

## Comparison of NHI Proposals

*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.*

One of the greatest concerns by stakeholders has been the lack of material in the public domain on the proposals for National Health Insurance that have emanated since the African National Congress (ANC) congress in Polokwane in December 2007<sup>a</sup>. The ANC National Executive Committee (NEC) Sub-committee on Health and Education, chaired by Dr Zweli Mkhize, set up an ANC Task Team led by Dr Olive Shisana in July 2008 to prepare a policy proposal for consideration by the subcommittee and later by the NEC. None of the documents produced by that task team or considered or approved by the ANC NEC were released in the public domain, although leaked versions are available<sup>1,2</sup>.

The release of a document by the ANC in September 2010<sup>3</sup>, timed for the ANC National General Council meeting<sup>b</sup>, is the first publicly available information on the proposals. Note that this is still an ANC party document and is not a Department of Health or Government document. It is also not a document of the Ministerial Advisory Committee on NHI (MAC), appointed in September 2009<sup>4</sup>.

This policy brief deals with the evolution of the NHI proposals since December 2007 and contrasts the most recent proposals ("the ANC 2010 proposals") with those envisaged from 1994 to 2005.

### 1. National Health Insurance as Envisaged Pre- and Post-Polokwane

Prof Di McIntyre and Alex van den Heever provided a summary of the history of NHI from the 1940s to 2005 in the South African Health Review 2007<sup>5</sup>. The paper is particularly useful as a summary of developments and the debates about mandatory health insurance. The authors describe the "considerable discussion and sometimes very heated debates" and outline the core features of each of five proposals:

- 1994: Health Care Finance Committee (similar to the ANC Health Plan of 1994<sup>6</sup>)
- 1995: Committee of Inquiry into National Health Insurance<sup>7</sup>
- 1997: Department of Health SHI Working Group (see also White papers of 1997<sup>8,9</sup>)
- 2002: Taylor Committee of Inquiry into Social Security<sup>10</sup>
- 2004/5: Ministerial Task Team for Implementing SHI.<sup>11</sup>

The chapter provides an understanding of proposals in terms of the four functions in healthcare financing: revenue collection, pooling, purchasing and delivery (original extract shown overleaf, labelled Table 2<sup>5</sup>). The authors found "that there is considerable consistency in the core objectives of the mandatory health insurance proposals that have been advanced over the years, namely that it is a mechanism for addressing key problems facing private health insurance and for dealing with the massive public-private health sector mix disparities in South Africa."

<sup>a</sup> <http://www.anc.org.za/events.php?t=52nd%20National%20Conference%20-%20Polokwane>

<sup>b</sup> <http://www.anc.org.za/events.php?t=National%20General%20Council%20-%202010>

**Table 2: Overview of proposals for mandatory health insurance in South Africa, 1994-2002**

Features	Health Care Finance Committee (1994)* (similar to ANC plan)	Committee of Inquiry (1995)	Department of Health SHI Working Group (1997)	Taylor Committee of Inquiry into comprehensive social security (2002)	Ministerial Task Team for implementing SHI (2002)
Revenue collection: <ul style="list-style-type: none"> <li>Sources of funds &amp; contribution mechanisms</li> <li>Collecting organisation(s)</li> </ul>	<ul style="list-style-type: none"> <li>All formal sector employees (part of contribution paid by employers); community-rating</li> <li>Private insurers could be intermediaries for SHI</li> </ul>	<ul style="list-style-type: none"> <li>All formal sector employees (part of contribution paid by employers); community-rating</li> <li>Choice between state-sponsored SHI fund and private insurers</li> </ul>	<ul style="list-style-type: none"> <li>Formal sector employees above income tax threshold but not medical schemes members (employers share contribution); community-rating</li> <li>Separate state hospital fund, or 'opt out' for a private insurer</li> </ul>	<ul style="list-style-type: none"> <li>Mandatory for formal sector employees above income tax threshold via medical schemes &amp; voluntary for low income, informal sector via state-sponsored scheme – community-rating</li> <li>Others through dedicated payroll tax</li> <li>Ultimately all to make income-related contributions</li> </ul>	<ul style="list-style-type: none"> <li>Mandatory SHI tax (as part of a composite Social Security tax) – all taxpayers</li> <li>Voluntary community-rated contributions to medical scheme (possibly make mandatory later)</li> </ul>
Pooling of funds: <ul style="list-style-type: none"> <li>Coverage (risk pool)</li> <li>Allocation mechanisms</li> </ul>	<ul style="list-style-type: none"> <li>Contributors and their dependants</li> <li>Risk equalisation between individual insurers</li> </ul>	<ul style="list-style-type: none"> <li>Contributors and their dependants</li> <li>Risk equalisation between state-sponsored fund &amp; individual private insurers for compulsory benefit package</li> </ul>	<ul style="list-style-type: none"> <li>Contributors and their dependants</li> <li>No risk equalisation between state fund and private insurers. Allocation from state fund to hospitals through government budget process</li> </ul>	<ul style="list-style-type: none"> <li>Universal</li> <li>Risk equalisation between state-sponsored scheme and individual private insurers for uniform minimum benefit package</li> </ul>	<ul style="list-style-type: none"> <li>Universal for the basic benefit package, but contributors and dependants for 'top-up'</li> <li>Risk-adjusted subsidy to public sector &amp; schemes for basic benefit package</li> </ul>
Purchasing: <ul style="list-style-type: none"> <li>Benefit package</li> <li>Provider payment</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive services (primary care &amp; hospital services)</li> <li>Collectively negotiating provider payment rates</li> </ul>	<ul style="list-style-type: none"> <li>Hospital services</li> <li>Payment rates set at the cost of service within a public hospital</li> </ul>	<ul style="list-style-type: none"> <li>Public hospital services</li> <li>Unspecified for private insurers</li> <li>Budget for state fund</li> <li>Fee-for-service for private insurers</li> </ul>	<ul style="list-style-type: none"> <li>All eligible for minimum package (primary care, chronic illness and hospital care)</li> <li>Budgets &amp; salaries for public facilities, capitation for private PHC via state scheme, unspecified for medical schemes</li> </ul>	<ul style="list-style-type: none"> <li>Basic benefit package of primary care plus existing PMBs</li> <li>No specific changes in provider payment from what currently exists</li> </ul>
Provision	<ul style="list-style-type: none"> <li>Mainly public, but some role for private providers in primary care</li> </ul>	<ul style="list-style-type: none"> <li>Choice of provider, with competition between private &amp; public hospitals</li> </ul>	<ul style="list-style-type: none"> <li>Public hospitals only for state fund</li> <li>Choice for privately insured</li> </ul>	<ul style="list-style-type: none"> <li>Public facilities for non-contributors and low income payers of SHI tax</li> <li>Choice for medical scheme members</li> </ul>	<ul style="list-style-type: none"> <li>Public facilities for non-contributors and low income payers of SHI tax</li> <li>Choice for medical scheme members</li> </ul>

\* The Health Care Finance Committee considered three different potential SHI designs. The design that was supported by this Committee is presented in this table.

Source: Mchtyre et al., 2007.<sup>22</sup>

The proposals on NHI from 1994 to 2005 shared a common theme: that there would be a two-tier system in which the differences would gradually diminish over time. From the outset in 1994, the ANC envisaged<sup>6</sup> the creation of a National Health Service, not a National Health Insurance system: "A single comprehensive, equitable and integrated National Health System (NHS) must be created." NHI (as opposed to NHS) merits less than 1 page of that 77 page document<sup>12</sup>. NHI is mentioned as a possible way to deal with the problems in voluntary medical schemes and a committee of enquiry was to be formed to consider possible structures for an NHI, based on existing medical schemes. Thus what was envisaged initially was a multi-tier system: a public National Health Service, alongside of which is a mandatory contributory environment for formal sector workers and their dependants, organised as National Health Insurance.

There was a major shift in the thinking about NHI at the ANC Conference in Polokwane in December 2007. Prof Gavin Mooney of Australia and Prof Di McIntyre wrote about this change in how NHI was envisaged<sup>13</sup>: "Proposals in the past have focused on introducing what would in effect be a social health insurance; that is, one that only covered health care for those who contributed. The intention was to regulate medical schemes to move them away from risk-rated contributions, and to introduce both a prescribed minimum-benefit package and a risk-equalisation fund between individual schemes. This would introduce risk cross-subsidies (between healthy and ill South Africans), and ultimately move towards income cross-subsidies through further regulation." ... "The major drawback of this option is that it could entrench a two-tier system." ...

"The decision at the ANC conference has created the space for a somewhat different vision of change in the South African health system — one that focuses from the outset on achieving universal coverage by promoting income and risk cross-subsidies in the overall health system. The broad vision is to focus energies primarily on rebuilding the public health sector to the point where it once again becomes the provider of choice for the vast majority of South Africans. This would be achieved by reversing the effects of the GEAR policy, and gradually, but substantially, increasing tax funding for health services, as well as introducing a compulsory National Health Insurance contribution for all formal sector employees (those in paid employment)."

"The introduction of an explicit National Health Insurance payroll contribution would have two effects. First, it would create a sense of entitlement to publicly funded health services. Second, it would compel medical-scheme members to seriously consider whether continued medical-scheme membership is worth the additional cost." "The value of this approach is that it would lead to an integrated funding and service provision system, with considerable income and risk cross-subsidies, and this would occur within the shortest possible time. Although the richest individuals may still choose to contribute to medical schemes in addition to their National Health Insurance payments, a visible two-tier system would be diminished, rather than reinforced and entrenched as in the social health insurance option."

"In addition, by holding the "strings" of the largest health care "purse" (rather than attempting to achieve this only through regulatory means), National Health Insurance is likely to be a much more powerful mechanism for controlling the fees charged by private providers. The extent to which the services of private providers are purchased by the National Health Insurance will depend on the level of public sector service capacity in particular geographical locations, as well as the extent to which private providers are willing to accept the payment rates offered by it."

## 2. Features of the ANC 2010 NHI Proposals

The summary and evaluation below is derived from the document<sup>3</sup> released by the ANC for discussion at the ANC National General Council meeting in September 2010. Paragraph references are to that document.

## Coverage and Registration

“The NHI Fund will cover all South African citizens and legal residents” (paragraph 74). Registration (paragraph 95) “will be based on a health facility approach. Using the green, bar-coded identity document or equivalent legal document people will be registered ... and eventually be issued with an NHI card that will keep their health information history ...”.

## Benefit Package

“The cover will entitle individuals and households to a defined, comprehensive package of healthcare services.” The definition of a comprehensive package is described (paragraph 75) as being comprehensive “because it will cut across all levels of the health system”. Private health providers, medical schemes and members have a rather different interpretation of “comprehensive” where the term is taken to mean a top-end packages with rich and generous benefits. This difference in understanding may be at the root of much misunderstanding when people are asked if they want “a comprehensive package of care” delivered by NHI.

It is said that although the NHI Fund is to be responsible for “primary, secondary and tertiary” care, quaternary health services are said to remain the responsibility of the National Department of Health (NDoH). Nothing is said about how the referrals or this interaction might be handled.

The NHI package is said to contain primary care and preventative services; inpatient care; out-patient care; emergency care; prescription drugs; appropriate technologies for diagnosis and treatment [but “appropriate” is not defined]; rehabilitation; mental health services; the full scope of dental services (other than cosmetic dentistry); substance abuse treatment services; basic vision and vision correction (other than laser vision correction for cosmetic purposes); and hearing services, including the provision of hearing aids.

There is a caveat: paragraph 78 says that the benefit package “will exclude medically unnecessary services and expensive therapies that have little impact on healthcare”. There is no detail of what these may be and how extensive the rationing will be. The only detail is with respect to prescription drugs and medical supplies and devices which “will be linked to the Essential Drugs List and updated on a regular basis”.

Paragraph 59 indicates there may be more extensive rationing: “The heart of a good NHI is an explicit and inclusive discussion of what should be included in a national package. This uses the principle ‘that everyone is covered’ but not ‘everything is covered’.”

A conceptual diagram for rationing, as performed in India, is given in paragraph 59, page 20. It is said this “can easily be adapted to the South African context for determining a comprehensive package of health services under NHI”. The authors of the report have not taken into account the extensive work done on a possible package and rationing issues in South Africa since the mid-1990s. This includes work by Söderlund, Khosa and Peprah<sup>14,15</sup>, Gould<sup>16</sup>, Discovery Health<sup>17</sup>, the work on costing the Prescribed Minimum Benefits<sup>18-22</sup>, the evaluation of the PMB legislation<sup>23</sup>, the LIMS investigation<sup>24</sup> and the Council for Medical Schemes project to reconsider the definition of minimum benefits<sup>25</sup>. There has also been substantial work done on the definition of norms and standards at various levels in the public sector.

**In summary, the benefit package has not yet been defined and the complex trade-offs required in rationing remain at a broad conceptual level. This has implications for the costing which is critically dependant on the package to be offered. Negotiations with providers are also dependant on knowing what is to be provided in the benefit package.**

## Institutional Model

The core of the NHI proposal is to create a new institution to handle all the functions of the health system (paragraph 69). “at the core of the proposed health sector reforms is the reconfiguration of institutions and organisations involved in the funding, pooling, purchasing and provision of health

care services in the South African health system. An NHI Fund will be established .... to receive funds, pool these resources and purchase services on behalf of the entire population. The Fund will be publicly administered as a single purchaser with sub-national offices at the provincial levels to negotiate and contract with the health care providers and will be established within five years”.

The NHI Fund is given a large number of tasks, including a highly sophisticated information system (paragraph 97), “based on an electronic patient record. This will enable any person who visits a health facility in any province or health district to be allocated an unique identifier and have their medical history recorded and stored electronically on an electronic health record that is linked to the NHI card.”

The NDoH is said to continue to be (paragraph 73) “A major provider of services through its national, provincial and district level structures and facilities” and responsible for “infrastructure development for which it receives a budget”. “It remains critical that the responsibility for co-ordinating the development of overall health plans including personal services resides with the NDoH”.

**Given that SARS is expected to collect the revenue and the NDoH is to continue to provide the services, there does not seem to be the need for a massive new organisation to handle pooling and to perform the additional purchasing from private providers. Existing provincial Departments of Health could be purchasing services from private providers as needed. The need to provide health cards to all, to link each person to a designated provider, to contract with providers and to allow complex payments for people to attend providers in other areas seems hugely wasteful when the bulk of the system will continue to be run by the NDoH as a National Health Service.**

### Revenue Collection

There is still no detail of how the funds will be raised and the document continues to describe the funding by describing all the possible sources: (paragraph 82, page 25): a surcharge on taxable income; payroll taxes (for employees and/or employers) and an increase in Value Added Tax which is earmarked to the NHI.” The mandatory payroll-related contribution (paragraph 84) “will be progressively structured”<sup>c</sup>.

The work on evaluating the alternatives has not been completed, saying “These alternative funding mechanisms will be evaluated [emphasis added] in terms of their revenue generation potential, and their potential on economic growth, employment, savings and income distribution”.

The 2010 proposals acknowledge that a significant increase in funding will be required (paragraph 83): “Funding of the health sector from general tax revenue should be significantly increased”.

The mandatory contribution (paragraph 84) will be payable by “Everyone earning above the income tax threshold will be required to make this contribution”. This will include the self-employed.

In the costing estimates a proposed scale for contribution is given (paragraph 111, page 32): “a mandatory NHI contribution that is progressively structured from less than 1% for the lowest income earners to a maximum of about 7-8% for the highest income earners”. However it is not demonstrated that this scale of contribution is adequate for the amounts said to be needed to fund the system. This issue is explored further in section 3.

**In summary, despite working on the proposals for two years since July 2008, there is not yet any clarity on the mix of tax funding and mandatory contributions that would be required. The suggested highly progressive mandatory contribution scale (from 1% of income to 8% of income) is not linked in any way to the amount needed to be raised. The more progressive the scale, the higher will need to be the percentage collected from the highest income groups.**

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<sup>c</sup> In other words, will not be a flat percentage of income but will be progressive. An example of a progressive scale is the current income tax system where the percentage paid increases with income.

## Pooling of Funds

The proposals envisage a single fund, but then this is diluted with the establishment of “sub-national offices” for contracting (paragraph 69). It is difficult thus to assess how the funds would flow and whether there would be nine provincial pools or 52 district pools as envisaged in the first draft of the proposals in February 2009<sup>1</sup>. The 2010 proposals acknowledge the lack of clarity in a section listing the tasks in the transition to NHI, listing (paragraph 207): “Determination of the pooling systems that will be implemented to ensure the NHI Fund yields the full economies of scale ...”.

**The lack of clarity on pooling adds to the concern about why an organisation like the NHI Fund is needed at all.**

## Purchasing

The core recommendations on provider payment mechanisms are long overdue for implementation in the private sector<sup>24,26,27</sup>. The proposals envisage the use of (paragraph 88) “risk-adjusted per capita payments (i.e. capitation) and global budgeting”. It is said that the annual capitation amount “will be linked to target utilisation and cost levels” and will be (paragraph 91) “linked to an appropriate index such as CPI”. “Facilities that do not meet the requisite standards (paragraph 88) “will continue to get global budgets” until they meet the standards. It is also said that during the transition period to full implementation (paragraph 92) that budgets will be calculated on a risk-adjusted basis.

It is also promised that (paragraph 89) “provider payment mechanisms must assure incentives for the health workers in the public sector, through supplements for specific tasks or sessional payment. It is also important to consider the implementation of performance-based payment mechanisms”.

It seems that some services may not be included in these mechanisms (paragraph 91): “High costs care for services excluded from the list of benefits under capitation will be reimbursed from a separate allocation of the NHI”.

There is much work still to be done and paragraph 206 in the implementation section calls for “Determination of the appropriate revenue mobilisation and provider payment mechanisms” as well as interim mechanisms.

**The introduction of new reimbursement systems will require much research, negotiation and technical expertise and the preliminary work needed for casemix-adjusted global budgets and risk-adjusted capitation is substantial. There appears to be some confusion as to what the payment mechanisms may be and it is not clear whether primary care providers will effectively become fund-holders for diagnostic, specialist and hospital payments or whether these services will be subject to separate contracts. The proposals remain at conceptual level, leaving the detailed work to be done during implementation.**

## Delivery and Healthcare Provision

The core description of NHI (paragraph 74, page 23) says that “healthcare services [will be] provided through appropriately accredited and contracted public and private health services providers”. Paragraph 80 says: “Both public and private facilities will be accredited by a separate national Office of Standards Compliance using agreed national norms and standards”.

Private GPs (paragraph 78) “can be accredited if they work in multi-disciplinary practices which include primary health care nurses and a range of allied health professionals”. “All South Africans can then choose which primary health care provider in the district they would like to register with and utilise health services”.

In a section on the primary health care approach (paragraphs 119 to 126), a wider definition of primary care is envisaged than currently: “The composition of the primary care package will extend beyond services traditionally provided in health facilities, such as clinics, community health centres

and district hospitals to include extensive community and home-based services in which community health workers forms and (sic) essential part". The proposals envisage 5,000 teams of a doctor or clinical associate, a nurse and 3-4 community health workers [but the number is doubled later in the paragraph] which will visit homes, "take care of minor ailments and advise on rehabilitation", with each team responsible for 10,000 people<sup>d</sup>.

The proposals argue for access to medicines to be made easier for patients (paragraph 124): "Private pharmacies may be contracted to dispense medicines" and "private pharmacies and the public health sector should courier medicines to stable chronic patients" in the care of these community teams.

The proposals acknowledge that there is a substantial lack of professional resources to implement NHI. A shortfall of 80,000 staff in 2007/8 is given (paragraph 17) and (paragraph 129) "in many categories of staff, South Africa is heavily under-supplied with key health professionals and is facing a huge challenge in the medium to long-term". The extent of the problem is still not known (paragraph 132): "The first step is to undertake a comprehensive audit of the health professional workforce across the country, ..., to determine the numbers and categories of personnel needed ...".

**In summary, the promise that all South Africans can choose which primary care provider they would like to register with is an extravagant promise to make, before any negotiations with private providers have begun or the extent of the lack of health professionals is known. The ambitious primary care approach is conceptually set out but detailed integration of this model with the existing health system has not been dealt with.**

### 3. Contradictions and Concerns with the ANC 2010 NHI Proposals

The proposals contain many contradictions which contribute to a sense of the document being little more than a wish-list and series of promises that could not be delivered in reality.

#### Contradictions in the Benefit Package

"The services to be provided to the public cannot be less than what they are currently receiving" (paragraph 75, page 24). If this is applied to existing public sector recipients and medical scheme members, it implies an equalisation of benefits at the level at which medical schemes currently deliver, not the public sector. This has enormous implications for the cost of the benefit package.

In previous analysis it was shown by McLeod, Grobler and Van der Berg<sup>28</sup> that to equalise the benefit package at a comprehensive level might cost as much as R334 billion in 2009<sup>e</sup>. This assumes current medical scheme delivery. The same package would be R234 billion if there was a 30% reduction in delivery cost compared to the private sector.

A further contradiction is the lack of any mention of complementary medicine or African Traditional Healers in the proposals. This is in direct contrast to the intentions of Government since 1994 that "People have the right of access to traditional practitioners as part of their cultural heritage and belief system."<sup>6,29</sup> There are estimated to be some 185,500 traditional medicine practitioners, compared to the approximately 24,000 doctors and specialists practicing in the country<sup>30</sup>.

The total amount spent on traditional medicines was estimated to be worth R2.9 billion to the economy in 2006<sup>31</sup>. The amount spent represents 5.6% of the National Health budget payments in

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<sup>d</sup> To appreciate the scale of this proposal for 5000 new primary care teams, the report notes that since 1994 there have been 1800 new clinics and community centres built (paragraph 8).

<sup>e</sup> The costings should be regarded as preliminary as administration and managed care costs have not been included. The effect of HIV/AIDS in the public sector population is also not fully taken into account and there are a range of technical issues that still need to be addressed. Readers are urged to read the limitations and further work required in the full methodology report.

that year. The amount spent out-of-pocket by consumers on complementary medicines and vitamin supplements in 2007 was estimated as worth some R4 billion to the manufacturers of these products<sup>f</sup>. This represented 43% of medical scheme spend on medicines in that year.

If spend on complementary and traditional medicine is not covered by NHI, then there will continue to be a substantial amount paid out-of-pocket by consumers. There will also be rationing of the health package and thus the introduction of NHI will not eliminate out-of-pocket spending on healthcare by consumers. The promise of no out-of-pocket spending applies only to whatever is covered by the NHI (paragraph 87).

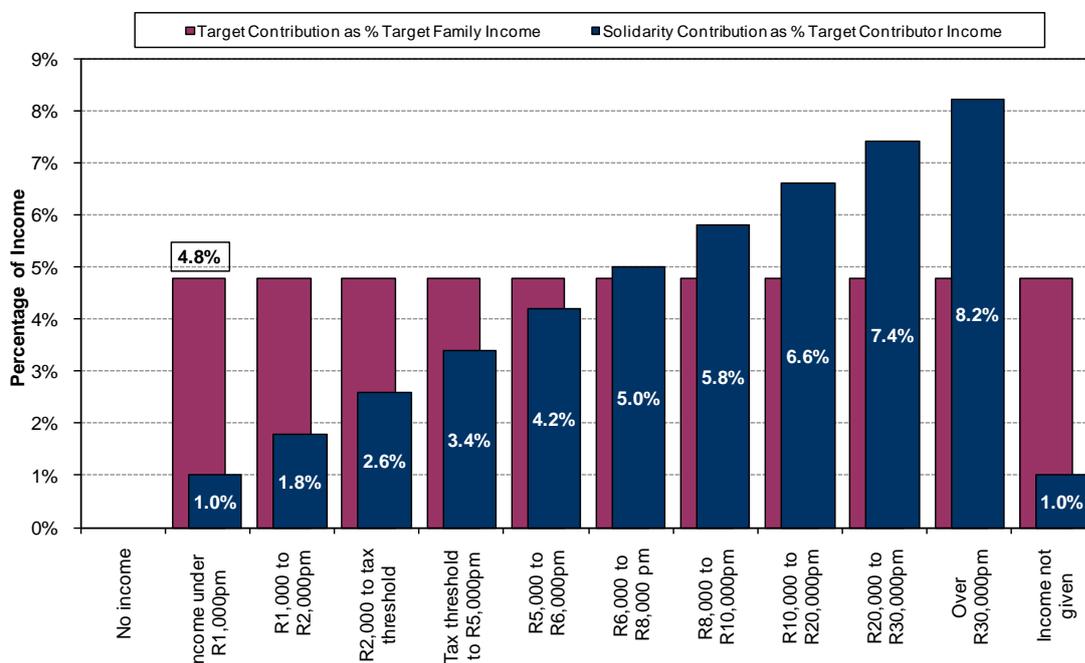
### Contradictions in the Funding Proposals

A major contradiction in the funding proposals is in a box after paragraph 87 on page 26: “It is also important to emphasise that the progressive mandatory contributions from individuals should not exceed their current contributions to medical schemes for similar benefits”.

This is impossible to achieve and can be nothing more than an empty promise. Attempting to raise the same amount from medical scheme members as currently contributed, but in a progressive way using a mandatory pay-roll contribution, must of necessity shift contributions from lower income to middle and higher income workers. Even a flat contribution as a percentage of income would do this and a progressive scale will shift the payments even more.

This is in fact acknowledged in the costing estimates (paragraph 112, page 32) where low income earners are expected to have contributions drop from 14% of income to “less than 1%”, while high income earners are expected to have increases in contributions from 5.5% of income to “7-8%” of income.

The proposed scale is not linked in any way to the amount that might be needed. In order to test this a model is used that was developed or the Department of Social Development to test solidarity contributions for retirement reform<sup>32</sup>.



**Figure 1: Proposed ANC NHI scale compared to flat percentage of income, using Solidarity Model and data from General Household Survey 2005**

<sup>f</sup> Survey by the Health Products Association in 2007. See <http://www.hpsa.co.za/>

A first crude version is to escalate the contributions from 1% to 8.2% in a linear fashion across the income groups derived from the General Household Survey of 2005. If the amount raised is solved backwards to see the equivalent flat percentage of income it represents, we find that the proposed scale is equivalent to a contribution of **4.8% of income** for everyone who earns any income (from R1 upwards).

It is instructive to revisit the calculations for Social Health Insurance to see what a contribution of 4.8% of income could purchase. The most recent version of the calculations by McLeod and Grobler were released in spreadsheet form with Policy Brief 12<sup>33</sup>. In Table 2 of that Policy Brief, a table shows the amount needed as a social security contribution (as a flat percentage of income) for various packages and various groups to be covered. The amount of 4.8% of income, determined above for the ANC 2010 proposals would buy only Prescribed Minimum Benefit (PMB) coverage and only for all contributors and their families. In order to cover the whole population for PMBs, the amount needed would be 9.5% of income. In order to cover a **comprehensive package** of care (PMBs plus primary care, all in-hospital care and all out-of-hospital care) would cost 18.3% to cover contributors and their families, or **37.2% of income** to cover the whole population<sup>9</sup>.

Using the progressive slope of from 1% to 8%, the actual scale needed would be more like 7.8% for the lowest income group, rising to 63.6% of income for the highest income group. This is clearly not remotely practical and hence the ANC proposals are implicitly assuming that increased tax revenue, rather than the social security contribution would be used to fund much of the additional cost of NHI. There is nothing presented to describe how this can be achieved within the existing tax envelope. The net impact on income earners of additional taxes is not shown in the ANC 2010 proposals.

**The suggested highly progressive mandatory contribution scale (from 1% of income to 8% of income) is shown not to be linked in any way to the amount needed to be raised for the population to be served or the benefit package promised. The promise that this social security contribution will not exceed current medical scheme contributions has no validity and is contradicted internally in the document. A substantial amount of work needs to be done on the costing of the proposals and the impact on individuals before it can be claimed in paragraph 113 that "NHI is affordable".**

### Contradictions in the Purchasing Proposals

There are contradictions in the way in which contracting will occur. It is said that (paragraph 91) "The capitation amount should be a uniform amount for the defined levels of providers, regardless of public or private ownership". Later, the amount is described as being risk-adjusted for population age, gender and disease profile (paragraph 93). It is not at all clear what the role of the provincial offices will be. Paragraph 69 said there would be "sub-national offices at the provincial levels to negotiate and contract with the health care providers". If the amount of the payment is not negotiable but uniform, then it is not apparent on what basis local negotiation with providers will occur.

### Concerns with the Evidence of Public-Private Imbalance Used

The 2010 proposals, like the two previous versions, make use of a table of public and private distribution of providers from 2005 which has been shown by Econex<sup>30</sup> to be incorrect. The proposals also quote the HPCSA numbers for doctors registered from 2002 to 2008 (Table 2). The figure for the total number of doctors in recent years is given as some 34,000 but this has been shown by Econex to be a massive over-statement of doctors and the numbers actually practicing were estimated for 2008 as closer to 24,000<sup>30</sup>. A refinement of the estimate, updated to 2010 by Econex<sup>34</sup>, gives a figure of 27,432 doctors (GPs and specialists) in South Africa. This follows an increase in the HPCSA registration from 2008 to 2010 of 2,225 doctors. There are similar problems of mis-statement and over-statement of existing numbers of nurses.

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<sup>9</sup> This calculation in 2007 terms estimates the total cost of the package (including the per capita subsidy but before administration costs) to be some R339 billion per annum. This is of the roughly the same order of magnitude as the ANC 2010 proposals which estimate the cost of NHI being R376 billion (but in 2010 terms and including administration) once fully implemented.

The two tables overleaf contrast the evidence used by all the post-Polokwane proposals for NHI, as derived by Prof Di McIntyre of the Health Economics Unit at UCT, with a revised table based on the evidence gathered by Econex and others in 2009<sup>30</sup> and 2010<sup>34,35</sup>.

**Table 1: UCT HEU Calculation of Public and Private Practitioners Relative to Population in 2005, as used by ANC NHI Proposals**

Table 1: Distribution of health care resources between public and private sectors (2005)

Item	Private sector	Public sector
Population per general doctor	(243) 588*	4,193
Population per specialist	470	10,811
Population per nurse	102	616
Population per pharmacist	(765) 1,852*	22,879
Population per hospital bed	194	399

\* Data in brackets represents only medical scheme members (14.8% of the population), main estimate assumes that private GPs and pharmacists may be used by up to 35.8% of South Africans. Source: Data on personnel and bed numbers from Health Systems Trusts South African Health Review, 2005/06.

**Table 2: Revised Public and Private Practitioners Relative to Population in 2008 and 2010**

Delivery of healthcare in 2008 unless otherwise specified	Private Health Insurance	Some Private + Public	Public Sector	Total Population
	Private primary care and private hospitals	Private primary care and public hospitals	Public primary care and public hospitals	
Population covered	7.9 million	10.2 million	30.8 million	48.9 million
<b>Proportion of population</b>	<b>16.1%</b>	<b>20.9%</b>	<b>63.0%</b>	<b>100.0%</b>
Per capita expenditure per beneficiary per annum	R11,300	R2,500	R1,900	
Per capita Government expenditure per beneficiary per annum	Limited to tax break on medical schemes	R1,900	R1,900	
Per capita Government expenditure (2010) <sup>[2]</sup> per beneficiary per annum	R1,730	R2,500	R2,500	R2,374
<b>Proportion of total expenditure</b>	<b>51.4%</b>	<b>14.7%</b>	<b>33.8%</b>	<b>100.0%</b>
Population per primary care practitioner	(1,138)*	2,612	3,838	3,270
Population per primary care practitioner (2010) <sup>[1]</sup>		2,723	2,861	2,812
Population per pharmacist	(1,567)*	3,594	16,626	7,105
Population per specialist (2008)	1,521		10,184	5,311
Population per specialist (2010) <sup>[1]</sup>	1,767		9,581	5,198
Population per nurse	197		394	339
Population per hospital bed	303		482	440
Proportion of population using Traditional Medicine		72.0%		72.0%
Population per Traditional Medicine practitioner		190		190
* estimates in brackets are if only used by private health insurance				
1. Econex Health Reform Note 7: Updated GP and Specialist Numbers for SA, October 2010				
2. Hein Van Eck, Health-e News, 13 October 2010				
Number of pharmacists working in private sector is not known with accuracy and is derived from the SA Pharmaceutical Council, adjusted for possible double counting of those who have died, are no longer practicing, or who have immigrated.				

For example, the UCT HEU figures give one GP to 243 medical scheme beneficiaries and one GP to 588 people (including out-of-pocket spend on GPs). The revised calculations show the ratio to be 1,138 for medical scheme beneficiaries and 2,612 for all those using private GPs. While still higher than the public sector at one GP to 3,838 people, the gap (2,612 to 3,838) is not nearly as large as used for the ANC 2010 proposals (588 private to 4,193 public).

The Econex 2010 update<sup>34</sup> shows an even narrower gap: "our estimates show that there are at least 2,723 people per GP in the private sector and 2,861 people per GP in the public sector. This is a very important result, as the distribution of the population between GPs in the public and private sectors are then almost equal, and not as skewed as the ANC proposal suggests."

As Econex has described<sup>30</sup>, the major problem in the original figures was taking the total numbers of practitioners from the national registers, then deducting the public sector workforce and assuming the balance was the private sector workforce. The practitioner register for doctors, maintained by the HPCSA, "includes doctors who are registered in SA, but practise abroad and it seems to be a gross overstatement of the true number of doctors practising in the country". "The official sources provide an overestimate of GPs of up to 25,000 doctors. This also applies to nurses and specialists. This means that international comparisons of human resource ratios using official data for South Africa do not provide the correct picture."

Econex has said<sup>30</sup> that "The problems with the various databases and the overstatement of the number of doctors in the private sector (in official sources), have led to a misperception about a 'skewed distribution of human resources between the public and private sectors.' "

New information to hand on the subsidy for private healthcare<sup>35</sup> shows new evidence about the relationship of that subsidy to Government expenditure on healthcare. "Government provides for a tax subsidy for medical scheme members, which is expected to be roughly 14.2bn in 2010 for a projected 8.2m people. The 2010/11 Department of Health budget of R104bn is used to provide healthcare services for roughly 42m people who make use of the system (this includes those roughly 10m people who do not have medical scheme cover, but do access private GPs by paying out-of-pocket). Put another way, the above government healthcare benefit to medical scheme members amount to roughly R1,730 per annum, whilst the amount for those who are dependent on the public sector is almost R2,500 per capita per annum."

This compares to previous figures in 2005<sup>11</sup> which showed the private sector tax subsidy was R1,441 pbpa (in 2005 prices), while public expenditure was lower at R1,154 pbpa. At the time this was argued to be inequitable and unfair. Since 2006 the tax break for medical schemes has been capped so that it no longer escalates with medical scheme contributions, while public expenditure per capita on healthcare has risen over that period.

**The ANC document released in September 2010 uses the same 2005 figures for the public-private distribution of health workers that have been used since the early drafts and ignores the research in 2009 that shows these numbers to have been incorrect. The starting point for the analysis of the public-private imbalance is thus shown to be invalid.**

**The updated 2010 estimate for the number of doctors<sup>h</sup>, shows that the distribution of the population between GPs in the public and private sectors are almost equal and the imbalance in specialists is less than previously thought.**

**The amount spent by Government on a person in the public sector is now shown<sup>h</sup> to be R2,500 pbpa, compared to R1,730 pbpa for the medical scheme subsidy. This has reversed from earlier estimates in 2005 when the Government spent more per head on private sector subsidies than on public sector delivery. It reflects the impact of National Treasury reform of the tax subsidy for private healthcare since 2006.**

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<sup>h</sup> Published after the ANC proposal was released.

## Concerns with the Evidence on Income Cross-Subsidies

The three ANC proposals to date have all relied heavily on the work by Ataguba and McIntyre on the financing and benefit incidence across income groups<sup>36</sup>. There was however an important critique of the methodology used by Ataguba in a 2009 report<sup>37</sup> which has not been considered. The critique by Theron, Van Eeden and Childs demonstrates a miscalculation in the Ataguba, McIntyre work which changes the conclusions reached.

The authors find, once the methodology is corrected, that there are already significant cross subsidies from rich to poor in the South African health system, with the richest quintile providing 82.3% of financing and receiving 36.0% of benefits. The lowest income quintile provide 1.0% of the financing and receive 12.5% of benefits. The measure of "need" is also queried, with the authors saying that "the finding that the results are indisputable seems too conclusive a result given the crude nature of the measures used".

Further work on this issue has been done by Prof Servaas van der Berg<sup>38</sup> and by Alex van den Heever<sup>39</sup>. It is important that the researchers find common ground on what the conclusions should be on this critical issue.

On a minor point, Figure 2 on page 9 of the document purports to be "Trends in Public sector health employment" but is a duplicate of Figure 3, "Trends in real per capita health expenditure...".

A comparison of trends in per capita expenditure needs to take into account the very different age profiles in the public and private sector<sup>40</sup>, as well as how these have changed over time. Essentially the public sector has a much younger profile and with higher mortality and high fertility, has tended to become younger over time. The voluntary private sector has tended to become older with time and the introduction of GEMS has altered the mix of men and women as more working women, such as nurses and teachers, are included.

**The arguments on the extent of the lack of income cross-subsidies presented in the ANC proposals are contradicted by the work of other researchers.**

## Contradictions in the Costing of Administration

Paragraph 70 argues that "Evidence from other countries has shown that a single payer is administratively more efficient (with costs around 3 percent) ...". This is taken, without further analysis, as the potential cost of the NHI Fund in South Africa.

The scope of administration envisaged for the NHI Fund is large, with a central office and "sub-regional" offices. It is expected to register every person in the population and issue an electronic health card, negotiate with every public and private provider and maintain a database of all healthcare provided. Sophisticated managed care is also envisaged in the form of protocols and continuous quality measurement.

Alex van den Heever has written of the cost of the system for paying social grants, saying that<sup>41</sup> the "South African Social Security Agency (SASSA) which has a similar configuration, but with more straightforward functions, has administration expenditure equivalent to 8% of turnover. Extrapolating this minimum administration cost onto the NHIA would result in an expense of **R16 billion per annum** (at the low estimate of R200 billion turnover per annum) which would have to be up and running before extending a single service."

The problem in the NHI proposals is that administration costs of 3% of a large budget in another NHI system is not going to be equivalent to 3% of a much smaller budget here. The size of the fund matters in determining the percentage needed for administration.

Another way to benchmark this is to consider the Government Employees Medical Scheme (GEMS). It has recently been shown<sup>42</sup> that GEMS has a particularly low non-healthcare costs compare to other large medical schemes. The cost in 2008, using data from the Council for Medical Schemes, was

R40.91per beneficiary per month, which is low at 6.1% of gross contributions. If we apply this cost to the envisaged 50 million people to be covered for NHI the cost would be **R24.5 billion per annum**. This compares to the projected administration cost in the ANC 2010 proposals of **R10.9 billion** (in 2010 terms) once NHI is fully implemented.

No medical scheme in South Africa is currently using cards with the full health history electronically readable from the card. This idea is a relatively new development internationally and has a chequered history<sup>i</sup>. The UK National Health Service began a program of electronic health records in 2005 but implementation has been marked by delays and problems<sup>j</sup>. "The development of a medical records database for 50m patients in England (was) a central plank of the £12bn<sup>k</sup> upgrade of the NHS's IT systems."

The cost of this new technology does not seem justified in South Africa if a public National Health Service is providing care for all. The need for (paragraph 98) "linkage between (the) membership data base (with updated contribution status) and the accredited health care providers" is not necessary for a national health system.

**The ANC 2010 proposals use an unrealistic estimate of the cost of administration, given the administrative functions listed and the sophisticated technology intended to be used.**

### Contradictions in the Timing of Implementation

The plan for implementation (paragraphs 202-216) includes the statement: "The transitional process from the current to the proposed NHI environment ... will require a well-articulated implementation plan." There is no plan on the table as yet, only some suggestions as to what should be incorporated in such a plan.

Paragraph 49 says that "the aim is to accredit at least 25% of all facilities annually until all facilities are fully accredited during a five year phased period". Yet paragraph 69 says the Fund, with its sub-national offices to contract with providers, "will be established within five years". It is thus not clear what happens in the interim or whether negotiations with providers only begin five years from now, which would be 2015.

The media statement from the ANC on this proposal said<sup>l</sup>: "The NHI will be in parallel with a health system strengthening plan". "The strengthening plan has several key components, starting with a detailed inventory of both public and private facilities, including infrastructure, human resources and technology. The inventory will serve to assess the current capacity of the health-care system to provide services at different levels, and where this capacity is located. Secondly, it will identify gaps for expansion and facilities that require refurbishment. The plan also involves the revitalising and adequate financing of district health systems; improved access to primary health services, and the increased autonomy of managers in public health-care facilities." ...

"Implementation will be phased in over 14 years, and roll out will start in 2012 in the seriously underserved areas where people have difficulty accessing health care."

It is not clear how the date of 2012 fits with other statements nor how financing can be phased in in order to begin delivery in the most underserved areas.

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<sup>i</sup> See for example the disadvantages and costs of electronic health records quoted in this Wikipedia article: [http://en.wikipedia.org/wiki/Electronic\\_Medical\\_Record](http://en.wikipedia.org/wiki/Electronic_Medical_Record)

<sup>j</sup> <http://www.bbc.co.uk/news/10333432>

<sup>k</sup> Roughly R132 billion, at an exchange rate of 11 Rands to 1 GBP.

<sup>l</sup> <http://www.anc.org.za/show.php?include=docs/pr/2010/pr0921.html&ID=6013>

## 4. Conclusions

The ANC election manifesto for the April 2009 elections stated that Government will<sup>m</sup>: “Introduce the National Health Insurance System (NHI) system, which will be phased in over the next five years.” The document produced in September 2010<sup>3</sup> says that NHI will now be phased in over 14 years. There is thus perhaps a greater sense of realism about how massive the proposed reforms are and this is welcomed.

The 2010 document is the smallest of the reports prepared by the ANC to date. The first document in February 2009<sup>1</sup> was some 200 pages; the second report in June 2009 was 64 pages and this one is only 47 pages. The document released in September 2010 shows very little development from one given to the National Executive Committee in June 2009. The major addition is the first draft of the funding numbers but these appear unchanged from earlier drafts that were provided to the party and not released in public.

The evidence on which the case for NHI is based, particularly the reported differences in density of healthcare personnel in the public and private sectors, have not been updated to take into account new research. The core of the argument for increased income cross-subsidies has also been shown to be based on research whose findings are contradicted by other researchers. New evidence to hand after the release of the proposals also shows a reversal in the expenditure on public health compared to the subsidy for private healthcare.

**It is critical for all stakeholders in this debate to find common ground on what the best-available evidence is. Only when there is acceptance and agreement on the nature of the problem can reasonable and practical solutions be found.**

The case for the NHI Fund to be the solution to the problems facing public healthcare delivery in South Africa has not been made. The unrealistic scope of the Fund's activities and unnecessary administration could provide lucrative opportunities for tenders for unnecessary membership cards, sophisticated administration systems and managed care systems. The positioning of the NHI Fund as the answer to all the problems facing the health system has the potential to be a further delaying mechanism for accepting responsibility and for improving conditions in the current national health service.

Other observers will be commenting on the health economic issues and the governance issues raised by the proposals and these have not been dealt with in this policy brief.

The proposals still lack a clear description of the benefits to be offered with the inevitable rationing being treated at a conceptual level only, ignoring the extensive work on a minimum package that has occurred in South Africa since 1994.

Despite two years of work on these proposals since July 2008, there is not yet any clarity on the mix of tax funding and mandatory contributions that would be required. Importantly, the preliminary costings have not shown the potential impact on individuals and families. The suggested highly progressive mandatory contribution scale (from 1% of income to 8% of income) is not linked in any way to the amount needed to be raised and preliminary tests of this scale suggest it may need to be nearly eight times higher (from 8% to 64%) if the social security contribution is to meet the shortfall in existing allocation from tax.

The proposals for the institutional model, the negotiation with providers and the cost for the ambitious administration needed also all lack detail and coherence, with numerous contradictions being found. The estimated cost of administration of 3% is shown to be unrealistic, given the scope of the plans.

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<sup>m</sup> <http://www.anc.org.za/elections/2009/manifesto/manifesto.pdf>

The ANC 2010 NHI proposals contain the same impossible core promise as earlier documents: that there will be more healthcare, more GPs and a choice of public or private sector providers, no co-payments, with coverage for the whole population, but at a cost which will be lower than what workers are currently paying for medical schemes.

From a practical perspective, the proposals still do not give any clear sense of what NHI might look like and much work remains to be done before stakeholders can be consulted properly. The list of stakeholders in the report includes a major role for the unions but fails to identify employers, doctors and healthcare workers as stakeholders, or the existing members and managers of medical schemes. Complementary medicine practitioners and African Traditional Healers remain excluded from the proposals.

**The dissemination of a report in the public domain is indeed welcome after two years of work by the ANC Task Team which was formed in July 2008. However the NHI proposals as released in September 2010 remain little more than a conceptual wish-list and there remains much more technical work to be done to describe a viable and implementable system.**

It seems inescapable that there will be, as envisaged in the ANC Health Plan of 1994<sup>6</sup>, a two-tier system with a solid under-pinning of a National Health Service available to all. What does need to be addressed are the problems in the voluntary health insurance system and how to turn this to a mandatory system to remove some of the burden on the NHS so that those who can contribute to healthcare, do so, according to their income. This is closer to the vision articulated from 1994 to 2005 and that work needs to be reconsidered without the Post-Polokwane ideological constraints.

The NHI proposals in 2010 rightly focus on the need to improve delivery and the quality of care in the NHS. However it is unnecessary and wasteful to develop a duplicate institution such as the proposed NHI Fund. The reforms in management and systems can as readily be implemented by the Department of Health and are long overdue.

Reforms needed in private health insurance, like the introduction of the Risk Equalisation Fund, are critical and cannot be delayed with the excuse of these not being necessary once some future system is fully implemented 14 years from now. It is incumbent on all stakeholders in healthcare in South Africa to work together to find a viable vision of the immediate future of the South African health system.

The opinions expressed are those solely of the author.

**Professor Heather McLeod**

15 October 2010

## Resources on the IMSA Web-site

The following is available on the NHI section of the IMSA web-site: [www.imsa.org.za](http://www.imsa.org.za)

- A copy of the ANC proposals [PDF document]. The original is obtainable from: <http://www.anc.org.za/show.php?include=docs/pr/2010/pr0921.html&ID=6013>

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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