Innovative Medicines South Africa

National Health Insurance Policy Brief 21

Myths about Medical Schemes

The purpose of this series of policy briefs on National Health Insurance (NHI) and the related IMSA web-site is to put in the public domain material and evidence that will progress the technical work of developing a National Health Insurance system in South Africa. This includes tools for costing NHI and evidence on where savings could be achieved in moving to a future mandatory system with universal coverage.

The fundamental reason for these policy briefs has been to put hard evidence on issues relating to healthcare and NHI in the public domain. This policy brief deals with several pervasive myths about medical schemes that have surfaced in debates and in the NHI Green Paper[1]. Fresh evidence is presented on each of the myths in order to inform future debate.

1. Myth that Medical Scheme Beneficiaries are mostly White

The NHI Green Paper[1] says: "Prior to the 1994 democratic breakthrough, South Africa had a fragmented health system designed along racial lines. One system was highly resourced and benefitted the white minority. The other was systematically under-resourced and was for the black majority."

"The Constitution has outlawed any form of racial discrimination and guarantees the principles of socioeconomic rights including the right to health. Attempts to deal with these disparities and to integrate the fragmented services … did not fully address the inequities. … Post 1994 attempts to transform the healthcare system and introduce healthcare financing reforms were thwarted. This has entrenched a two-tiered health system, public and private, based on socioeconomic status and it continues to perpetuate inequalities in the current health system."

While the Green Paper does say that the current two tiered system is based on socioeconomic status, a quick reading of the paragraphs leaves a sense that the private sector is still largely for whites.

In November 2011 COSTAU issued a statement[2] which is much bolder on the race issue. Describing the public and then the private sectors: "Seventeen years into democracy, the South African health care system is still flawed by the imbalances of the past. It was designed to service the minority at the expense of the majority, which has led to an unequal, costly, wasteful and unsustainable two-tier system, consisting of:

- A public health service which treats health as a social need, yet is starved of adequate funding and resources. Less than 40% of total health care resources are in this sector, yet it serves 85% of the population, the majority of whom are black and poor.
- An expanding private sector, which treats healthcare as a market-driven private business. It accounts for more than 60% of the total healthcare resources, yet it serves a minority of the population, the majority of whom are white and wealthy."

This characterisation of the two-tier system as being black-white may be useful political rhetoric but it is simply no longer true: in 2010 Whites made up only 35.7% of medical schemes. The three graphs below, using official Government figures and StatsSA surveys, show the figures in 2010 and how the position has changed historically.

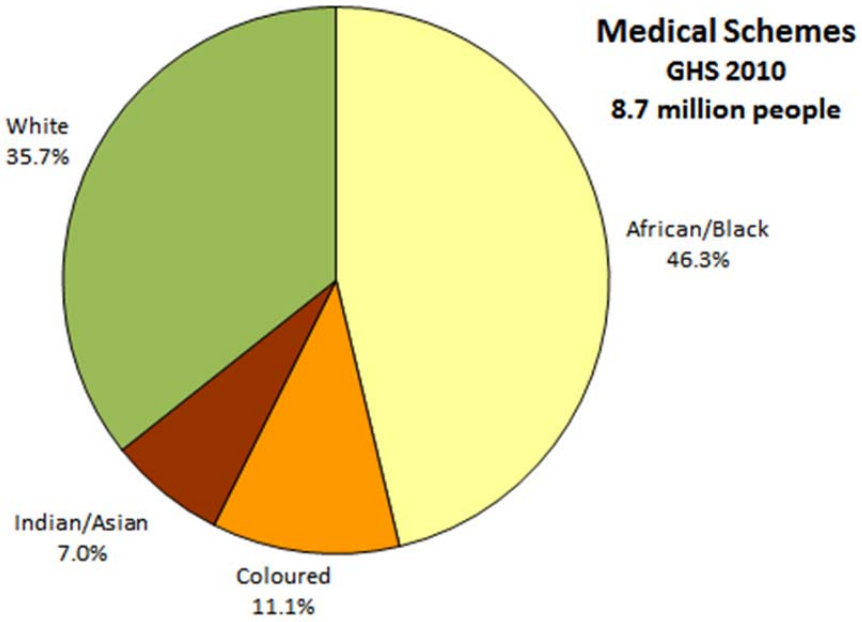

Figure 1: Ethnicity of People belonging to Medical Schemes in 2010 using the StatsSA General Household Survey 2010

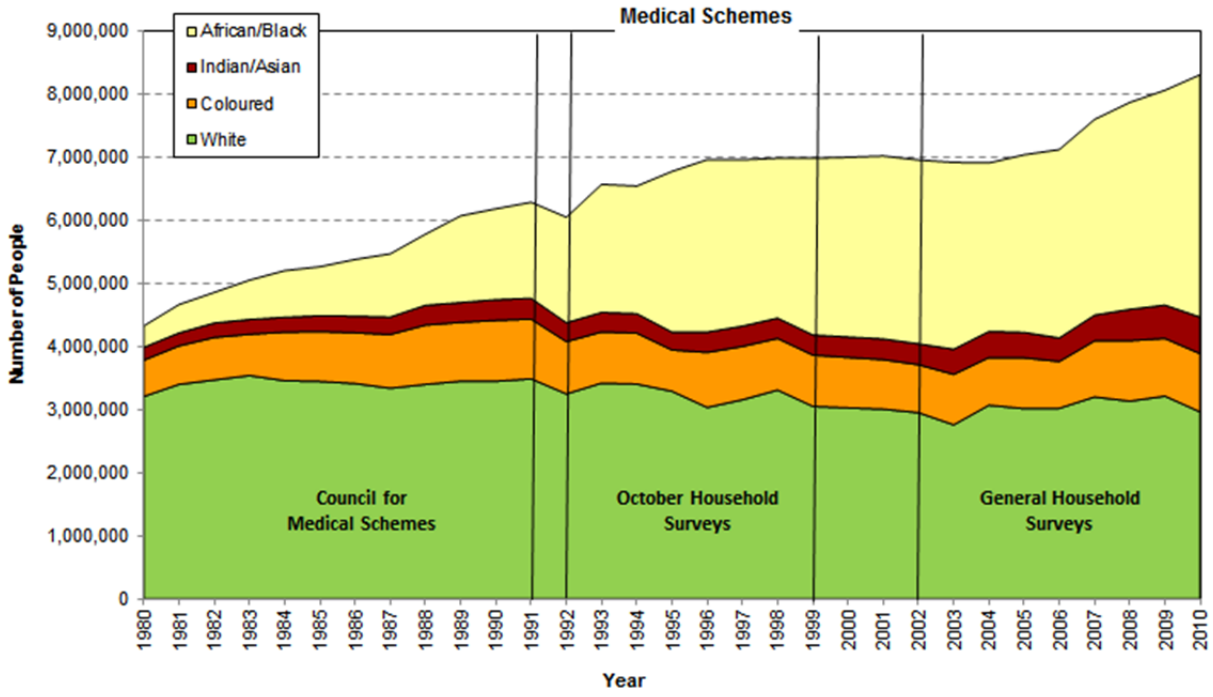

Figure 2: Historic Ethnicity of People belonging to Medical Schemes[a]

[a] The data were compiled by Prof Servaas vd Berg, Prof Alex vd Heever and Prof Heather McLeod. Annual reports from the Council for Medical Schemes had ethnicity data, as reported by schemes, until 1991. From 1992 onwards, only survey data is available and this is from StatsSA. October Household Surveys were used from 1993 to 1999 and these were replaced by General Household

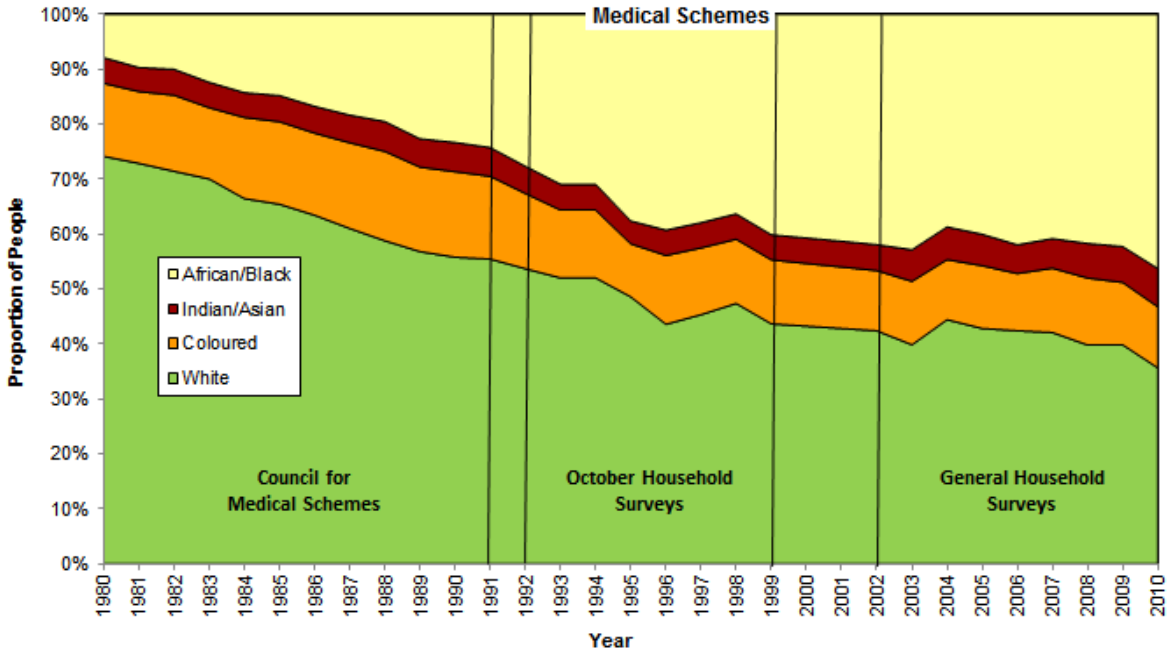

Figure 3: Historic Ethnicity of People belonging to Medical Schemes

The graph above shows that in 1980 only 7.9% of those covered by medical schemes were African/Black[b]. This proportion grew steadily to 30.9% by 1994 and to 46.3% by 2010. In 1994, Whites were 52.0% of the medical scheme population, with the "previously-disadvantaged[c]" being 48.0% of medical schemes. In 2010 (see Figure 1), this group has grown to be 64.3% with Whites making up only 35.7% of medical schemes.

There are two authoritative sources on the history of healthcare in South Africa. A history both public and private healthcare in South Africa is given in the Department of Health submission to the Taylor Committee in 2002[3]. The public sector history of healthcare legislation begins in 1833 when the first Public Health Act was promulgated following a smallpox epidemic in Kimberly. "Local authorities were given the power to establish hospitals and departments while the government advanced 50 percent of the costs of expenses and maintenance." The Department of Health was not established until the Public Health Act of 1919. "The intention of the Act was to decentralise. The Department of Health was given powers to advise, assist and if necessary coerce the local authorities and provincial administration in fulfilling their public health responsibilities."

The private health insurance history begins with the first private sector fund which was "the De Beers Consolidated Mines Ltd. Benefit Society, established in 1889. By 1910 seven such schemes were in existence" and there were 48 schemes by 1940, with a largely employment focus. Although medical schemes were not regulated until 1956, the split into public and private healthcare was well in existence before the beginning of the formal apartheid years in 1948.

An even earlier history of healthcare in South Africa is given in the book by Van Rensburg[4]. The documented history of healthcare in South Africa begins in 1652 under Dutch rule. The period 1795 to 1910 under British rule saw the extensive professionalization of healthcare provision, the registration of doctors and the establishment of hospitals. By the time of Union in 1910, two divergent healthcare systems were already entrenched. Van Rensburg describes the two systems as Western medicine and the traditional medicine of the indigenous people.

Surveys from 2008 onwards. The periods were linked by deriving three missing values. The survey data is adjusted to the total medical scheme beneficiaries reported by CMS.

[b] The descriptions of ethnic groups are those in use by StatsSA.

[c] African/Black plus Coloured plus Indian/Asian

2. Myth that Medical Schemes are for the Wealthy

There has for some time been evidence in the public domain that medical scheme membership by income-level shows a strong relationship between income and the proportion of that income group that are on medical schemes[5,6]. However that does not mean that most of the members of medical schemes have high incomes (or whatever "wealth" means in the context of COSATU's assertion). The actual numbers, not proportion covered, need to be considered.

The evidence about the proportion on medical schemes by income was derived from StatsSA household survey data (GHS2005 and more recently, GHS2008). Actual data on income levels and medical scheme membership was made available more recently by National Treasury and SARS in a new annual publication on Tax Statistics[7]. This data was analysed and reported on in IMSA Policy Brief 20 on the Tax Base in South Africa[8]. The graph below shows the individual taxpayers numbers who used the medical expenses deduction in 2009 (in tax returns proceed by March 2010).

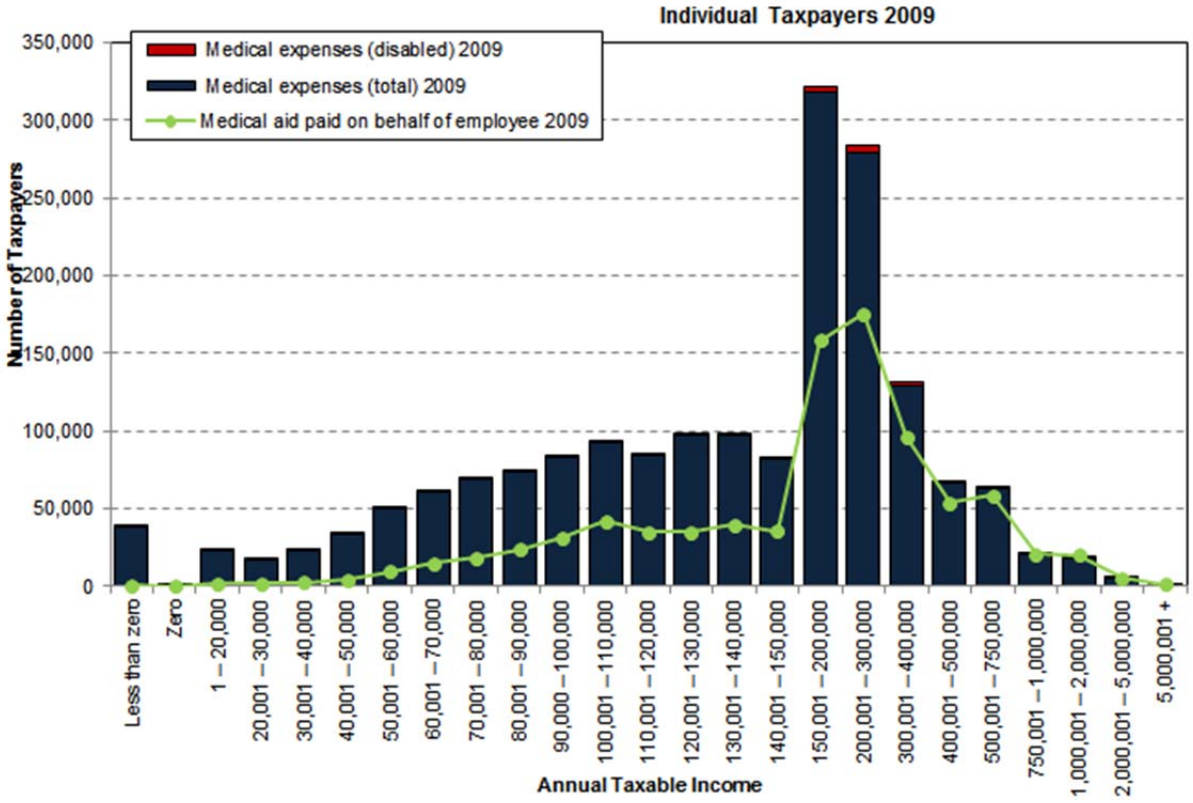

Figure 4: Individual Taxpayers using the Medical Expenses Deduction in 2009

The graph above shows a very large concentration of people in the two taxable income bands R150,000 to R200,000 and R200,000 to R300,000 per annum. An analysis of the data shows the following use of the medical expenses tax deduction by income level:

- The two bands from R150,000 to R300,000 per annum (R12,500 to R25,000 per month) cover **32.6%** of individual taxpayers using the deduction.
- **50.7%** of individual taxpayers using the deduction had taxable earnings of below R150,000 per annum (R12,500 per month).
- Only **16.7%** of taxpayers have taxable earnings over R25,000 per month.

The graph below shows the analysis of income levels graphically.

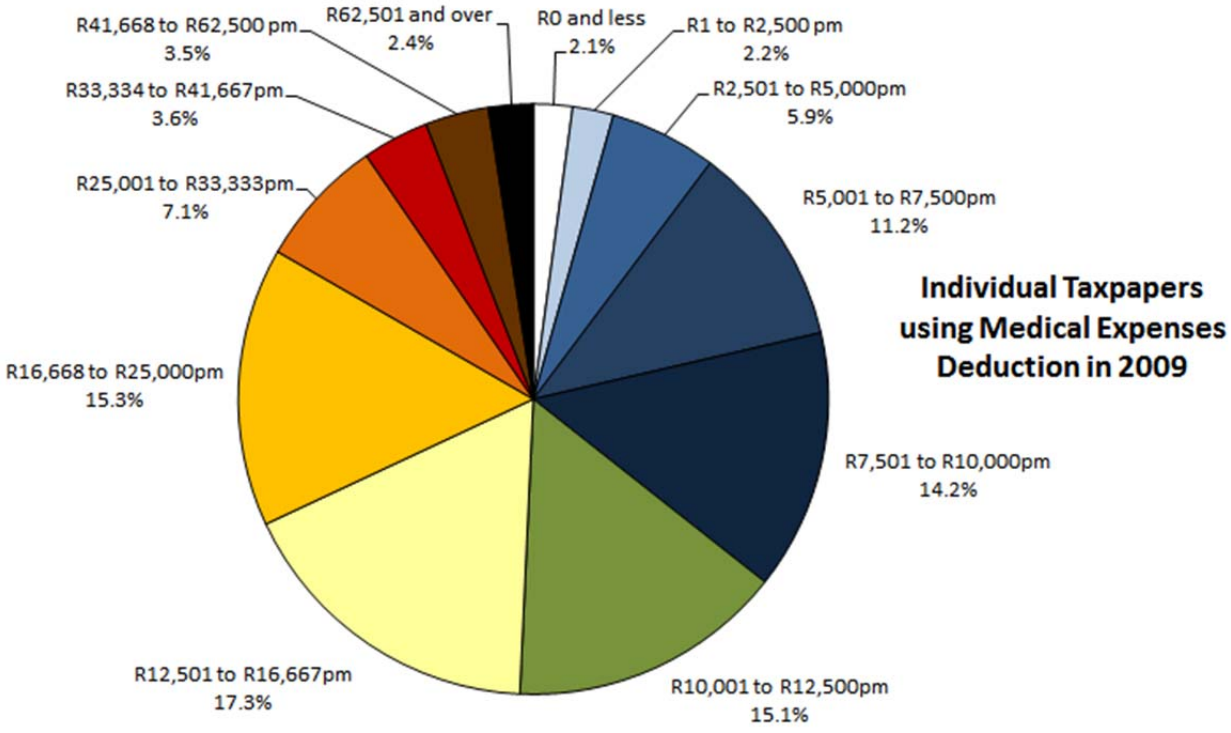

Figure 5: Monthly Taxable Income of Individual Taxpayers using the Medical Expenses Deduction in 2009

Thus a little over half the people making use of the tax deduction for medical schemes earn under R12,500 per month. Removing the tax deduction would cause substantial hardship for these families. The conversion of the tax deduction to a tax credit from 2012, as suggested by National Treasury[9], is expected to have a beneficial effect on the lower income groups. A criticism is that the tax credit is not expected to be available to those earning below the tax threshold which was R54,200 (R4,516 per month) in the tax year ended February 2010.

In the 2010 Tax Statistics the number of people who made use of the tax deduction for medical schemes or medical expenses was 1.857 million taxpayers or 51.8% of the total of 3.585 million individual taxpayers assessed. By the date of the report at the end of tax year 2010, 69.0% of the potential tax returns had been processed. Thus the number of 1.857 million taxpayers using the tax deduction could grow to some 2.691 million if those yet to be assessed have the same usage of the medical expenses deduction.

The total number of primary members in medical schemes is given by the Council for Medical Schemes[10] as 3,488 million[d] as at December 2009. Comparing this possible number using the medical expenses deduction it suggest that up to 77% of medical scheme members may be using the tax break for medical scheme membership. This seems feasible as those not making use of the deduction are likely to be over age 65 and on pension. The tax threshold for those over age 65 was R84,200 (R7,016 per month) in the tax year ended February 2010.

[d] The primary member is the member who pays the contribution and gets the tax relief. Members plus dependants (spouse and children, as allowed in the rules of the scheme) make up the total beneficiaries.

The evidence above that just over 50% of those who use the tax deduction for medical schemes have taxable income of less than R12,500 means we need to change the view that medical schemes are used only by the wealthy.

Mark Heywood said in 2009[11]: "For activists to participate effectively in the discussion about NHI, a number of misleading ideological assumptions about health care need to be dispensed with. One is that only rich people access private care. This is not true. Thousands of trade unionists are members of medical aid schemes. In addition, because of the terrible quality of the public health sector, its queues and unpredictability, poor people often opt to pay out of pocket for whatever health service they think they can afford."

There is only rather old evidence of the number of people on medical schemes who are members of a trade union. The StatsSA October Household Survey 1999 (OHS1999) asks questions about medical scheme membership in the household and then "Is ..... a member of a trade union?". The group that answered either "yes" or "no" were 2.6 million people which is very close to the number of members of medical schemes in that year, 2.7 million, according to the Council for Medical Schemes[12]. Those on a medical scheme and belonging to a trade union were 52.4% of the group. The questions about medical scheme membership and trade union membership have not been asked in the same survey in more recent years.

3. Myths about the Population Covered by Medical Schemes

The proportion of the South African population covered by medical schemes is often quoted in order to bolster a particular position. At times, values as low as 13.7% and as high as 20% of the population have been quoted. The NHI Green Paper[1] says in 2011: "However, despite the introduction of the [Medical Schemes] Act and the supporting principles the level of coverage for the national population has remained below 16 percent." The graph below shows Council for Medical Scheme beneficiary numbers as a percentage of the ASSA2008 historic population. It is shown that the proportion of people on medical schemes has fluctuated between 14.5% and 17.1% over the period from 1985 to 2010.

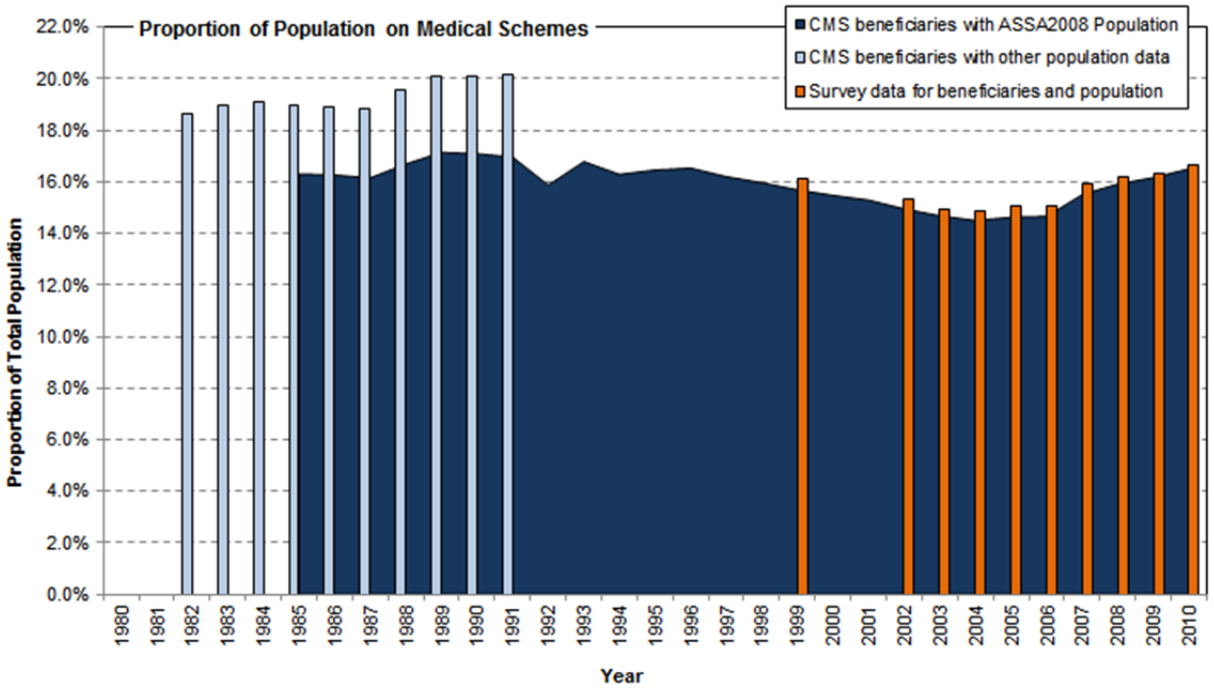

Figure 6: Medical Scheme Coverage as Percentage of the Total Population

The reason for the widely differing estimates is the use of different sources of information about how many people are covered by medical schemes as well as different estimates of the total population in South Africa. This issue was illustrated for the period 2002 to 2008 in IMSA NHI Policy Brief No. 2[13].

The recommendation was made not to use survey data (like the StatsSA surveys) but rather to use the actual medical scheme beneficiaries as recorded by the Council for Medical Schemes (CMS). When the work was done in 2009, the best population projection was ASSA2003 from the Actuarial Society of South Africa (ASSA). There is now a newer population projection available, ASSA2008[14], which is the preferred population estimate for this calculation.

The Council for Medical Schemes in the early 1990s was the source of the incorrect figures showing membership above 20%. They would have been using population estimates of the time which were too low and substantial modelling work was done in the 1990s to determine what the population estimate should have been for 1985[15].

The best estimate of the proportion of people in South Africa covered by medical schemes is thus **16.2% in 2009** and **16.7% in 2010**. Note that this covers only those on registered medical schemes and does not include those on bargaining council schemes.

4. Myth that Medical Schemes Profit from their Members

The NHI Green Paper says about medical schemes[1]: "However, over the years many of them have experienced problems of sustainability. A number of medical schemes have collapsed, been placed under curatorship or merged. They have reduced from over 180 in the year 2001 to about 102 in 2009. This was mainly due to over pricing of health care."

Figure 7 below shows the long-term history of the number of schemes in South Africa, using the official figures from the Council for Medical Schemes[e]. The graph shows that the reduction in the number of schemes is a very long-term trend that has been consistent since 1974 when data was first collected. This reduction is in the interests of members as it means fewer, larger schemes. The larger the risk pool, the more stable and predictable the results. There should also be operating efficiencies from larger funds and larger risk pools should, in theory, improve negotiating power.

The Green Paper goes on to say: "In a bid to sustain their financial viability, many schemes resorted to increasing premiums, in many cases at rates higher than CPIX. When this was not successful, the schemes resorted to decreasing members benefits. …. However, it is evident that the above measures did not improve or have worsened the cost-escalation because at the centre of this problem is the uncontrolled commercialism of healthcare …."

There seems to be an understanding by those that drafted the Green Paper that schemes are profiting from their members. The reality is that medical schemes are **not-for-profit** entities and are controlled by their members. They are analogous to pension and provident funds rather than insurance companies.

Confusion tends to arise because some medical schemes have similar names to the for-profit administrators that are responsible for administration and managed care services. These services can also be provided by in-house staff but "self-administered" schemes have reduced substantially since the 1990s. In 2010 only 15 schemes continued to be self-administered[10].

[e] The early history from 1974 to 1999 was collated from old hand-written records at the Council for Medical Schemes by Preeta Rama. The results were published in 2000 as a monograph[16].

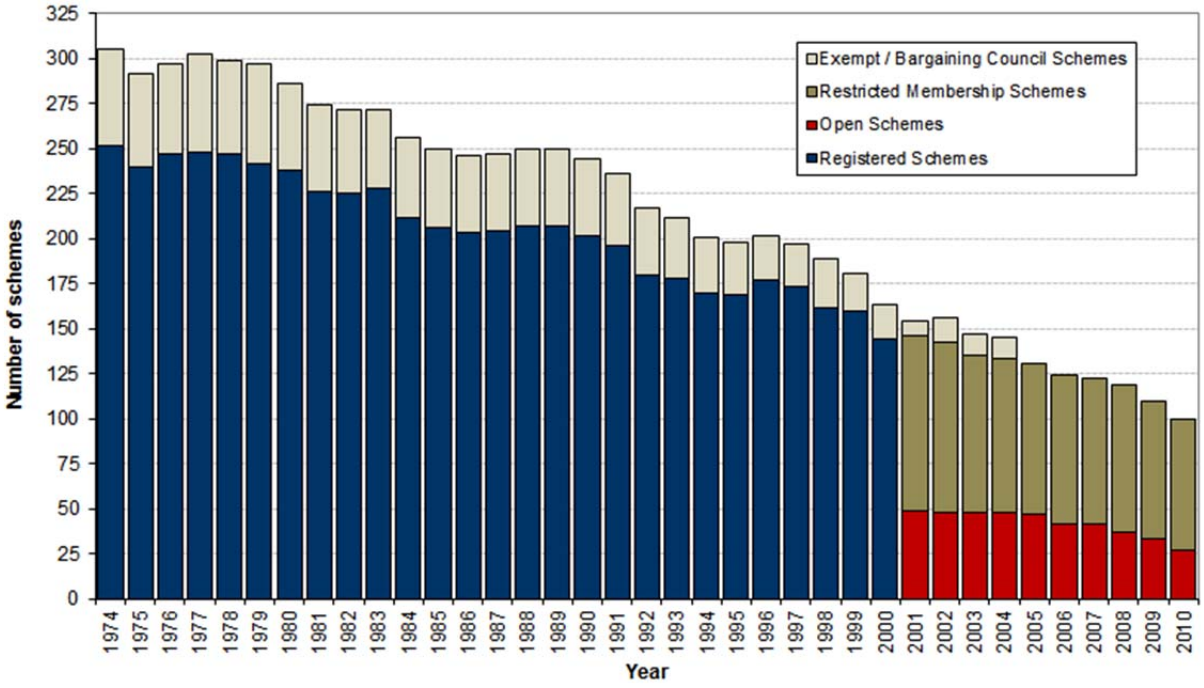

Figure 7: Number of Medical Schemes in South Africa

The Medical Schemes Act, No. 131 of 1998[17] requires that

- Every medical scheme has a board of trustees consisting of fit-and-proper persons to manage the business of the medical scheme.
- At least 50% of the members of the board of trustees must be elected from the members.
- Those prohibited from serving on boards of trustees include any employee, director, officer, consultant or contractor of the administrator of the medical scheme, or of the holding company, subsidiary, joint venture or associate of that administrator.
- Brokers may also not serve on boards of trustees.

The Green Paper fails to recognise that it is Government legislation and regulatory supervision that requires that medical schemes remain solvent at all times. The Medical Schemes Act, No. 131 of 1998[17], insists that a "medical scheme shall at all times maintain its business in a financially sound condition". Harsh penalties are imposed if the conditions in the financial section are not met: "If a medical scheme fails to comply with any provision of this section, every officer of the medical scheme who is a party to the failure, shall be guilty of an offence."

The Green Paper also does not acknowledge that the regulator, the Council for Medical Schemes, has in some cases refused the increases that schemes require in order to maintain solvency. The trustees must take action to remain solvent at all times and they have thus been forced to cut benefits.

The reasons for healthcare costs escalating faster than inflation[f] are complex and include new medical technology and developments. One of the most important effects is the aging of the medical scheme population that has been occurring and which is exacerbated by the voluntary medical scheme environment which results in older and less healthy members on schemes. The Department of Health signalled the intention to move to compulsory membership of medical schemes in 2003[18] but in the last eight years has not made any legislative changes that would give effect to mandatory

[f] CPIX was the measure of head-line inflation until 2008. StatsSA released a revised CPI based to 100 in 2008 and that has been the official headline inflation figure since January 2008.

membership. Reimbursement mechanisms are also of concern and the Green Paper is correct to raise fee-for-service reimbursement as an issue.

The Green Paper assertion that sustainability problems in medical schemes are evidenced by the numbers of mergers fails to reflect that mergers create larger, more sustainable risk pools. Reducing the number of schemes and options has been policy of the Council for Medical Schemes and the Department of Health. The failure of the Department of Health to implement the Risk Equalisation Fund that was said to be urgent in 2004[19] has also increased the instability of some funds with an older risk profile.

Although the Green Paper is critical about medical schemes it offers no policy changes as solutions to any of these issues other than the implementation of NHI in perhaps 14 years' time.

5. Myths about Public and Private Expenditure on Healthcare

The fundamental issue in the Green Paper and also repeated by many commentators is the seeming imbalance in expenditure between the public and private sector on healthcare. The figures most frequently quoted are those prepared by the Health Economics Unit (HEU) at the University of Cape Town (UCT)[20] in respect of 2008:

- R11,300 pbpa[g] for those belonging to medical schemes (this includes both medical scheme spending of R9,600 and estimated out-of-pocket payments of R1,700);
- R2,500 pbpa for the middle group (includes out-of-pocket payments to private primary care providers, and government spending on hospital care); and
- R1,900 pbpa for those using government primary care and hospital services.

This expenditure is correct but from the particular perspective of National Health Accounts where the total spending on health in a country is considered, regardless of the source of that expenditure.

The problem has been that this total expenditure is misquoted to seem as if it is Government expenditure or somehow within the ability of Government to direct both the public and personal funds. If we stop for a moment and think about education: expenditure on education is not treated in the same way by adding all public and private expenditure. When education policy is discussed it is only Government expenditure on education that matters. The issue is even more stark if we think about transport: we do not add up all expenditure on trains, buses and private vehicles and see it as being potentially available for the transport budget.

What is needed in this debate is to clearly separate out that expenditure on health that is made by Government from the expenditure on health by people from their own pockets. Personal expenditure is discretionary and cannot be relied upon or captured by Government.

The report by National Treasury on converting the tax deduction for medical expenses to a tax credit[9] said: "It is therefore pertinent to take public expenditure on health services, of about R78 billion in 2008/09, as a relevant benchmark. This amounts to about R1,600 a year per person, or R1,950 a year for South Africans who are not covered by medical scheme membership. **The present tax relief deductions, expressed as tax foregone per medical scheme beneficiary, amounted to an estimated R1,600 per person in 2008/09."**

"The overall tax relief on medical expenses is therefore broadly proportional on a per capita basis, by comparison with public expenditure on health services targeted at those without medical scheme coverage. The overall structure of health financing arrangements is redistributive, in that public health services are financed from general tax sources rather than membership contributions or patient fees."

[g] Per beneficiary per annum

In the table below the figures quoted by the UCT HEU and National Treasury for 2008 are re-stated to separate Government and personal expenditure.

Table 1: Government and Personal Expenditure on Healthcare per beneficiary per annum in 2008

Group	**Government Expenditure on Delivery and Tax Subsidies**	Personal Expenditure on Medical Schemes	Personal Out-of-Pocket Expenditure on Healthcare Providers	**Total Government and Personal Expenditure**
Users of Government primary care and hospital services	**R1,950**	-	-	**R1,950**
Users of Government hospital services, but private primary care	**R1,950**	-	R550	**R2,500**
Medical Scheme beneficiaries	**R1,600**	R8,000	R1,700	**R11,300**

The critical comparison is what Government spends on someone using public sector care (**R1,950 per beneficiary per annum** (pbpa)) and what Government spends on someone who uses medical schemes (**R1,600 pbpa**).

Activists should also be questioning two other Government expenditures on healthcare that are in the form of subsidies paid by Government as employer to those who work in the public sector. There are two notable examples, again in 2008:

- **R5,220 pbpa** for employer subsidy on GEMS[h] for public sector workers and their families.
- **R14,518 pbpa** for employer subsidy on PARMED for politicians and their families.

The membership of GEMS and Parmed schemes was discussed in IMSA NHI Policy Brief No. 15 on NHI and Workplace Healthcare[21]. Traditional leaders became members of GEMS in 2011 but it is not known what their subsidy policy is[22].

[h] A revised and improved employer subsidy regime was negotiated and implemented from 1 July 2006. A 75% subsidy of monthly contributions was provided, capped at R1,900 per month per employee. Workers on the lowest salary bands (earning less than about R60,000 a year) received a 100% subsidy capped at R1,900. Those remaining on open schemes received the lower original subsidy of up to two-thirds of contributions, capped at R1,014 per month. The issue formed part of acrimonious bargaining during the June 2007 public sector strike. There were calls by labour for the subsidy to be used across other schemes. A revised subsidy of R2,020 per month was offered by Government, but still restricted for use in GEMS. In the 2010 wage negotiations it was agreed that the issue of equalising the subsidies for membership of GEMS and other medical schemes would be investigated again. As at December 2011, the maximum subsidy was R2,760 per month, payable to a principal member with four dependants.

GEMS has grown very rapidly since it first accepted members in January 2006, thanks in part to the generous employer subsidy. As at 31 December 2010[10], GEMS had 520,477 members and 1,458,437 beneficiaries. This represents 17.5% of the 8.3 million beneficiaries across all medical schemes and 41.5 % of the 3.5 million beneficiaries of restricted membership medical schemes.

The estimate of R5,220 pbpa as the employer subsidy to GEMS in 2008 was taken as the average spend for a beneficiary, R435 pbpm, under the maximum subsidy of R2,175 for a member with four dependants. While not all families have as many dependants, the subsidy increases for smaller families to a maximum of R6,840 pbpa for a single person. As not all members might receive the maximum subsidy, the lower figure has been used for illustration.

PARMED is the medical scheme for members of parliament and their families, as well as judges and those in the provincial legislatures. PARMED had 5,415 beneficiaries at the end of 2010[10]. The average contribution (member together with State as employer) was R2,301.20 pbpm in 2010, compared to the average for all restricted schemes of R874.7 pbpm. Industry observers have long regarded this scheme as the most generous in the market as it has few limits or managed care techniques imposed.

A clear example where PARMED benefits exceeded those in the public sector was in providing antiretroviral treatment for HIV/AIDS. Belani, in an evaluation of the Constitutional Court's decision on the right to treatment for HIV/AIDS[23] said that officials and leaders within the ANC had "pointed out that the Parliamentary and Provincial Medical Aid Scheme provides full coverage of HIV-related treatment for members of parliament, provincial legislatures, judges and the President himself." This was at a time when the State refused to provide anti-retroviral treatment in the public sector.

It has been difficult in the past to see the full employee benefit package for members of parliament. The Mail & Guardian obtained a copy of the Ministerial Handbook[24] and published this on their web-site in 2011, to the condemnation of a Government spokesperson[ij]. The Ministerial Handbook describes the medical scheme subsidy as follows: "Members will as long as they hold office be members of the PARMED Medical Aid Scheme. A monthly contribution to PARMED is payable. The Member contributes one third of the total monthly contribution and the relevant Department contributes the remaining two thirds of the contribution."

The estimate of R14,518 pbpa as the employer subsidy to PARMED was taken as 2/3 of the R1,814.70 pbpm contribution in 2008, annualized. There is no Rand limit to the employer subsidy on PARMED.

6. Conclusions

May the robust debate about the most appropriate form for the future healthcare system continue – but based on hard evidence rather than rhetoric.

Produced for IMSA by
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5 January 2012

[i] http://mg.co.za/article/2011-04-22-dept-fumes-at-publication-of-handbook
[j] http://mg.co.za/article/2011-04-29-publishing-of-ministerial-handbook-illegal-and-irresponsible

Resources on the IMSA Web-site

The following is available on the NHI section of the IMSA web-site: www.imsa.org.za

- The slides used in this policy brief [PowerPoint slides].
  Two additional slides are included on the ethnicity in the National Health Service and the historic number of beneficiaries on medical schemes.

As the purpose of this series is to put in the public domain material and evidence that will progress the technical work of developing a National Health Insurance system, we would be delighted if you make use of it in other research and publications. All material produced for the IMSA NHI Policy Brief series and made available on the web-site may be freely used, provided the source is acknowledged. The material is produced under a Creative Commons Attribution-Noncommercial-Share Alike licence.

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References

1. Department of Health. National Health Insurance in South Africa: Policy Paper Pretoria; 2011. URL: http://www.doh.gov.za/docs/notices/2011/not34523.pdf,
   And http://www.doh.gov.za/docs/notices/2011/not34523-2.pdf
2. COSATU. NHI will be cheaper in the End. Zwelinzima Vavi's keynote address to the Emerging Market Healthcare gala dinner, Cape Town, November 19 2011: Amandla!; 2011. URL: http://www.amandlapublishers.co.za/home-page/1032-nhi-will-be-cheaper-in-the-end--by-zwelinzima-vavi
3. Department of Health. Inquiry into the Various Social Security Aspects of the South African Health System: Policy Options for the Future; 2002.
   URL: http://www.doh.gov.za/docs/reports/2002/inquiry/index.html
4. Van Rensburg HCJ. *Health and Health Care in South Africa*. First ed. Pretoria: Van Schaik; 2004:626.
   URL: http://www.vanschaiknet.com/component/booklibrary/?task=view&id=99&catid=34
5. McLeod H. Framework for Post-Retirement Protection in Respect of Medical Scheme Contributions. In: Department of Social Development, ed. *Reform of Retirement Provisions: Feasibility Studies*. Pretoria; 2007. URL: http://www.polity.org.za/article/reform-of-retirement-provisions-feasibility-studies-september-2007-2007-09-11
6. McLeod H. Affordability of Health Insurance *National Health Insurance Policy Brief 9*: Innovative Medicines South Africa; 2010.
   URL: http://www.innovativemedicines.co.za/national_health_insurance_library.html
7. National Treasury, South African Revenue Service. 2010 Tax Statistics. Pretoria: Government Printer; 2011. URL: http://www.treasury.gov.za/publications/tax%20statistics/2010/
8. McLeod H. The Tax Base in South Africa *National Health Insurance Policy Brief 20*: Innovative Medicines South Africa; 2011.
   URL: http://www.innovativemedicines.co.za/national_health_insurance_library.html
9. National Treasury. Conversion of Medical Deductions to Medical Tax Credits – Tax Policy Discussion Document for Public Comment Pretoria; 2011
   URL: http://www.treasury.gov.za/public%20comments/default.aspx
10. Council for Medical Schemes. Report of the Registrar of Medical Schemes, 2010/2011. Pretoria; 2011. URL: http://www.medicalschemes.com/
11. Heywood M. National Health Insurance: A Step in the Health Direction: Amandla; 2009. URL: http://www.amandlapublishers.co.za/home-page/250-national-health-insurance-a-step-in-the-health-direction
12. Council for Medical Schemes. Annual Report of the Registrar of Medical Schemes 1999. Pretoria; 2000. URL: http://www.medicalschemes.com/Publications.aspx

13. McLeod H. Expanding Health Insurance Coverage *National Health Insurance Policy Brief 2*: Innovative Medicines South Africa; 2009.
URL: http://www.innovativemedicines.co.za/national_health_insurance_library.html
14. McLeod H. Projected Population and HIV/AIDS Update *National Health Insurance Policy Brief 18*: Innovative Medicines South Africa; 2011.
URL: http://www.innovativemedicines.co.za/national_health_insurance_library.html
15. Dorrington RE. ASSA600: An AIDS Model of the Third Kind? . *Transactions of the Actuarial Society of South Africa.* 1998;Volume XII Part I.
URL: http://www.actuarialsociety.org.za/Resource-Centre/TASSA/1990---1998-267.aspx
16. Rama P, McLeod H. An Historical Study of Trends in Medical Schemes in South Africa: 1974 to 1999. CaRE Monograph No. 1. Cape Town: Centre for Actuarial Research; 2001.
URL: http://www.commerce.uct.ac.za/Research_Units/CARE/Monographs/current.asp
17. Republic of South Africa. Medical Schemes Act No. 131 of 1998, *Government Gazette No. 19545, Vol. 402, 2 December 1998*; 1998. URL:
http://www.medicalschemes.com/files/Acts%20and%20Regulations/MSACT19July2004.pdf
18. Department of Health. Opening Address to the Consultative Forum on Risk Equalisation by Dr Ayanda Ntsaluba, Director-General, Department of Health Midrand; 2003.
19. Armstrong J, Deeble J, Dror DM, Rice N, Thiede M, Van de Ven WPMM. The International Review Panel Report to the South African Risk Equalization Fund Task Group. Pretoria; 2004.
URL: http://www.medicalschemes.com/publications.aspx
20. Health Economics Unit UCT. The Public-Private Health Sector Mix in South Africa *HEU Information Sheet - Health Care Financing* 2009.
URL: http://heu-uct.org.za/research/publications/information-sheets/
21. McLeod H. NHI and Workplace Healthcare *National Health Insurance Policy Brief 15*: Innovative Medicines South Africa; 2010.
URL: http://www.innovativemedicines.co.za/national_health_insurance_library.html
22. Unknown. MEC promises chiefs medical aid, pensions *New Age*; 2011. URL:
http://www.thenewage.co.za/11737-1008-53-MEC_promises_chiefs_medical_aid,_pensions
23. Belani A. The South African Constitutional Court's Decision in TAC: A "Reasonable" Choice? *Center for Human Rights and Global Justice Working Paper, Economic, Social and Cultural Rights Series, Number 7*; 2004. URL: http://www.chrgj.org/publications/docs/wp/Belani%20The%20South%20African%20Constitutional%20Court%27s%20Decisions%20in%20TAC.pdf
24. Ministry of Public Service and Administration. Ministerial Handbook. A Handbook for Members of the Executive and Presiding officers. Approved by Cabinet 7 February 2007; 2007.
URL: http://mg.co.za/uploads/2011/04/13/Ministerial-Handbook-2007.pdf