

Prerequisites for National Health Insurance in South Africa: Results of a national household survey

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Background. National Health Insurance (NHI) is currently high on the health policy agenda. The intention of this financing system is to promote efficiency and the equitable distribution of financial and human resources, improving health outcomes for the majority. However, there are some key prerequisites that need to be in place before an NHI can achieve these goals.

Objectives. To explore public perceptions on what changes in the public health system are necessary to ensure acceptability and sustainability of an NHI, and whether South Africans are ready for a change in the health system.

Methods. A cross-sectional nationally representative survey of 4 800 households was undertaken, using a structured questionnaire. Data were analysed in STATA IC10.

Results and conclusions. There is dissatisfaction with both public and private sectors, suggesting South Africans are ready for health system change. Concerns about the quality

of public sector services relate primarily to patient-provider engagements (empathic staff attitudes, communication and confidentiality issues), cleanliness of facilities and drug availability. There are concerns about the affordability of medical schemes and how the profit motive affects private providers' behaviour. South Africans do not appear to be well acquainted or generally supportive of the notion of risk cross-subsidies. However, there is strong support for income cross-subsidies. Public engagement is essential to improve understanding of the core principles of universal pre-payment mechanisms and the rationale for the development of NHI. Importantly, public support for pre-payment is unlikely to be forthcoming unless there is confidence in the availability of quality health services.

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The introduction of mandatory health insurance in South Africa was first mooted in the 1940s by the Collie Committee of Enquiry, and it has been intensely debated since the late 1980s. ¹⁻⁶ The resolution to implement a National Health Insurance (NHI) at the ANC Conference in Polokwane in December 2007 signalled that an NHI will be implemented. The only remaining questions are how and when this will happen.

The debates over the past two decades produced a common view on why an NHI is desirable, namely to address the key challenges facing the current health system.⁴ South Africa has dismal health status indicators compared with other countries at similar levels of economic development. This was the situation even before the impact of the AIDS epidemic

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took its toll. Social determinants, including massive income inequalities, clearly contribute to this pattern of ill-health, but it is also clear that the nearly 7% of GDP devoted to the health system is not providing value for money. Possibly the greatest contributor to this is the fact that 47% of financial resources flow via medical schemes, serving about 15% of the population, while less than 40% of health care funding comes from tax revenue for public sector services.7 The remaining 14% of funds are out-of-pocket payments, either co-payments by medical scheme members or direct payments to private GPs and pharmacies by those who do not have medical scheme cover but can occasionally use primary care services in the private sector. Nearly 85% of the population is entirely dependent on public sector hospital services, although a smaller section of the population is dependent on public sector primary care services. Not only financial resources are concentrated in the private sector; 79% of doctors work in this sector.8 The maldistribution of resources between the public and private health sectors, relative to the population that each serves, reflects inefficiencies and inequities that contribute to South Africa falling far short of the Millennium Development Goals.

The proposed NHI seeks to address these health system challenges. While the exact form that the NHI will take is unclear, it is envisaged that there will be a **single** pool of funds comprising allocations from general tax revenue and mandatory contributions by formal sector workers and their employers. These funds will be used to purchase quality health care for all South Africans from accredited public and private

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providers. It is likely that those who choose to take additional cover through medical schemes will be entitled to do so. The main intention is to provide universal financial protection against the costs of using health services when needed.

While the idea of an NHI has long been on the policy agenda, there has been limited public engagement and awareness about the issue. However, it is the public – as beneficiaries and contributors – who will be directly affected by an NHI and who will affect its implementation. The extent to which an NHI is acceptable to society is therefore crucial to its success.

Against this backdrop, we draw on data from a recently conducted national household survey to explore:

- public perceptions as to what key changes in the public health system are necessary to ensure the acceptability and sustainability of an NHI, and
- whether South Africans are ready for a change in the health system, particularly in relation to moving towards an NHI.

Methods

The national household survey was initiated by two South African universities (the Health Economics Unit at the University of Cape Town and the Centre for Health Policy at the University of the Witwatersrand, with inputs from colleagues at the London School of Hygiene and Tropical Medicine) and the national Department of Health. Data collection was contracted to an experienced survey company, the Community Agency for Social Enquiry (CASE).

The survey was nationally representative. Enumerator areas (EAs) were stratified by province, type of settlement (farm, informal settlement, tribal settlement, small holding, or urban settlement) and population group. In total, 960 EAs were selected across the 9 provinces, and 5 randomly selected households were interviewed within each EA, giving a total sample size of 4 800 households. The EAs within each stratum were selected with a probability proportional to the size of the EA, defined as the number of households within it. Fieldworkers were extensively trained to ensure the questions were well understood. Data were collected in May and June 2008; 20% of questionnaires were subjected to telephonic 'check-backs' for verification and double-entry data capture reduced errors. The data were weighted to national population levels. The questionnaire and study protocol were subject to ethical review by the University of Cape Town, and all respondents provided signed informed consent.

The questionnaire collected information on self-assessed health, health care utilisation, out-of-pocket spending and perceptions on the current public and private sectors, and views relating to a possible future NHI. To elicit perceptions and preferences, as is standard practice, the survey presented statements for respondents to agree or disagree with. Both positive and negative statements were presented to avoid

agreement bias. Respondents were asked what sources of information informed their views on public and private sector services, and whether they had recent experience of the public and private sectors.

The notion of an NHI was described as a 'publicly supported health insurance scheme', with the following detail provided: 'Imagine that government sets up a scheme to cover the health care costs for all South Africans. The scheme would cover the full costs for your day-to-day health care (when you need to go to a clinic or a doctor and for medicines) and for when you need to go to hospital.' It was not possible to provide a full description of what an NHI might entail. A wider range of more specific questions and discussions might allow for more detailed engagement with different forms of NHI. (The questionnaire is available on request.)

The data were analysed in STATA IC10. Monthly household expenditure allowed comparison across socio-economic quintiles. The reported expenditure was mapped against data from the larger Income and Expenditure Survey across provinces, population groups and other variables to confirm the validity of the socio-economic data.

Certain important prerequisites for NHI are not dealt with in this paper. They include improvements in the core functions of the public health system such as policy co-ordination between national and provincial departments, the governance and accountability framework, and financial and human resources management, which are all necessary to improve quality of care, capacity within the new body to establish effective contracting arrangements with public and private providers, and adequate management of the process and phasing of reform to ensure successful implementation.

Results

Public perceptions on the requisite changes to the public health system

Despite considerable ongoing debate about the exact form that the proposed NHI should take, a wide range of stakeholders agree that the most urgent first step towards an NHI is to improve public sector health services. This survey similarly reflects that public perceptions are clearly not very positive towards the public health sector at present; 45% of respondents expressed the view that patients at public hospitals are usually treated with respect and dignity. They reported that their view was based largely on media reports and the experience of family and close friends. Consequently, there is some concern about the extent to which views of public sector services are based on personal experience. Among those with recent personal experience of these services, 57% of respondents who had been admitted to a public hospital within the past year were of the view that patients are usually treated with respect and dignity.

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For a NHI to be feasible, the general public has to feel confident about using public sector services. Views as to what changes are required were explored by asking: 'What aspects of good quality care at public clinics/hospitals would give you trust and confidence in the service?' Respondents were presented with a list of possible options to rank. These options were based on key problems that had been identified through focus-group discussions with communities and facility exit interviews in previous research projects, ^{9,10} as well as concerns about public sector health services being discussed in the media, such as staff competence, drug availability, cleanliness of facilities, patient-provider interactions, confidentiality and privacy, and waiting times.

Regarding clinics, respondents placed the greatest emphasis on being assured that primary health care nurses (PHCNs) are adequately trained to treat patients. This was followed by wanting an assurance that they would be referred to a doctor if the PHCN were unable to treat them, with the third most important issue being the availability of drugs at public health facilities. However, there were considerable differences across socio-economic groups. For the poorest groups, drug availability and empathic staff-patient interactions were rated more highly than the average across all groups, with a slightly lower rating on adequately trained PHCN and a much lower rating on doctor referral than the average. Staff competence issues were of greatest importance for the richest groups.

Ten options were presented for ranking for public hospitals. To enable easier comparison across the options, the options were randomly assigned to two separate lists. Table I presents the options in each set and the percentage of respondents who ranked each option as the most or second most important issue to address. The results are compared between the poorest and richest quintiles and are ordered according to their relative importance to the poorest quintile. (This does not reflect the ordering of these options in the questionnaire.)

Across all respondents, the nature of patient-provider engagements and communication between them, as well as

cleanliness of the facility and the availability of drugs, were regarded as being of particular importance. Richer groups placed more emphasis on good communication between providers and patients, shorter waiting times and privacy in consultations than poorer groups, while availability of drugs, provision of patient transport and confidentiality were given more emphasis by poorer groups. These findings suggest the need not only to address these problems within existing services, but to take into account the possibility that different socio-economic groups have different expectations and experiences of quality and accessibility of care within public sector facilities.

South Africans' preparedness for major health system change

The national household survey indicates that the general public is not only concerned about the public health sector but also about aspects of the private health sector. For example, although 57% of respondents felt that private providers only provide care that is really needed, 43% were concerned that private providers may provide unnecessary care to make money, indicating a clear concern about how the profit motive affects private providers' behaviour.

What is particularly important is that South Africans have concerns about the affordability of medical schemes: 67% of all respondents said that they 'would join a publicly supported health insurance scheme if my monthly contribution was less than for current medical schemes'. Even more striking is that 71% of those who are *currently* members of medical schemes agreed with this statement. This finding strongly suggests that South Africans are willing to consider alternatives to the existing medical schemes.

Public acceptance of an NHI is strongly related to the extent to which the population is acquainted with the notion of insurance. This requires an understanding of the concept of making small, regular pre-payments to be drawn on at a time of need for health care to avoid the sometimes catastrophic

Table I. Percentage of respondents who ranked this aspect of public hospital care as the most or second most important issue to address

First set	Poorest quintile	Richest quintile
If the hospital was clean	52.8	57.1
If I was sure that I would be listened to and understood by doctors and nurses and	41.5	57.0
that I would understand what they tell me about my condition and treatment		
If I could make an appointment to see a doctor at the hospital at a specific time	41.0	47.3
If I was sure that hospital staff would keep my health problems confidential	33.1	25.8
If transport was provided to and from a hospital if I was referred there	31.3	12.5
Second set	Poorest quintile	Richest quintile
Second set If the hospital always had the drugs that I needed	Poorest quintile 58.8	Richest quintile 36.5
	1	1
If the hospital always had the drugs that I needed	58.8	36.5
If the hospital always had the drugs that I needed If the staff at the hospital are kind and understanding	58.8 56.0 38.6	36.5 56.7
If the hospital always had the drugs that I needed If the staff at the hospital are kind and understanding If I was able to see a nurse or doctor and discuss my health problems in private	58.8 56.0 38.6	36.5 56.7 48.6

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consequences of paying out-of-pocket when illness strikes. We found a good understanding of this concept among South Africans, with three-quarters of respondents agreeing with the statement: 'I would agree to pay a small amount each month so that if I get sick, health care will be free, even if I am not sick now'. Support for this statement was higher among medical scheme members (82%), who have been personally exposed to a pre-payment system, than non-members (74%).

Another factor that influences public acceptance of a universal pre-payment health financing system such as NHI is the extent to which the general public is familiar with the concepts of risk and income cross-subsidies and also supports these cross-subsidies. Income cross-subsidies refer to the wealthy making greater contributions to health care funding than the poor. Payment is according to an individuals' ability to pay, but all have access to the same range of health services. Risk cross-subsidies refer to people with a greater need for health care (i.e. high-risk individuals) being able to use more health services than those who are healthy (i.e. low-risk individuals), irrespective of the contribution to health care funding made by each group.

In general, South Africans do not appear to be well acquainted with, nor are they generally supportive of, the notion of risk cross-subsidies. Only 53% of all respondents agreed with the statement: 'I would be willing to pay the same amount of money each month as everyone else, even though others who are more sick than I am will use the services more than me'; 64% of current medical scheme members support risk cross-subsides. This strongly suggests that personal experience influences views on risk cross-subsidies and that there is a need for public education on the importance of risk-pooling.

There is substantial support for income cross-subsidies in South Africa. Given the difficulty of asking technical questions about the relative progressivity of funding contributions in a household survey where some respondents have no formal education, the research team depicted four health funding contribution options using pie charts and pictures of houses to indicate different socio-economic groups. Fig. 1 illustrates the progressive contribution option. The four options presented were:

- Everyone pays the same amount (flat Rand amount, which is regressive, i.e. the poor pay a greater proportion of their income than the rich)
- All pay the same proportion of their income as health care contributions (termed a proportional system)
- Progressive funding, where the proportion of income contributed increases with wealth; and
- The poorest don't have to pay (the poor are exempt from payments, with progressive contributions for middle- and high-income groups).

The majority of respondents (62%) preferred a financing system that is progressive (either with all contributing at least

something, or with the poorest not paying anything). However, there were considerable differences across socio-economic groups with the richest preferring proportional contributions while the poorest preferred progressive contributions (Fig. 2).

A final issue on which it is important to gauge public preferences is that of what type of organisation should administer the proposed NHI. Two-thirds of respondents indicated that they trust an organisation linked to government more than a private organisation to administer an NHI. Only the richest 20% of the population indicated a preference for a private organisation to manage an NHI.

Conclusions

This household survey strongly suggests that South Africans are ready for health system change, particularly when this 'change' is broken down into specific issues of focus, such as quality of care in facilities or income-cross subsidisation. Respondents raised considerable concerns about both the

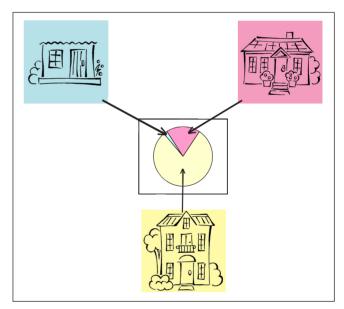


Fig. 1. One of the pictorial options included in household survey, representing a progressive contribution system.

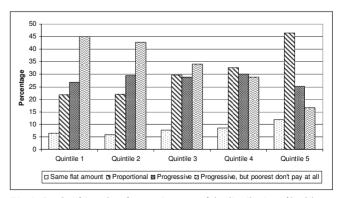


Fig. 2. South Africans' preferences in terms of the distribution of health care financing contributions according to socio-economic quintile.



public and private health sectors and pointed to areas of improvement in each. In terms of the private health sector, there are particular concerns about the affordability of medical scheme cover and about whether these schemes provide value for money.

The feasibility of an NHI is dependent on the improvement of public sector services, which the majority of South Africans will continue to rely on. Areas that need particular attention range from 'getting the basics right' such as ensuring that facilities are clean and that drugs are available, to addressing the many factors underlying continuing problems of staff morale and, consequently, provider engagement with patients. Possibly of equal importance is the need to improve public perceptions of public health services, which according to respondents are strongly influenced by what they read in the media.

There is also a great need for public engagement around what an NHI involves and about the rationale for fund pooling. While there is strong support for a progressive funding system (i.e. for income cross-subsidies), there is less support for risk cross-subsidies.

It is critical that public preferences be taken into account in designing an NHI and further research is needed to understand these preferences and what informs them in greater detail. If the proposed NHI is to be implemented successfully, it is important that the general public understands the rationale for its development and supports the core principles underlying universal pre-payment health financing systems. However, public support for pre-payment is unlikely to be forthcoming

unless there is confidence in the availability of quality health services.

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References

- African National Congress. A National Health Plan for South Africa. Johannesburg: African National Congress, 1994.
- De Beer C, Broomberg J. Financing health care for all is national health insurance the first step? S Afr Med J 1990; 78: 144-147.
- Department of Social Development. Transforming the Present Protecting the Future: Consolidated Report. Report of the Committee of Inquiry into a Comprehensive System of Social Security for South Africa. Pretoria: Department of Social Development, 2002.
- McIntyre D, van den Heever A. Social or national health insurance. In: Harrison S, Bhana R, Ntuli A, eds. South African Health Review: 2007. Durban: Health Systems Trust, 2007: 71-88. http://www.hst.org.za/uploads/files/chap5_07.pdf (accessed 23 February 2008).
- Department of Health. Restructuring the National Health System for Universal Primary Health Care. Report of the Committee of Inquiry into a national health insurance system. Pretoria: Department of Health. 1995.
- McIntyre D, Doherty J, Gilson L. A tale of two visions: The changing fortunes of social health insurance in South Africa. Health Policy Plan 2003; 18(1): 47-58.
- McIntyre D, Thiede M, Nkosi M, et al. A Critical Analysis of the Current South African Health System. Cape Town: Health Economics Unit, University of Cape Town and Centre for Health Policy, University of the Wittwatersrand, 2007.
- Day C, Gray A. Health and related indicators. In: Harrison S, Bhana R, Ntuli A, eds. South African Health Review 2007. Durban: Health Systems Trust, 2007. http://www.hst.org.za/ uploads/files/chap15_07.pdf (accessed 23 February 2008).
- Mills A, Palmer N, Gilson L, et al. The performance of different models of primary care provision in Southern Africa. Soc Sci Med 2004; 59(5): 931-943.
- Gilson L, Palmer N, Schneider H. Trust and health worker performance: exploring a conceptual framework using South African evidence. Soc Sci Med 2005; 61(7): 1418-1429

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