Perceptions of and Support for National Health Insurance in South Africa

Frederik Booysen

Population Health, Health Systems and Innovation (PHHSI), Human Sciences Research Council (HSRC)

Department of Economics, University of the Free State (UFS)

Paper presented at the biennial conference of the Economic Society of South Africa

30 August – 1 September 2017

Grahamstown

Background: For the purpose of the effective implementation of the proposed national health insurance policy it is necessary to have an understanding of the awareness and perceptions of and support for such policy among clients using the healthcare system.

Data: The South African National Health and Nutrition Examination Survey (SANHANES-1) in 2011-12 asked household heads a series of questions on healthcare utilisation and access and collected information on knowledge and perceptions of and support for national health insurance (NHI).

Method: Comparisons in awareness and perceptions of and support for national health insurance are drawn between private sector healthcare users with medical aid ('private') and public sector healthcare users without medical aid ('public'), using bivariate analysis. Probit regression models are used to assess the predictive value of type of healthcare user in explaining awareness and perceptions and of user type, awareness and perceptions in explaining support for national health insurance.

Findings: Awareness and knowledge of NHI is relatively low. There is consensus though as to the problematic nature of the lack of access to medical aid and private healthcare as well as the overall affordability of national health insurance. In most other respects, however, private sector users with medical aid are more pessimistic and less supportive of national health insurance than public sector users without medical aid. Perceptions of lower cost and affordability enhances support, while preferences for lower cost and full coverage but limited choice are dependent on benefitting directly from NHI in financial terms and on the quality of healthcare services improving.

Conclusion: Concerted efforts are required to develop a proper communications strategy to disseminate information on and garner support for the country's national health insurance policy, based on a rigorous assessment of the policy's implementation in its first pilot phase.

JEL codes: I11, I13, I14, I18

Keywords: public healthcare, private healthcare, medical aid, national health insurance, South Africa

1. Introduction

The inequalities and inequity in South Africa between the public and private healthcare sectors in terms of availability, acceptability and affordability is well documented (Harris et al., 2011; Mayosi & Benatar, 2014). In response to the quest for universal health coverage (UHC), and following the publication in August 2011 of the Green Paper on National Health Insurance (NHI), the government in 2012, as part of the fourteen-year implementation period, embarked on a pilot of a national health insurance programme in eleven health districts across the country. In December 2015, government launched the White Paper, which was officially adopted in June of 2017. In the process of implementing such policy, or any public policy for that matter, it is important to have a grasp of healthcare users' awareness and knowledge, and perceptions of and support for national health insurance (NHI). This paper sets out to explore differences in awareness, knowledge and perceptions of and support for national health insurance in South Africa, using data from a large nationally representative survey.

2. Literature review

A handful of studies have documented the awareness and/or perceptions of and support for national health insurance among healthcare users or providers in South Africa.

The first study, by Shisana et al. (2006), which focused on users, in 2005 collected nationally representative data on public perceptions of national health insurance and selected health financing policy issues from more than 16,000 individuals, documenting a majority but not universal support for national health insurance. The second of these studies, conducted during 2008, in the early run-up to the publication of the Green Paper (McIntyre et al., 2009), employs a cross-sectional nationally representative survey of 4,800 households to gauge public perceptions regarding changes to the public health system required to ensure the acceptability and sustainability of and readiness for national health insurance. The study finds that users in both the public and private sectors are dissatisfied with healthcare services, which in their opinion, signifies that South Africans are ready for a health systems change of this nature. However, the authors conclude that, "public support for pre-payment is unlikely to be forthcoming unless there is confidence in the availability of quality health services" (McIntyre et al., 2009: 725). The third study, by Sishana (2012), employs data from the South African Social Attitudes Survey (SASAS) to show that women are more supportive of national health insurance than men, implying a positive impact on the health of women and girls and on gender equality. The last, Setswe, Nyasulu and Witthun (2014) and Setswe et al. (2015/2016), employs data from a cross-sectional three-province survey of approximately 800-900 adults. In this research, conducted in 2013, awareness of the NHI was generally good, expectations high, but knowledge poor.

Two published studies explore awareness, perceptions and support on the provider side, both focusing on general practitioners (GPs). In-depth, qualitative interviews with seventy-six clinicians in the Eastern Cape province in 2012 revealed that government "will face significant challenges in garnering the support of private GPs. Concerns revolved around remuneration, state control, increased workload, clinical autonomy and diminished quality of care and working conditions" (Surender et al., 2015: 759). Surender, Van Niekerk and Alfers (2016), using a qualitative approach, report contracted GPs' views of and experiences with national health insurance in 2015 in Tshwane district, one of the pilot sites, based on fifty-five in-depth interviews. The authors found strong support among GPs for the idea of national health insurance, but document a "general scepticism that private doctors would embrace the scheme on the scale required". GPs interviewed (Surender et al., 2016: 1092).

Published material regarding the actual pilot implementation of the NHI programme is even sparser, with some work published approximately three years ago as two short editorials (Matsoso & Fryatt, 2013; Ogunbanjo, 2014). Fusheini and Eyles (2016), though, reviews material for NHI pilot districts from multiple sources and concludes that, "there is a need for a minimal universal coverage and emphasis on district particularity and positive discrimination" in favour of underserved and disadvantaged communities.

3. Data

SANHANES-1 is a cross-sectional survey. The purpose of the study was to recruit and establish a cohort of 5,000 households to be followed up over the coming years. The survey applied a multi-stage disproportionate, stratified cluster sampling approach. Based on the HSRC 2007 Master Sample, a random sample of 1,000 Enumerator Area (EAs) from the 2001 census mapped using aerial photography, 500 EAs representative of the socio-demographic profile of South Africa were identified and a random sample of 20 visiting points (VPs) randomly selected from each EA, yielding an overall sample of 10,000 VPs. Of 10,000 households (VPs) sampled, 8,168 were valid, occupied households. A total of 1,832 VPs were abandoned dwellings. Of the total valid VPs, 6,306 (77.2%) were interviewed, while 1,289 (15.8%) refused to take part in the survey. The survey was conducted in 2011/12.

In the household questionnaire, which was answered by the household head, a variety of questions on health care utilisation, access and equity was followed by a question asking respondents, "In the past 6 months, have you seen, read or heard any news or information about a proposal by government to introduce a programme to provide national health insurance for all South Africans." Following on this question respondents were provided with the following statement: "We are now going to talk about some of the changes government is planning with regard to health care in South Africa. The government wants to create a National Health Insurance, which is a system in which everyone is covered by health insurance and people contribute according to ability to pay and use health services according to their need." Subsequently, respondents were asked a total of eleven questions on various aspects regarding national health insurance and healthcare financing.

4. Method

The main purpose of this paper is to investigate awareness and perceptions of and support for a national health insurance policy in South Africa. The main emphasis is on the views of two important groups of constituents, namely (a) public sector users without medical aid (who are the main target beneficiaries of the new policy) *versus* (b) private sector users with medical aid (who are directly affected by major changes in the existing private health insurance industry).[1] The analysis comprises three components. To investigate the socio-economic gradient across these two groups of health care users, the first step in the analysis, a wealth index and corresponding wealth quintiles were constructed by applying Multiple Correspondence Analysis (MCA) to the household survey data.[2] In the next step, the following five sets of outcomes are compared across the two groups of healthcare users: (i) access to and satisfaction with healthcare; (ii) perspectives on equity in healthcare access; (iii) awareness and knowledge of national health insurance; (iv) perceptions of national health insurance; and (v) support for national health insurance. In all cases, don't know responses are treated as missing. Finally, a series of probit regression models are estimated to answer two sets of questions. First, the role of healthcare user type as predictor of awareness, perceptions and support is determined. Second, regression analysis is used to determine the extent to which various opinions of national health insurance predicts support for the policy when adjusting for healthcare user-type and awareness.

5. Results

As expected, the vast majority of households with medical aid using private healthcare fall in the upper wealth quintiles (Table 1). In fact, more than two thirds of households with medical aid using private healthcare are from the top quintile. In turn, the three quarters of households without medical aid relying on the public healthcare sector are approximately equally distributed across the bottom three quintiles, with 6.6% only in the top quintile.

[1] The sub-sample for these comparisons is 5,068 or 80.4% of the total sample (n=6,303). Excluded from the sub-sample, are those without medical aid using private healthcare services (n=621; 9.9%), those with medical aid using public healthcare services (n=191; 3.0%), and those using neither private nor public healthcare services (n=175; 2.8%), the balance being non-response to the questions on healthcare utilisation and/or access to medical aid (n=248; 3.9%). The total sample here is 6,303 and not 6,306 as unique identifiers could not be constructed for three households, i.e. some visiting point (VP) information was missing.

[2] Use was made of a total of sixteen variables, including housing type, water and sanitation services, and asset ownership. The percentage inertia explained by the first dimension is approximately 90%. The full list of thirteen assets is as follows: ownership of a fridge, television, stove, mobile phone, radio, DVD, washing machine, computer, DSTV, motorcar, vacuum cleaner, and telephone (landline), internet access. Multiple imputation by iterative binomial and multinomial logistic regression analysis, applied using Stata's *mi* function, was employed to deal with item non-response. Asset ownership was imputed as a function of the ownership of the twelve other assets, whereas housing type was imputed from information on the material of the wall and roof of a dwelling. The wealth index is the average index value calculated across each of the 10 iterations.

[Table 1 about here]

There are stark and statistically significant differences between healthcare users in terms of access to healthcare (Table 2). Compared to private sector users with medical aid, almost three times as many public sector users without medical aid reported having to postpone receiving healthcare, while more than twice as many reported experiencing difficulties with affording the cost of healthcare or prescription medicine. Eleven percent more private sector users with medical aid lived within close reach (0-10km) of a healthcare facility. In turn, a larger proportion of public sector users without medical aid lived more than 20km away from a healthcare facility (6% versus 4%).

[Table 2 about here]

Table 3 equally so reveal vast differences in satisfaction with healthcare. Many more private sector users with medical aid are very satisfied with the quality and cost of their healthcare. The quality gap is particularly large: approximately half of private sector users with medical aid was very satisfied compared to only 11.9% of public sector users without medical aid. Concomitantly, more public sector users without medical aid were only satisfied with quality and cost of healthcare. Another indication of the quality divide between the public and private sectors is that many more respondents without medical aid were indifferent about the quality of care they receive in the public sector (17.1% versus 3.1%), or dissatisfied or very dissatisfied (21.9% versus 2.5%) when compared to private sectors users with medical aid.

[Table 3 about here]

[Table 4 about here]

This group of healthcare users agree on the extent to which access to medical aid and private care is a problem, i.e. there are no statistically significant difference between the two groups (Table 4). Approximately three-quarters of respondents indicated that such lack of access is a "very serious problem". However, the two groups of healthcare users had distinctly different views of whether those with higher income should be able to afford better care than people with lower incomes. A much greater percentage of public sector users without medical aid (34.6%) felt that this was "definitely wrong" when compared to private sector users with medical aid (23.9%).

[Table 5 about here]

Only approximately one in five respondents that responded other than "don't know" had knowledge of or information on the national health insurance policy (Table 5). There is a huge divide moreover (31.4%) between the two groups of public (13.3%) and private sector users (44.7%) in terms of awareness of the national health insurance policy. Among those public sector users without medical aid who were aware of the policy, a somewhat greater number reported having either "a little" or "not yet enough" information when compared to private sector users with medical aid, among whom a much larger proportion had "a fair amount" of knowledge (34.3% versus 26.4%).

[Table 6 about here]

Perceptions on national health insurance (Table 6), as one may expect, did differ statistically significantly between the two groups of healthcare users ($p<0.001$). The exception is views on the affordability of the policy, where users were in agreement. Almost three-quarters of users was of the opinion that national health insurance is affordable. Public sector users without medical aid were more likely to trust government to run the new health insurance scheme in comparison to private sector users with medical aid, of whom just more than half put their trust in a private organisation (79.2% versus 48.9%). In the case of the other issues, private sector users with medical aid had less positive views of national health insurance than public sector users without medical aid, i.e. fewer felt that national health insurance was cheaper, that their family would be better off, that the country would be better off, or that the quality of healthcare would improve under national health insurance.

[Table 7 about here]

The reported differences in support for national health insurance mirror the above differences in perceptions, i.e. there was less support for the new policy among private sector users with medical aid than among public sector users without medical aid (Table 7). Fewer private sector users with medical aid was of the opinion that NHI is a top priority and that insurance for all is the priority (as opposed to making healthcare better and more affordable). In addition, fewer supported a national health insurance that lowered healthcare costs and provided coverage to all South Africans, but limited the choice of doctor, hospital, or treatment. In other words, choice is relatively important for current private sector users with medical aid. A greater number of private sector users with medical aid preferred the current medical aid system over national health insurance. The one exception, however, is the question of whether health insurance for all remains important even if taxes increase. In fact, a greater percentage of private sector users with medical aid were in support of this statement compared to public sector users without medical aid (64.4% versus 61%). The difference, however, was not statistically significant.

[Table 8 about here]

Table 8 presents the first set of regression results and confirm the above descriptive findings in regards to differences between healthcare users. The coefficient on awareness is positive and statistically significant. The other coefficients are all negative (i.e. private sector users with medical aid are less in favour of the relevant statement), but not all are statistically significant. The strongest results in terms of statistical as well as economic significance is for the following four outcomes: (a) better quality healthcare under national health insurance; (b) preferring national health insurance over the current medical aid system; (c) insurance for all being the priority as opposed to making healthcare better and more affordable; (d) supporting a national health insurance with lower costs and full coverage, but less choice. The probability of a private sector user with medical aid being in favour of these statements regarding national health insurance is between 10.3% and 14.8% smaller compared to a public sector user without access to medical aid.

[Table 9 about here]

The second set of regression results is presented in Table 9. Public sector users without medical aid expressed a significantly stronger choice in terms of preferring the proposed national health insurance over the current medical aid system [4] or considering NHI for everyone as a top priority [2]. In other words, private users with medical aid are more in favour of the current medical aid system than a new national health insurance. The same is true for insurance for everyone being the top priority. Awareness predicts only one outcome, namely the preference for cost and coverage over choice. More specifically, those who at the time were aware of the national health insurance policy are less likely to accept a national health insurance option that is less costly and ensures full coverage, but limits choice of healthcare provider or treatment.

The single most important predictor of support for NHI in terms of perceptions is views regarding its cost and affordability. Being of the opinion that NHI is affordable significantly increase the probability of being of the opinion that NHI is a top priority [1] and that NHI is important even if taxes increase [3], and preferring NHI with lower cost and full coverage, but less choice [5]. Likewise, being of the opinion that the NHI is cheaper than the current medical aid system increases not only the probability of being of the opinion that NHI is a top priority [1] and that a NHI with lower cost and full coverage, but less choice is preferred [5], but so too the probability of preferring the proposed NHI over the current medical aid system [4]. Support for NHI as top priority is also enhanced when the NHI is perceived to make the country better off. The support for an NHI that is less costly and ensures full coverage, but offers less choice [5], is also influenced by two other factors, namely whether such policy is perceived to have very direct benefits, i.e. making one's family better off financially, and whether the care provided under NHI is of a better quality.

6. Discussion

The first finding to highlight is that awareness of the NHI at the time was considerably low, especially among the policy's main intended beneficiaries, namely public sector healthcare users with no medical aid. Yet, even less than half of private sector users was not aware of the policy, while of these, half or more described their knowledge as "a little" or "not yet enough". These low levels of awareness and knowledge may be attributed to the fact that this survey was conducted at the very outset of the launch of the new policy, when one would not expect awareness to be very high. Nevertheless, other authors, notably Setswe, Nyasulu and Witthun (2014) and Setswe et al. (2015/2016), has also documented low levels of knowledge, despite reporting high levels of awareness. Setswe et al. (2014/2015) and Setswe et al. (2015) put forward a range of vehicles for a community consultation plan to address the matter, including "house-to-house campaigns, town hall-type of meetings, workplace consultations and road shows at significant sites in communities such as clinics, schools, mines, farms and pension paypoints" (Setswe et al., 2014: 221).

A second main finding is that support for NHI, not surprisingly, is greater among those perceived to gain the most from the policy (improved access and financial protection) as opposed to those perceived to potentially stand to lose (higher taxes and less choice with fewer benefits). The research also reveals how perceptions regarding the NHI's cost and affordability and its direct benefits and impact on the quality of healthcare services drives perceived support for the new policy. Imperative, at this early stage of implementation, is to conduct an expanded survey(s) to gauge support, knowledge, awareness, perceptions, behaviour and satisfaction with national health insurance in the 11 pilot districts, building on studies such as those by Dalinjong and Laar (2012), Jehu-Appiah et al. (2012) and Lee, Suh and Song (2009), including replicating the NHI survey module in SANHANES-1 where appropriate and feasible to determine how the awareness, knowledge and perceptions reported here may have changed over time in the subsequent five years.

An important limitation has to be kept in mind when interrogating these results. The response rate to the household (Visiting Point) survey was relative low (77.2%). When excluding 'don't know' answers to the questions on national health insurance, non-response increases further, to as high as an additional 22.6% of respondents for one specific question, primarily one may assume due to the reported limited awareness and knowledge of NHI on the part of respondents.

7. Conclusion

Concerted efforts are required to develop a proper communications strategy to disseminate information on the country's national health insurance policy and its implementation to healthcare users, in the private sector, but especially in the public sector. What is paramount, moreover, is that evidence on the benefits and success of the NHI policy in the 11 pilot districts be interrogated by researchers and be made available in the public domain for stakeholders and citizens to draw informed conclusions regarding their support for this policy.

8. References

Dalinjong, P.A., Laar, A.S. (2012). The national health insurance scheme: perceptions and experiences of health care providers and clients in two districts in Ghana. *Health Economics Review, 2*, 13.

Evans, M., & Shisana, O. (2012). Gender differences in public perceptions on National Health Insurance. *South African Medical Journal, 102*(12), 918-924.

Fusheini, A., & Eyles, J. (2016). Achieving universal health coverage in South Africa through a district health system approach: conflicting ideologies of health care provision. *BMC Health Services Research, 16*, 558.

Harris, B., Goudge, J., Ataguba, J.E., McIntyre, D., Nxumalo, N., Jikwana, S., & Chersich, M. (2011). Inequities in access to health care in South Africa. *Journal of Public Health Policy, 32*(S1), S102-S123.

Jehu-Appiah, C., Aryeetey, G., Agyepong, I., Spaan, E., & Baltussen, R. (2012). Household perceptions and their implications for enrolment in the National Health Insurance Scheme in Ghana. *Health Policy and Planning, 27*, 222-233.

Lee, S., Suh, N.K., & Song, J. (2009). Determinants of public satisfaction with the National Health Insurance in South Korea. *International Journal of Health Planning and Management, 24*(2), 131-146.

Matsoso, M.P., & Fryatt, R. (2013). National Health Insurance: The first 18 months. *South African Medical Journal, 103*(3), 156-158.

Mayosi, B.M., & Benatar, S.R. (2014). Health and Health Care in South Africa – 20 Years after Mandela. *New England Journal of Medicine, 371*(14), 1344-1353.

McIntyre, D., Goudge, J., Harris, B., Nxumalo, N., & Nkosi, M. (2009). Prerequisites for National Health Insurance in South Africa: Results of a national household survey. *South African Medical Journal, 99*(10), 725-729.

Ogunbanjo, G. (2014). South Africa's National Health Insurance revisited: "Quo vadis?" ("Whither goest thou?"). *South African Family Practice, 56*(2), 84.

Setswe, G., Nyasulu, P., & Witthuhn, J. (2014). Do South Africans really understand the National Health Insurance scheme? A survey of adults in three provinces. *African Journal of Physical, Health Education, Recreation and Dance, S1*(1), 221-233.

Setswe, G., Muyanga, S., Witthuhn, J., & Nyasulu, P. (2015). Public awareness and knowledge of the National Health Insurance in South Africa. *Pan African Medical Journal, 22*,19.

Setswe, G., Witthuhn, J., Muyanga, S., & Nyasulu, P. (2016). The new National Health Insurance policy in South Africa: Public perceptions and expectations. *International Journal of Healthcare Management, 9*(2), 77-82.

Shisana, O., Rehle, T., Louw, J., Zungu-Dirwayi, N., Dana, P., & Rispel, L. (2006). Public perceptions on national health insurance: Moving towards universal health coverage in South Africa. *South African Medical Journal*, *96*(9), 814-818.

Shisana, O. (2012). Gender differences in public perceptions on National Health Insurance. *South African Medical Journal, 102*(12), 918-924.

Surender, R., Van Niekerk, R., Hannah, B., Allan, L., & Shung-King, M. (2015). The drive for universal healthcare in South Africa: views from private general practitioners. *Health Policy and Planning*, *30*, 759-767.

Surender, R., Van Niekerk, R., & Alfers, L. (2016). Is South Africa advancing towards National Health Insurance? The perspectives of general practitioners in one pilot site. *South African Medical Journal, 106*(11), 1092-1095.

Table 1: Health care utilisation, by wealth quintile

Wealth index	Public sector users with no medical aid	Private sector users with medical aid	Total
Quintile 1	26.1	1.2	20.0
Quintile 2	26.0	1.9	20.1
Quintile 3	22.9	7.2	19.9
Quintile 4	18.4	21.1	20.0
Quintile 5	6.6	68.7	19.9
Total	*100.0*	*100.0*	*100.0*

Note: Results are weighted. 'Total' figure represents all respondents. The reported differences are statistically significant ($p<0.001$). Due to weighting, the total observations are not distributed perfectly equally across the five wealth quintiles. Totals may not add up due to rounding.

Table 2: Healthcare access, by healthcare user

	Public sector users with no medical aid	Private sector users with medical aid	Total	
Postponed care	23.9	8.5	21.0	***
Difficulty affording cost of healthcare	30.9	14.1	27.2	***
Difficulty affording prescription medicine	29.6	13.0	25.7	***
Distance to nearest healthcare facility:				
0-10 kilometres	76.0	85.0	77.7	***
11-20 kilometres	18.1	11.0	16.3	
21-30 kilometres	3.9	2.5	3.6	
>30 kilometres	2.1	1.5	2.1	
Total	*100.0*	*100.0*	*100.0*	

Note: Results are weighted. 'Total' figure represents all respondents. Statistical significance: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

Table 3: Satisfaction with healthcare, by healthcare user

	Public sector users with no medical aid	Private sector users with medical aid	Total	
Satisfaction with quality of healthcare:				
Very satisfied	11.9	50.2	21.2	***
Satisfied	49.1	44.3	48.4	
Neither satisfied nor dissatisfied	17.1	3.0	13.6	
Dissatisfied	14.6	1.8	11.4	
Very dissatisfied	7.3	0.7	5.5	
Total	*100.0*	*100.0*	*100.0*	
Satisfaction with cost of healthcare:				
Very satisfied	13.0	29.7	16.5	***
Satisfied	48.5	39.9	46.7	
Neither satisfied nor dissatisfied	21.6	12.4	19.1	
Dissatisfied	11.9	12.3	12.3	
Very dissatisfied	5.0	5.8	5.4	
Total	*100.0*	*100.0*	*100.0*	

Note: Results are weighted. 'Total' figure represents all respondents. Statistical significance: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

Table 4: Perspectives on equity, by healthcare user

	Public sector users with no medical aid	Private sector users with medical aid	Total	
Lack of access to medical aid and private care:				
Very serious problem	77.8	75.1	76.8	
Serious problem	11.3	14.0	12.3	
Somewhat serious problem	6.1	7.2	6.4	
Not a serious problem	4.8	3.6	4.6	
Total	*100.0*	*100.0*	*100.0*	
People with higher income should afford better care:				
Definitely right	22.6	23.0	22.7	***
Somewhat right	11.1	15.4	12.0	
Neither right nor wrong	23.7	26.9	24.1	
Somewhat wrong	8.0	10.8	8.7	
Definitely wrong	34.6	23.9	32.6	
Total	*100.0*	*100.0*	*100.0*	

Note: Results are weighted. 'Total' figure represents all respondents. Statistical significance: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

Table 5: Awareness and knowledge of national health insurance, by healthcare user

	Public sector users with no medical aid	Private sector users with medical aid	Total	
Have information on NHI	13.3	44.7	20.4	***
Level of knowledge:				
A lot	17.3	16.4	17.4	
A fair amount	26.4	34.3	31.3	
A little	35.7	32.5	33.6	
Not yet enough	20.6	16.8	17.7	
Total	*100.0*	*100.0*	*100.0*	

Note: Results are weighted. 'Total' figure represents all respondents. Statistical significance: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

Table 6: Perceptions of national health insurance, by healthcare user

	Public sector users with no medical aid	Private sector users with medical aid	Total	
Government should implement NHI	79.2	48.9	72.1	***
NHI is affordable	74.3	74.7	73.9	
NHI is cheaper than current arrangement	75.8	62.1	73.0	***
Family financially better off under NHI	75.2	63.3	72.1	***
Country better off under NHI	76.6	70.4	75.0	***
Better quality of care under NHI	79.6	62.3	75.0	***

Note: Results are weighted. 'Total' figure represents all respondents. Statistical significance: * p<0.05, ** p<0.01, *** p<0.001.

Table 7: Support for national health insurance, by healthcare user

	Public sector users with no medical aid	Private sector users with medical aid	Total	
NHI is a top priority	86.3	79.1	84.3	***
Insurance for all is the priority	53.3	40.5	49.6	***
NHI is important even if taxes increase	61.0	64.4	61.3	
Prefer NHI over current medical aid system	73.1	61.1	70.2	***
Support NHI with lower cost but less choice	75.8	60.4	71.3	***

Note: Results are weighted. 'Total' figure represents all respondents. Statistical significance: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

Table 8: Awareness, perceptions and support for national health insurance, by healthcare user

Dependent variable	**Independent variable:** private users with medical aid *versus* public users with no medical aid		
1. Awareness			
Have information on NHI	0.212	(0.023)	***
2. Perceptions			
NHI is affordable	-0.022	(0.027)	
NHI is cheaper	-0.072	(0.031)	*
Family financially better off	-0.064	(0.030)	*
Country better off	-0.025	(0.031)	
Quality of healthcare better	-0.103	(0.028)	***
3. Support			
NHI is a top priority	-0.050	(0.023)	*
Insurance for all is the priority	-0.123	(0.032)	***
Prefer NHI over current medical aid system	-0.121	(0.030)	***
Support NHI with lower cost and full coverage, but less choice	-0.148	(0.028)	***

Note: Results are weighted. Adjusted for household head's age, sex and race. Results are for ten individual probit regression models and are reported as marginal effects calculated at the mean. The regression model for 'NHI is important even if taxes increase is not reported here as the model did not pass the test for overall fit ($p>0.05$). Robust standard errors are reported in parentheses. Statistical significance: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

Table 9: Healthcare user type, awareness and perceptions of national health insurance as predictors of support for national health insurance

	Dependent variables (yes/no):				
Independent variables	**1.** NHI is a top priority	**2.** Insurance for everyone is the priority	**3.** NHI is important even if taxes increase	**4.** Prefer NHI over current medical aid system	**5.** Prefer NHI with lower cost and full coverage, but less choice
Private sector user with medical aid	-0.016 (0.025)	-0.089 (0.037) *	0.038 (0.038)	-0.114 (0.034) ***	-0.055 (0.031)
Aware of NHI	-0.026 (0.021)	-0.062 (0.031)	0.000 (0.033)	-0.017 (0.030)	-0.108 (0.027) ***
NHI is affordable	0.150 (0.020) ***	0.006 (0.033)	0.134 (0.033) ***	0.042 (0.031)	0.077 (0.028) **
NHI is cheaper than current medical aid system	0.056 (0.019) **	0.022 (0.032)	0.036 (0.033)	0.081 (0.032) *	0.108 (0.028) ***
Family is financially better off under NHI	0.036 (0.025)	0.015 (0.045)	0.071 (0.045)	0.005 (0.044)	0.137 (0.038) ***
Country is better off under NHI	0.061 (0.026) *	-0.029 (0.046)	0.054 (0.047)	0.074 (0.045)	-0.009 (0.044)
Quality of healthcare is better under NHI	0.020 (0.025)	0.047 (0.041)	0.080 (0.041)	0.014 (0.040)	0.101 (0.035) **

Notes: Results are weighted. The independent variables are all binary in nature (yes/no). The comparison group for 'private sector user with medical aid' is 'public sector user with no medical aid', 'make healthcare better and more affordable' for 'insurance for everyone is the priority' and 'no' for all other outcomes. Adjusted for household head's age, sex and race. Results are for probit regression models and are reported as marginal effects calculated at the mean. Robust standard errors are reported in parentheses. Statistical significance: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.