

## The Role of Primary Healthcare in Health Reform

### 1 Introduction

In the previous NHI research note series we discussed various aspects of the proposed NHI plan and provided cost estimates for implementation of such a scheme. We illustrated that extending comprehensive coverage to all South Africans would be massively expensive. The current note is the first in a new series of research notes in which we turn our attention to issues of general health reform in South Africa. The aim is to contribute to the debate about what steps should be taken on the road to reforming our health system. Health Minister Aaron Motsoaledi recently commented that the proposed NHI would be unaffordable if based on the current public health system, and assured the public that the NHI would not be an event, "it's going to be a process and a process that will take a long time."<sup>1</sup>

In line with what has been stated by the Minister concerning the importance of primary healthcare (PHC), this note looks

at some of the available data on PHC in South Africa. The importance of PHC was emphasised by Minister Motsoaledi and in this regard he mentioned that he will undertake a study tour to Brazil later this year where the implementation of a NHI primarily focused on the delivery of PHC has been very successful.<sup>2</sup> In accordance with Minister Motsoaledi's turnaround strategy with a renewed focus on PHC, this note argues that PHC remains the foundational pillar of any health system and should be prioritised within a review of health reform.

In further research notes in this series, the focus will be on engaging with some of the detailed questions that arise from the current national health insurance debate. These will include issues of accreditation, human resource requirements, optimisation of the public and private sectors, reimbursement models, etc. In the current note we point out that although (physical) access to and affordability of healthcare have improved during the past decade, quality of care remains a concern.

### 2 Are South African health services meeting the needs South Africans?

In this research note we examine the question "how well is the current system serving the poor?" The focus of this study is to better understand the nature of the problems that the current healthcare reform seeks to address and guide priority setting, given the limited human and financial resources available.

This question can be examined by investigating the three most important dimensions of health services, namely affordability, accessibility and quality. Data show that there has been a considerable improvement in affordability and accessibility of public healthcare offered to poor households since 1994, but that there are concerns about the quality of these services. The quality and perceptions of poor quality of public health services may also help explain why a considerable share of the very poorest households are paying for consultations

This research note forms part of a series of notes dealing with issues of health reform in South Africa. In the interest of constructively contributing to the NHI debate, the Hospital Association of South Africa (HASA) has commissioned this series of research notes which can be accessed on the Econex website: [www.econex.co.za](http://www.econex.co.za).

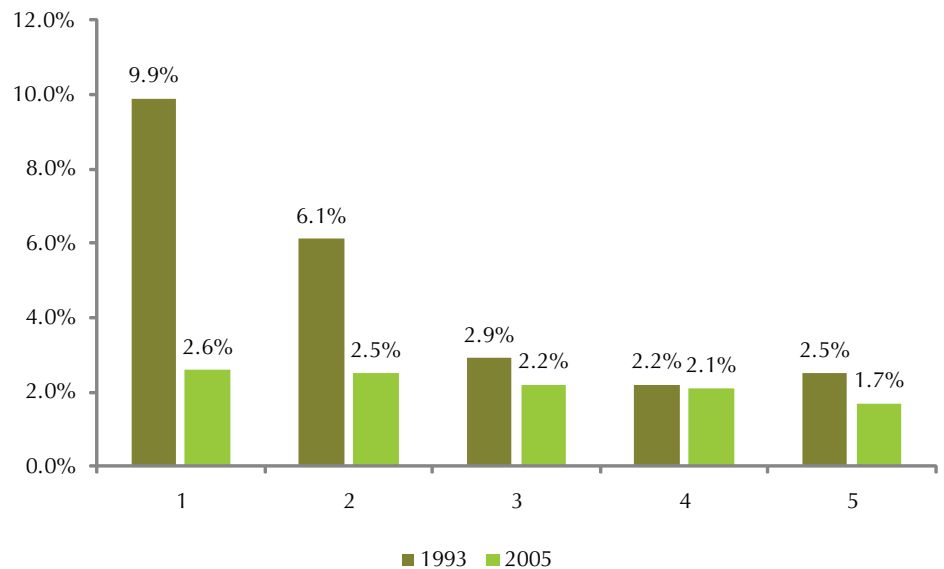
1. Thom, A., 2010. "SA must move to a health system focused on prevention – Minister," *Health-e*, 3 March. Available at: <http://www.health-e.org.za/news/article.php?uid=20032669>
2. See footnote 1.

with private providers when public healthcare is available free of charge. However, the past decade has witnessed a number of far-reaching changes in the public health system, aimed at making health services more physically accessible and affordable for the poor. There has been an increasing focus on the role of clinics, prompting an expansion of the network of clinics, increases in PHC budget and the elimination of user fees for primary care. These aspects will be measured below by looking at the available data (mainly from the General Household Surveys (GHS), the Income and Expenditure Survey (IES), the Labour Force Survey (LFS) and the Living Standards and Development Survey (PSLSD (1993)).

## 2.1 Affordability

There are various ways to measure whether affordability of healthcare has improved since 1994. One such measure is the so-called 'affordability ratio'. This ratio calculates what share of per capita non-food household expenditure the costs associated with a visit to a health worker represents. The calculated ratios are interpreted by comparing them to benchmark ratios. If ratios are higher than the benchmark, this is regarded as an indication of excessively high affordability burden. Using Demery's (2003)<sup>3</sup> suggested benchmark of 5% of non-food

Figure 1: Affordability ratios across income groups,<sup>4</sup> 1993 and 2000



Source: PSLSD 1993 & GHS 2003

household expenditure, it is clear that in 2000 the affordability ratio was far below this benchmark for all income groups in South Africa (Figure 1). Also a comparison with 1993 estimates (based on the PSLSDs) suggest that there has been a marked improvement in the affordability ratios for poor households from levels exceeding the benchmark of 5% (9.9% and 6.1% for the bottom two quintiles) to levels that are well below this benchmark. Figure 1 shows that affordability as an impediment to obtaining necessary health service has ameliorated significantly since 1993.

In previous research Econex<sup>5</sup> found that the estimated share of out-of-pocket expenditure is between 10% and 14% of total expenditure on health. This compares favourably with out-of-pocket expenditure in developing countries, where such expenditures may account for up to two thirds of total health expenditure.

Finally, a third measure of affordability is the answer given by people who did not access health services when needed because it was too expensive. Figure 2 indicates that the percentage of people that stated it was too expensive to visit a

## About ECONEX

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3. Demery, L., 2003. "Analysing the Incidence of Public Spending," in: Bourguignon, F. & Pereira da Silva, L., editors, *The Impact of Economic Policies on Poverty and Income Distribution. Evaluation Techniques and Tools*, New York: Oxford University Press, p. 41-68

4. Quintile 1 is the poorest and quintile 5 the wealthiest.

5. Econex. 2010. *Estimating the Financial Costs of a NHI for South Africa. Research commissioned by HASA.*

healthcare worker declined from 32.9% to 12.3% between 2002 and 2008.

From these indicators one can conclude that Government's public policy agenda focusing on primary care was successful in rendering basic services more affordable to especially the lower income groups.

## 2.2 Accessibility

The General Household Surveys indicate that poor households appear to have reasonably good physical access to public sector healthcare. Among the bottom four income quintiles the variation in the utilisation shares<sup>6</sup> for public sector clinics and hospitals are within a narrow band. Likewise, the likelihood of consulting a health worker when ill or injured is relatively high and reasonably constant across income groups. Individuals from poorer households are only slightly less likely (74.9%) than the affluent (83.1%) to consult a health worker when ill or injured. It is important to point out that a large share of those who were ill, but chose not to consult a health worker did so because they felt their illness was not serious enough to warrant a consultation.

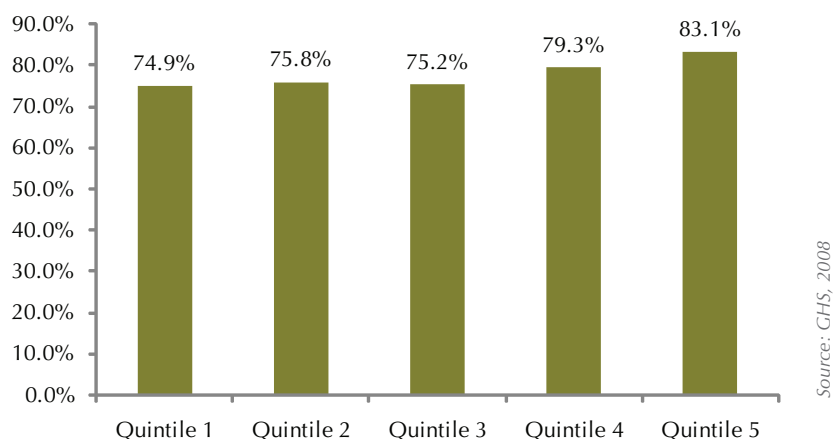
Increased accessibility is also evident from data that indicate a decrease in travel times. It is clear that a noticeably smaller proportion of individuals need to travel more than one hour to reach the nearest clinic or hospital (Table 1).

However, despite the marked progress in accessibility a substantial portion of households in all income groups, but especially the poor, still live more than an hour's travel away from the nearest hospital or clinic. Table 1 shows that 15% of the poorest quintile lives more than an hour from the closest clinic and 20% of this quintile lives more than an hour from the closest hospital.

Figure 2: People who did not consult a health worker as it was too expensive



Figure 3: Percentage of ill South African's that consulted a health worker across income groups,<sup>7</sup> 2008



## 2.3 Evidence on quality of care

The quality of healthcare is notoriously difficult to measure and the best correlation may be user satisfaction. User satisfaction could plausibly be regarded as an approximation of perceived quality. The General Household Surveys (GHS) and the Demographic and Health Surveys (DHS) both report data on satisfaction with healthcare. The comparison of satisfaction levels in 1998 and 2003 (from the DHS) indicates that dissatisfaction

with health services had grown, especially in public sector. The proportion of public sector patients that were dissatisfied has grown from 11.7% in 1998 to 23.3% by 2003. Over the same time period the dissatisfaction with private clinics and hospitals also rose from 7.0% in 1998 to 11.6% by 2003.

Data from the GHS provide reasons for this dissatisfaction. Figure 4 indicates that the biggest source of dissatisfaction is long waiting times, followed by

6. Respective shares of total utilisation of public hospitals and clinics in South Africa.

7. Quintile 1 is the poorest and quintile 5 the wealthiest.

unavailable medicines, rude staff and unclean facilities. Comparable data for private facilities showed that their users were more likely to be dissatisfied with the price of the service.

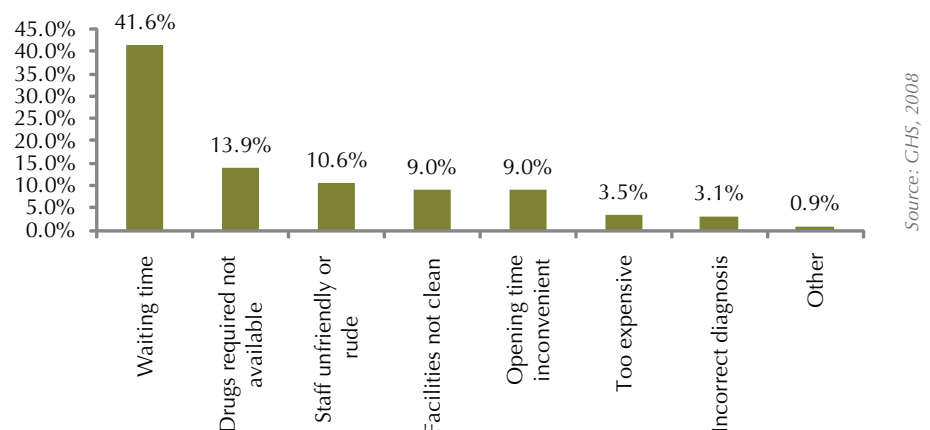
These are all subjective measures and it is important to consider alternative measures of quality that include objective measures. Crucial dimensions of quality such as the standard of diagnosis and care are notoriously difficult to observe for most patients and arguably the information asymmetry may be more severe for patients with less education. It is vital to consider user perceptions because they mediate healthcare choices and health seeking behaviour, but these perceptions will not necessarily correlate well with more objective measures of quality such as cure rates and the quality of diagnosis.

Various comparative studies have classified the South African health system as underperforming. Tangcharoensathien and Lertiendumrong (2000)<sup>8</sup> categorise South African healthcare as a high income, low performance system due to the relatively high per capita income, large health expenditure and the high under 5 mortality rates. Also, the Monitor Group (2008)<sup>9</sup> recently undertook an extensive evaluation of the quality of the health systems of 48 developed and developing countries. The quality variable was compiled using a rich set of variables including perceived health status, life expectancy, immunisations, prevalence of a selected number of diseases, obesity and smoking and a

Table 1: Percentage of health centre users with travel times exceeding 30 minutes, per income group, 1993 & 2003

Quintile	Private				Private			
	Clinic		Hospitals		Clinic		Hospitals	
	30 - 59 min	60 min or more	30 - 59 min	60 min or more	30 - 59 min	60 min or more	30 - 59 min	60 min or more
1	36.14	28.73	25.16	50.53	22.5	15.22	49.99	20
2	35.23	22.19	27.24	51.94	28.7	7.27	40.38	23.85
3	31.61	18.15	33.7	35.98	29.91	9.5	43.54	16.15
4	24.23	13.9	36.21	25.36	21.11	6.24	39.55	12.6
5	27.28	13.92	33.79	14.51	14.36	5.02	20.78	3.64

Figure 4: Percentage of people who experienced the following problems while visiting a public hospital or clinic



number of mortality indicators, the WHO health system responsiveness score and TB treatment success rate (under Directly Observed Therapy, Short-course (DOTS)). South Africa's health system fared poorly, ranking tenth from the bottom. The analysis proceeded to evaluate the South African public and private sectors

separately as if they represented two different countries. The South African public sector is ranked eighth from the bottom based on its performance, while the South African private sector is placed sixth overall – in the company of Australia, Sweden, Belgium, Switzerland and Ireland.

## More Information

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8. Tangcharoensathien, V & Lertiendumrong, J. 2000. *The Lancet Perspectives*, Vol. 356, December: S31.

9. The Monitor Group. 2008. *Health Systems Comparison Project*, July. Mimeo

Other measures of specific health outcomes can also be considered as indicators of quality, such as the targets set by millennium development goals (MDG) 4 and 5. The first part of the fifth MDG is to reduce the maternal mortality ratio (MMR), i.e. the number of maternal deaths per 100,000 live births, in each country by three quarters between 1990 and 2015. According to the MDG Monitor<sup>10</sup> South Africa's MMR was 230 in 1990 and 400 in 2005. These figures differ significantly from South African estimates (see Figure 5), although both sources show a marked increase in the ratio – indicating a severe deterioration in the quality of healthcare services over this period.

MDG 4 aims to reduce child mortality (both under five and infant mortality) by two thirds between 1990 and 2015. The MDG Monitor records South Africa's under five mortality at 60 per 1,000 live births in 1990 and 69 in 2006 – again showing a disheartening increase over that period. Health Minister Motsoaledi confirmed that, "South Africa is one of ten countries in the whole world which over the past decade dismally failed to bring down infant mortality."<sup>12</sup> Figure 6 shows South Africa's infant mortality rate since 1998. Although there are some differences between the various data sources, the trend seems to have improved during the last 5 years at least.

These two indicators point in opposite directions, while the infant mortality rate has improved somewhat, the maternal mortality ratio has worsened. Considering

Figure 5: Maternal mortality ratio,<sup>11</sup> 2001-2004

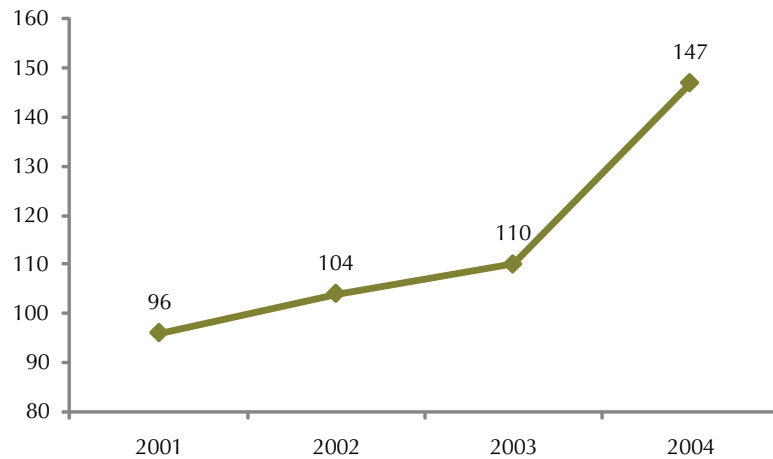
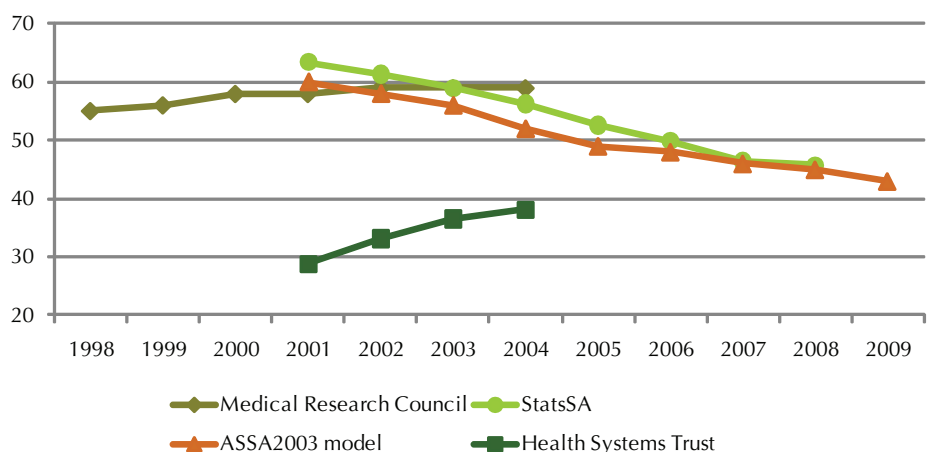


Figure 6: Infant mortality rate,<sup>13</sup> 1998-2009



a number of measures of health outcomes, the evidence seems to be mixed but with the bulk of indicators worsening. Other factors might also be at play, but in general there is not a clear indication that health outcomes have improved. This confirms the findings of the studies referred to above as well as the subjective experience of patients.

### 3 Renewed focus on primary care

The picture that emerges is one where affordability and accessibility have improved, but quality remains a concern. This is clearly an issue which affects everyone equally, but the poor would be particularly hard hit because

10. Available at: [www.mdgmonitor.org](http://www.mdgmonitor.org)

11. Complete definition: the number of women who die as a result of childbearing, during the pregnancy or within 42 days of delivery or termination of pregnancy in one year, per 100,000 live births during that year.

12. See footnote 1.

13. Complete definition: the number of children less than one year old who die in a year, per 1,000 live births during that year.

they often have fewer alternatives – or alternatives would at least require a bigger relative sacrifice. Data on health seeking behaviour indicate that 28.8% of uninsured individuals who were sick or injured in 2007 chose to consult a health worker in the private sector (GHS 2007). It is particularly concerning that 20% of individuals in the two lowest income quintiles consulted a private provider when they were ill, despite having free access to public providers. This suggests that the quality gap in private and public services is perceived to be quite large.

A study by Palmer (1999)<sup>14</sup> attempted to explain why poor individuals would pay R100 for a consultation at a private clinic when public sector clinics were free. Her work suggested that the perceived higher quality of diagnosis, prescription and counselling, the lower average waiting time and the increased privacy that private clinics offered were important motivating factors.

The positive, health-promoting effects of PHC in any and all contexts are virtually undisputed. International evidence is particularly clear about the central role that PHC has played, and should play, in health reform across the world. In addition to the many medical benefits that PHC has for patients or the public in general, it is also advantageous for the providers and/or funders of healthcare. It has been proven that “health systems

built on a solid foundation of primary care deliver more effective, efficient, and equitable care than systems that fail to invest adequately in primary care.”<sup>15</sup>

Individuals with poor access to PHC and its associated benefits “are more likely to be hospitalized, to delay seeking needed and timely preventive care, to receive care in emergency departments, and to have higher subsequent mortality and higher healthcare costs, and they are less likely to see a physician in the presence of symptoms.”<sup>16</sup> Related to the concern about healthcare costs, the characteristics of PHC facilitate less costly and more equitable healthcare as well. Research shows that better PHC experiences reduce the adverse effects of income inequality on health and are also associated with fewer differences in self-rated health between higher and lower income-inequality areas, so reducing health disparities.<sup>17</sup> Many studies have focused on the reduction in costs and consistently demonstrated that the increased provision of PHC, as well as a greater supply of GPs, is indeed associated with lower medical expenses at individual, district, country and medical aid levels.<sup>18</sup>

In terms of tertiary care, South Africa is regarded as “a superpower in health on the continent,” Minister Motsoaledi remarked. “Yet the irony lies in the fact that most of these countries that turn to South Africa for hi-tech healthcare have

low infant and maternal mortality rates.”<sup>19</sup> This illustrates that more focus on PHC is called for in South Africa to improve health outcomes. The provision of PHC is therefore key to any health reform process. For South Africa specifically it is true that, “Efforts to improve the system to achieve better health at lower cost are rapidly becoming imperative. Primary care offers an effective and efficient approach to achieve that goal. Evidence of the benefits of a health system with a strong primary care base is abundant and consistent.”<sup>20</sup>

## 4 Conclusions

This research note analysed evidence on the primary dimensions of healthcare such as affordability, accessibility and quality. We show that governments’ drive towards expanding primary care since 1994 had indeed improved affordability and accessibility. Yet, quality remains a concern and both subjective and objective measures of quality point to an overall decline. Indicative of this concern is the observed preference for private providers amongst the very poorest households. Within the broader scope of health reform, we advise the prioritisation of improvements to the quality of care in the public PHC sector as this is expected to go some way towards accomplishing the inspiring vision of the NHI by having a large impact on the health of the poorest and most vulnerable communities.

14. Palmer N, Mills A, Wade H, Gilson L, & Schneider H. 2003. *A new face for private providers in developing countries: what implications for public health?* *Bull World Health Organ* 81 (4): 292-7.
15. Grumbach, K., 2009. “Benefits of Primary Care and a Primary Care Medical Home: A Concise Summary of the Evidence,” *Center for Excellence in Primary Care, Department of Family and Community Medicine, University of California, San Francisco.*
16. Starfield, B., Shi, L. & Macinko, J., 2005. “Contribution of Primary Care to Health Systems and Health,” *The Milbank Quarterly*, Vol.83, No.3, pp.457-502
17. Shi, L., Starfield, B., Politzer, R. & Regan J., 2002. “Primary care, self-rated health, and reductions in social disparities in health,” *Health Services Research*, Vol.37, No.3, pp.529-50
18. Grumbach, K., 2009.
19. See footnote 1
20. Starfield et. al. 2005.