesthetists-rendering some of the available beds unusable.



Table 2: Surgical supply in the public and private sector (Dell and Kahn 2018)

Province	Public hospital surgical beds	Public hospital surgical beds per 100K uninsured population	Private hospital surgical beds	Private hospital surgical beds per 100K insured population	Ratio of private surgical beds per 100k to public surgical beds per 100k
Eastern Cape	1,890	31.29	663	85.69	2.74
Free State	619	27.09	764	152.31	5.62
Gauteng	2,452	25.31	4,837	140.80	5.56
KwaZulu-Natal	3,192	34.31	1,449	108.39	3.16
Limpopo	1,080	20.85	197	40.22	1.93
Mpumalanga	844	19.41	406	67.12	3.46
Northern Cape	292	29.10	126	70.13	2.41
North West	627	19.83	576	114.36	5.77
Western Cape	1,174	25.39	1,560	100.02	3.94
Total	12,170	26.45	10,578	120.70	4.56

This situation makes the case for shared resources and contracting across sectors even more compelling. However, compelling as it may be, the geographical location, availability and mix of services - and how the relate to the burden of disease - is likely to require more than just the existing platform. It is very likely that the supply side of the health sector will need to reorganise itself to ensure optimal distribution- which requires incentives for new buildings and practices and some element of task shifting³ to increase access.

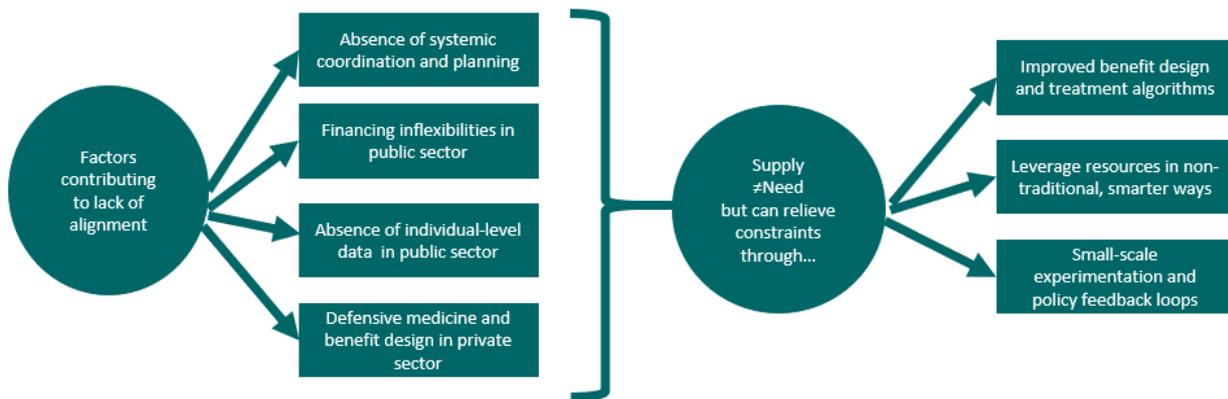
Pitfalls in the current supply

Recognising the impediments to reorganising a health system – incentives, entrenched ways of doing things, data, systems, budget structures, resistance to change, a lack of trust – means being realistic about the timelines for transformation of the health system and the need for strong leadership, management and political will.

In this section we discuss some of the factors that contribute to the lack of alignment between supply and the need for services in the South African health sector. Figure 1 sets out the logical flow of this section and details the pitfalls that are specific to a sector or shared between sectors. We present insights into how the supply side could, with the appropriate interventions, realign to better match supply to need and how it can be more agile in the face of a changing population and epidemiological burden.

³ This is where the scope of practice is altered to enable lower cadres of health workers to take on some of the work traditionally reserved for higher cadres. Where this is focussed on particular gaps in service delivery, it can be highly effective in improving access to care.

Figure 1: Constraints to alignment of supply and need and possible solutions



Absence of systemic planning and coordination

GIS mapping can help to determine micro-level supply-side decisions, and to develop a view of the current geographical spread of resources.

There is currently no national planning framework for healthcare, nor a body involved in collating data and advising on what type, how many and where healthcare facilities and human resources are required. Even the data on current supply is lacking (Wishnia et al. 2019). There is also, currently, no national framework for the licensing of facilities (Cliffe Dekker Hofmeyer 2019). This lack of data and coordination applies to both the public and private sectors. It is therefore difficult to match supply to need in a systematic way. Decentralised decision-making contributes to provincial variation that doesn't serve equity considerations for the country. However, centralised planning does carry with it the risk of limiting innovation in service delivery models.

In order to ensure better planning for the country as a whole, not only does each sector need to strengthen but the two sectors need to plan jointly. For example, the public sector could leverage off the available capital within the private sector to incentivise the building of new facilities in resource-scare areas, through the commitment of high patient volumes (at agreed upon reimbursement rates that would be mutually beneficial). Such approaches require good contract design and management.

The NHI Fund, and its willingness to contract across the sectors provides a new opportunity for the provision of care to be better coordinated and planned for. It should also allow for the gaps in supply to be better identified and subsequent incentives for reorganisation of the supply-side to meet the need. This is one of the benefits of

a strong purchaser-provider split, as we described in brief 2. This is a substantial capability that will require time and commitment to achieve.

Staffing rigidity in the public service

In the public sector, all staff are salaried and employed by the department of health (either national, provincial or local). In facilities, the staff are permanent, and it is not possible to move or downsize staffing numbers as a result of lower utilisation. Therefore, the supply of human resources, is, in effect, fixed. It is also very difficult for a facility to hire more staff to change their staffing mix, as the organograms are mostly generic by facility type. The hospital CEO is therefore not able to decide to rather employ three extra midwives instead of an obstetrician, as there isn't that flexibility to redesign what the staffing budgets are for. Given that health expenditure is mainly driven by human resource (HR) costs, this inflexibility makes it difficult to even begin to think through an agile public sector supply that can shift staffing numbers, mix and facilities as the needs become clearer.

The current salary structures provide limited opportunities to align the incentives of individual health professionals with overall goals of quality and efficiency. The NHI Bill makes reference to value-based approaches to allocating funding but provides no consideration of how this will translate into incentives for those working in the system.

Financing inflexibilities in the public sector

Public sector budgeting in South Africa occurs with a minimum of a three-year perspective as captured in the annual medium-term expenditure framework (MTEF), with space for only small annual adjustments given specific urgent needs. Policy development tends to happen over a long-time horizon with relatively little room for manoeuvring or flexibility in cases where it becomes clear that there is a supply and demand mismatch. As explained in brief 3, historical budget allocations play a strong role in determining which provinces and which health areas get what. This **lack of flexibility** and strong reliance on historical financial data means it is relatively difficult to turn the policy ship around once it becomes clear that there is a problem.

Impediments to private-sector reorganisation

Private providers are theoretically more able to reorganise and innovate. However, the pace of change is impeded by a wide range of factors, not least of which is the capital cost of re-organisation. There also needs to be the necessary impetus to encourage reorganisation, such as value-based contracting (which in turn requires strong purchasing of care). Reorganisation can be both driven by and slowed down by competitive dynamics depending on how competitive the market is and the existence of barriers to entry. There are also regulatory constraints to new

The purchaser can (and should) play a catalysing function in reorganising the supply side.



models of care and alternative reimbursement approaches that will have to be eliminated in order for providers to freely innovate (Cliffe Dekker Hofmeyer 2019).

For example, the private sector has been slow to implement multi-disciplinary team approaches. Enabling factors include stronger pressure from purchasers and the rules governing the supply-side being more supportive of multi-disciplinary teams. Even then, there is an element of reskilling required where medical practitioners have forgotten how to work effectively in teams.

Data gaps

Data is important: it should be both accurate and readily available - a difficult mix to get right.

Brief 3 explored some of the issues around the absence of good individual-level administrative data, except for TB and HIV, and the complexities and difficulties this brings to forming a nuanced picture of need, and therefore accurately matching supply to need. It becomes impossible to match supply to need if you have no reliable way of measuring need within the system. The issue is made worse by the long lags in available data in the public sector, as a result of a largely manual data collection process.

Private sector funders have this data as it is required for reimbursement, however the data have not been sufficiently leveraged to actually drive change in the supply of private healthcare. **Therefore, even where data exists, it requires a further leap to make the data meaningful and to use it for decision making.** Data collection will be key to the effectiveness of the NHI Fund – but data in and of itself will be insufficient to drive the required changes.

Defensive medicine and benefit design

Both sectors are experiencing a crisis in medicolegal claims, however the impact is experienced differently. In the public sector, claims are levelled at the department of health, and health professionals and facilities are not required to have individual malpractice insurance. In the private sector, all medicolegal claims are directed at the professional and therefore malpractice insurance premiums have grown significantly in recent years to account for the growing risk. The implications of this are threefold: first, providers may avoid certain 'high risk' professions (such as obstetrics) and as a result supply may quickly mismatch demand; second, tariffs will increase to keep up with the cost of providing the service; and lastly, providers may start to practice 'defensive' medicine, which is where unnecessary tests and procedures are done to pacify a patient or cover all bases, even when it is not clinically indicated, thereby driving up costs.

The benefits offered in the health system will shape how demand is expressed, and this will in turn influence the available supply of services over time. Palliative services are a good example of this in the private sector. Medical schemes have historically provided limited funding for palliative care. This in turn has resulted in a weak supply of palliative services. This is an important consideration for the Fund in considering what benefits



to offer. Not only will the benefits offered depend on available supply, but the benefits offered will also shape the available supply.

Then how do we match need?

Designing benefits to support population health: The 2019 Draft NHI Bill points to the creation of a benefits advisory committee who will determine the package of services that citizens are entitled to receive, through the NHI system (National Department of Health 2019). It is intended that the benefits advisory committee will include the principles of health technology assessment and would be responsible for designing protocols that are cost effective and have high public-health impact and only these treatments would be reimbursed by the Fund, with medical schemes providing complementary benefits.

The NHI Bill does not currently make sufficient allowance for the inter-connectedness between this process and the process of costing benefits and contracting with providers. It is also not clear how this process will interface, if at all, with planning and co-ordination of the supply-side.

The sectors currently differ, both in terms of how benefit packages are articulated and in terms of the foci of current coverage. The public sector does follow clinical guidelines and treatment protocols for specific disease areas and has a broad list of services available at each level of care. The inequity of resource allocation across geographical regions and individual facilities often means that prioritisation of care and resources frequently takes place at the point of care. By contrast, private-sector packages are articulated in more detail. The private sector benefits are hospi-centric, focused on providing access to acute and chronic care, rather than preventative, primary and palliative care. The public sector places focus on primary healthcare and in many instances hospital service are underfunded relative to need.

Adherence to the protocols that accompany the designed benefits is necessary to ensure the provision of high-quality, consistent care that will minimise the need for system bypassing and the under- and over-consumption of healthcare. This will require adequate resourcing to enable adherence, together with careful monitoring.

Discussions and processes are also underway to define a new PMB package (Council for Medical Schemes 2016) – the relevance of this process in light of the proposed change in the role of medical schemes is unclear. The package is meant to be reviewed every two years, which has not occurred. The difficulties associated with the PMB review process (including inadequate guiding frameworks, complex multi-stakeholder engagements, skills, resourcing and approvals) are an important red flag and potential area of learning for the NHI benefits advisory committee.



The introduction of health technology assessment (HTA) and a holistic benefit package would allow providers to give the most effective care for their clients for the services within the package, without having to worry about how the client may pay, and without providers carrying the burden of making prioritisation decisions at the point of care. This may in turn motivate clients to seek health services earlier, and this is one of the fundamental theoretical benefits of universal health coverage where payment for services is pre-pooled and providers rely on payment from the insurer (NHI Fund) rather than the individual. However, **well-articulated benefits are not sufficient to achieve this – benefits have to be supported with adequate resourcing and a well-functioning supply chain – both of which will take time to achieve.**

Purchasing from the private sector:

At this stage, the NHI Bill mentions purchasing services from the private sector for primary care but is silent on the leveraging of private hospitals for all of those covered. It is intended that the NHI Fund will be able to contract with private providers to increase access to resources (GPs, medical specialists etc.) and create an integrated supply side. It is unclear why the Bill would, at this stage, not create the space to leverage off all private sector resources, creating greater opportunities for innovation and improved access.

Even with a completely integrated health sector, it is possible that the supply will still not be sufficient given need. Furthermore, it is possible that given the differences in pricing between the historically private sector providers and the public sector, that contracting the private sector in its entirety may not be financially feasible, or if prices are driven down through monopsonist purchasing, not sustainable for providers. Care should thus be taken to expand the supply-side in its totality (both public and private) and not just rely on the additional resources that will be brought into the fold if the public sector is able to purchase from the private sector.

Contracting for value: the contracting mechanisms used to incentivise both efficiency and quality of care are likely to drive reorganisation in the system. The design of reimbursement mechanisms (including the process to design these mechanisms) is therefore critical. Private providers have more flexibility to respond to alternative reimbursement mechanisms than public providers, particularly those with access to capital. However, regulation pertaining to reimbursement of doctors poses a challenge to alternative reimbursement development in the private sector and problematic regulations will have to be amended. The current mechanisms for allocating budgets and paying employees in the public system leave no room for rewarding value. Changing this will not be an overnight process. Contracting certainty, and trust, will also be required to encourage providers to reorganise.

Task shifting: In the absence of more or different types of human resources and an inability to have an immediate solution to supply-demand mismatches given the time taken to plan the funding of and actually train new and more staff, one possibility is the implementation of task-shifting on multiple levels of the HRH system. Task shifting typically entails the expansion of the responsibilities and scope of practices of lower levels of health staff, such as nurses or midwives, community healthcare workers or even those of clients to self-manage



certain components of their care (Crowley and Mayers 2015). The primary way in which this has been used in the South African health system is through the shifting of tasks from doctors to nurses (Crowley and Mayers 2015).

Non-traditional healthcare facilities or alternative care settings: The costs of acute facilities has been highlighted as a major cost driver of private healthcare in South Africa. Hospitals in general, irrespective whether they are private or public, are an expensive setting to deliver care due to their capital-intensive nature. It is possible to deliver many day surgical procedures in the lower-cost setting of day hospitals (Donnelly 2017). Other alternatives include sub-acute facilities, step-down facilities, palliative care facilities, specialised facilities and even secondary care settings. Similar thinking can be applied to primary care where community health workers can be used to shift the care setting from facility to home. **The Fund should incentivise this type of shifting to alternative care settings** by generating appetite through competitive contracting, and contracting that stimulates innovation. For example, a rigid categorisation of facilities written into policy, or built into accreditation standards, as is currently the case, can stifle the system.

Leverage resources in more innovative, smarter ways: Technology, innovation and the evolving scope of practice of healthcare workers allows for existing resources to be used in more innovative, smarter ways, thereby serving more people and increasing access to healthcare. While valuable, technology innovation will also require policy flexibility- something our regulatory and policy framework currently struggles with. The NHI Fund should play a role in mobilising research and development through rapid HTAs and decision-making. Given the fast-paced environment of healthcare technology, a large bureaucratic single purchaser runs the risk of shutting down innovation. Therefore, **technology and eHealth policy should be written liberally into policy** to allow for testing and scaling of successful innovations to maintain appetite for supply-side innovation for the benefit of patient care.

The need for small-scale experimentation and policy feedback loops: A note of caution on the difficulty of creating dynamism and change in a sector as large as the South African health sector is required. Often large-scale policy initiatives are very difficult to implement successfully. Transplanting best-practice policy initiatives from other countries without paying proper attention to local factors and micro-level problems will mean the implementation of these initiatives are doomed to fail. Rather, small and localised changes and ongoing experimentation is required. This is referred to as problem-driven iterative adaptation (PDIA) (Andrews, Pritchett, and Woolcock 2013). This could be achieved by providing certain staff in the department of health or another relevant health regulatory and planning body with the room to experiment in terms of trying to better align demand to supply in an ongoing way.

This type of system change requires feedback loops that allow for faster learning and multiple individuals should be given experimentation and learning roles and the room and authority to experiment (Andrews,



Pritchett, and Woolcock 2013). It also allows for true and honest learning from failed attempts at trying to get supply and demand to match better.

Verification of accurate and reliable supply-need matching: Lastly, it does not make sense to advocate for the accurate and reliable matching of supply to need and to build a financing system around this if the system is not going to verify that such matching did indeed take place (and that it makes sense). Tangible metrics, such as waiting times, loss-to-follow-up and the length of waiting lists for certain procedures, will have to be defined and tracked to ascertain whether centralised approaches do in fact shift access to care on the ground.

Conclusion

The South African healthcare system is characterised by both the maldistribution of resources between the public and private health sectors and skewed geographical distribution of resources. The fragmented nature and lack of coordination of our health system as a whole has not assisted in aligning need with demand. Before the full implementation of NHI, there are ways to facilitate greater alignment: working more innovatively with the resources we have through telemedicine, non-traditional healthcare facilities and task shifting, more deliberate (and aligned) benefit design in both the public and private sectors, and ongoing (iterative) experimentation with clear policy feedback loops.

The purchaser-provider split can provide impetus for supply side reorganisation and innovation, through effective and sufficiently flexible contracting that motivates providers to provide the best care at the lowest cost. The NHI Fund could test this out in its piloting phases, through the contracting of much needed GP services for the public sector- as it is planning to do. The lessons from the experience can be used to inform further contracting mechanisms, measures and pricing and set the standard for how the Fund can begin to integrate the South African health system.

References

- Andrews, Matt, Lant Pritchett, and Michael Woolcock. 2013. "Escaping Capability Traps Through Problem Driven Iterative Adaptation (PDIA)." *World Development* 51. Elsevier Ltd:234–44.
<https://doi.org/10.1016/j.worlddev.2013.05.011>.
- Burger, Ronelle, and Carmen Christian. 2018. "Access to Health Care in Post-Apartheid South Africa: Availability, Affordability, Acceptability." *Health Economics, Policy and Law*, 1–13.
<https://doi.org/10.1017/S1744133118000300>.
- Cliffe Dekker Hofmeyer. 2019. "HMI Requests for Submissions: Response from Mediclinic."
- Council for Medical Schemes. 2016. "Prescribed Minimum Benefits Review: Proposed Construct and Work Plans." *Council for Medical Schemes*. Pretoria.
http://www.medicalschemes.com/medical_schemes_pmb/index.htm.



- Crowley, Talitha, and Pat Mayers. 2015. "Trends in Task Shifting in HIV Treatment in Africa: Effectiveness, Challenges and Acceptability to the Health Professions." *African Journal of Primary Health Care and Family Medicine* 7 (1):1–9. <https://doi.org/10.4102/phcfm.v7i1.807>.
- Davén, Jonatan, Candy Day, Mark Blecher, Aparna Kollipara, and Jodi Wishnia. 2017. "Finance." In *District Health Barometer 2016/17*.
- Dell, A J, and D Kahn. 2018. "Geographical Maldistribution of Surgical Resources in South Africa: A Review of the Number of Hospitals, Hospital Beds and Surgical Beds." *South African Medical Journal* 107 (12):1099. <https://doi.org/10.7196/samj.2017.v107i12.12539>.
- Donnelly, Lynley. 2017. "Building the Case for Day Hospitals," July 28, 2017. <https://mg.co.za/article/2017-07-28-00-building-the-case-for-day-hospitals>.
- Econex. 2013. "The South African Private Healthcare Sector : Role and Contribution to the Economy." https://econex.co.za/wp-content/uploads/2016/09/Econex_private_health_sector_study_12122013-1.pdf%0Ahttp://www.mm3admin.co.za/documents/docmanager/f447b607-3c8f-4eb7-8da4-11bca747079f/00060290.pdf.
- Heever, Alex Van den. 2012. "Review of Competition in the South African Health System. Report Produced for the Competition Commission." <https://doi.org/10.1111/j.1365-2427.2004.01254.x>.
- Massyn, Naomi, Ashnie Padarath, Nazia Peer, and Candy Day. 2017. "District Health Barometer 2016/17." Health Systems Trust.
- Mojaki, M.E., Basu, D., Letskokgohka, M.E., Govender, M. 2011. "Referral Steps in District Health System Are Side-Stepped." *South African Medical Journal* 101 (2):109.
- National Department of Health. 2019. *National Health Insurance Bill*. Pretoria: Government Gazette.
- Ranchod, S, B Childs, M Abraham, R Taylor, and Mrs Shivani Ranchod. 2015. "International Benchmarking of Hospital Utilisation: How Does the South African Private Sector Compare?" 308 | *ACTUARIAL SOCIETY*.
- Ranchod, Shivani, Cheryl Adams, Ronelle Burger, Angeliki Carvounes, Kathryn Dreyer, Anja Smith, Jacqui Stewart, and Chloé Van Biljon. 2017. "South Africa's Hospital Sector: Old Divisions and New Developments." In *South African Health Review 2017*, edited by Ashnie Padarath and Peter Barron.
- Wet, Phillip De. 2012. "Census 2011: Anomalies Could Disadvantage Some Provinces | News | National | M&G." *Mail & Guardian*, 2012. <https://mg.co.za/article/2012-11-02-00-census-2011-anomalies-could-disadvantage-some-provinces>.
- Wishnia, Jodi, Dave Strugnell, Anja Smith, and Shivani Ranchod. 2019. "The Supply of and Need for Medical Specialists in South Africa." Cape Town.
- World Health Organization. 2019. "Universal Health Coverage (UHC)." 2019.



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