

# Rural Health Partner Network

## Submission on National Health Insurance

### White Paper

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Submission made by:

Rural Health Advocacy Project, Rural Doctors Association of Southern Africa, Rural Rehab South Africa, UKZN Centre for Rural Health, Wits Centre for Rural Health, Ukwanda Centre for Rural Health (Stellenbosch University), University of Cape Town: PHC Directorate, Professional Association of Clinical Associates in South Africa, Africa Health Placements

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Ukwanda Sentrum vir Landelike Gesondheid  
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Submission endorsed by: People's Health Movement and SECTION27



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## Summary

In this submission we seek to draw attention to how the National Health Insurance White Paper fails to adequately account for rural health contexts and the challenges that these contexts pose for service delivery and access for patients. We do not, however, criticize the underlying principles of the NHI, and fully support the government in its commitment to this reform process. Our purpose is simply to ensure that each of the components of the proposed NHI is fully rural-proofed.

Rural areas are characterized by a number of intrinsic disadvantages that have particular relevance to the ideal of universal coverage proposed by NHI: there is a higher burden of poverty; the social determinants of health have a more direct influence on health; the cost of accessing health services is higher; management capacity is relatively weak; and there is a relative paucity of private practitioners and specialists in rural areas. An NHI that does not address these factors, cannot be fully implemented. In this submission we draw attention to several ways these factors can be accounted for through a process of rural-proofing.

We start by drawing attention to the fact that rural remains undefined within the health system and then offer an approach to developing functional definitions that can be used for the purposes of resource allocation and planning. Defining rural is critical in understanding how the system in rural settings functions and what sorts of resources are needed to address the health care needs of rural communities.

We then discuss some of the potential pitfalls of the suggested approaches to financing of health care outlined in the White Paper. Here we critique the use of utilisation as a key variable and argue that unmet needs in rural areas and the higher costs of providing care in these contexts demand careful consideration. This, we suggest can be done through the inclusion of a rural index in financing mechanisms.

We then turn our attention to PHC re-engineering and argue that it provides a good opportunity to consider how access to services could be improved in rural settings by doing things differently. We argue that due to geographic and socio-economic barriers to access, consideration should be given to innovative approaches to outreach, task sharing and patient transport.

We end our submission by discussing human resources for health—arguably the most important component of any health system. Here we argue that a high-level NHI working group should be established to focus specifically on human resources for health, to address NHI human resource needs in general, but especially also to address the human resource requirements for rural areas in terms of health care professionals.

Consideration of human resource needs for rural health is complex and includes the determination of human resource needs (which may differ from urban centres) and then how to attract and retain the right mix of professionals in rural areas. We maintain that recruitment and retention to rural areas involves more than just rural allowances; it demands consideration of education reform, enhanced scopes of practice, professional support, and access to social infrastructure such as housing and opportunities for partners and children.

## Introduction

The South African government is currently embarking on one of its most ambitious transformation projects of the last 20 years. The introduction of the National Health Insurance (NHI) has the potential to fundamentally shift how the provision of health care is funded, how the system is structured and how services are accessed. The NHI could, if implemented to its full potential, could be one of the country's most important social justice projects. The NHI has the potential to promote greater equity in health care provisioning and ensure all people who reside in South Africa enjoy full access to health care services as enshrined in Section 27 of South Africa's Constitution (Act 108 of 1996)

For this process to truly transform health care in South Africa, it is essential that the government implement reforms that effectively deal with deep fractures in the resourcing of care between various systems and contexts. This not only involves promoting greater equity between the public and private health systems, but also within the public system itself.

In this submission on the NHI White Paper, the Rural Health Advocacy Project and its partner organisations, together forming the Rural Health Partner Network, provide a detailed critique of the treatment of rural health in the current version of the policy paper. We are cognisant of the fact that the White Paper is a broad framework that outlines the structure and key priorities of the NHI and is not meant to provide the substance of each of its components. That said, the explicit recognition of factors that make service delivery both more expensive and difficult in rural contexts is absolutely vital at this juncture.

**Without due consideration of factors such as geography (distance and topography), demographic characteristics, epidemiological profiles, high levels of socio-economic deprivation and inequities in the resourcing of care, the NHI will simply duplicate historical and structural neglect that continues to define much of rural health.**

There are opportunities, however, to systematically account for these factors in the design and structure of the NHI. In this submission we offer advice on areas that require rural-proofing and how this may be achieved. Our submission is not one that simply demands more resources for rural health but is one that demands that we all think differently, THINK RURAL!

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## About us

The following organizations have contributed to the development of this submission:

### **Rural Health Advocacy Project**

The Rural Health Advocacy Project (RHAP) advocates for improved access to high quality, comprehensive health care services in rural areas. With the aim of improving the health of the South African Population, the RHAP stresses that a focus by the NHI on rural health will have a far-reaching effect, extending beyond rural communities, to impact South Africans at large.

### **Rural Doctors Association of Southern Africa**

As the voice of rural doctors in South Africa, the Rural Doctors Association of Southern Africa (RuDASA) has a vision of all rural people in South Africa accessing quality health care. Implementation of the NHI must assist in this, particularly in the adequate staffing of rural health services by appropriately skilled medical staff.

### **Rural Rehab South Africa**

Rural Rehab South Africa (RuReSA) is a group of concerned and committed rural Physio, Occupational, and Speech and Language Therapists, Audiologists and Psychologists. The group seeks to promote access to appropriate rehabilitation services in rural areas by addressing current policy; providing input on curriculum; providing a support network for current rural therapists; and promoting advocacy for accessible and appropriate service delivery for children and adults with disabilities in South Africa. RuReSA appreciates the commitment in the NHI to provide accessible, affordable and appropriate health care to all people at grass-roots level. However, we are concerned that the current strategies will exclude people with disabilities from accessing the appropriate services required.

### **Wits Centre for Rural Health (University of the Witwatersrand)**

The overall focus of the Wits Centre for Rural Health is the development of human resources for rural health care in South Africa. The Centre believes that the inequities faced by rural communities warrant the implementation of unique, tailored solutions for rural health care systems. In delivering on the NHI plans, rural health care must be prioritised.

### **Ukwanda Centre for Rural Health (University of Stellenbosch)**

The Ukwanda Centre for Rural Health coordinates and supports training and research initiatives in rural and underserved communities. Its objectives are to train and develop health workers to ensure that they are optimally equipped for service to the South African community; to conduct and support community-based research that is relevant to the health needs of the specific study community, but also to the broader South African and African population; and to engage in constructive cooperation between various communities, health-service providers, and non-governmental organisations in order to promote broad-based community development and health. It is essential that the NHI process engages rural communities on their priorities and needs.

### **Primary Health Care Directorate (University of Cape Town)**

The focus of the Primary Health Care Directorate at the University of Cape Town is the coordination and integration of primary health care principles into education, research and service programmes at UCT and in the province of the Western Cape. The multi-disciplinary team is involved in a wide

variety of projects that link clinical care with community engagement, as well as a number of educational projects at undergraduate and postgraduate levels that are concerned with the broader determinants of health. The NHI affords an opportunity for universal coverage of health services in line with core PHC principles. The Director is a member of a panel of experts invited by the DG of Health to consult on the plan for NHI.

#### **UKZN Centre for Rural Health (University of KwaZulu-Natal)**

The Centre for Rural Health at UKZN focuses its research and interventions primarily on health care systems strengthening and community-level care in rural health services. The centrality of management in the performance of the health care system has been widely recognised and the NHI will need to pay particular attention to this in order to succeed in its objectives.

#### **Professional Association of Clinical Associates in South Africa**

The Professional Association of Clinical Associates in South Africa (PACASA) is a non-statutory, non-profitable organisation for Clinical Associate professionals. PACASA is an association for all Clinical Associates in South Africa aiming at professional advocacy and development. PACASA will work not only with Clinical Associates in South Africa but allied health care professionals and members of the community who are interested in quality health care.

#### **Africa Health Placements**

The mission of Africa Health Placements (AHP) is to support and enhance healthcare systems in Africa, by finding, placing and retaining healthcare workers in rural and underserved areas. AHP pledges to continue supporting the South African Government in recruiting and retaining appropriately qualified health care workers to areas of greatest need, so that the Government can deliver on the NHI promise of equal access for all to comprehensive health care.

## Features and principles of the NHI

In the White Paper the NHI is described as a:

*“Financing system that is designed to pool funds to provide universal access to quality, affordable personal health services for all South Africans based on their health needs, irrespective of their socio-economic status. NHI will be implemented through the creation of a single fund that is publicly financed and publicly administered. The health services covered by NHI will be provided free at the point of care. NHI will provide a mechanism for improving cross-subsidization in the overall health system. Funding will be linked to an individual’s ability-to-pay and benefits from health services will be in line with an individual’s need for health care. Implementation of NHI is based on the need to address structural imbalances in the health system and to reduce the burden of disease.” (P.9)<sup>1</sup>*

In reality, the NHI is a process of far-reaching health system reform aimed at not only improving equity and effectiveness in the funding of health services, but also in how those services are provided and then accessed by patients. In the White Paper, systemic reform is succinctly described as having the following features:

- **Universal access:** All South Africans will have access to needed promotive, preventive, curative, rehabilitative and palliative health services that are of sufficient quality and are affordable without exposing them to financial hardships. The right to access quality health services will be on the basis of need and not socio-economic status.
- **Mandatory prepayment of health care:** NHI will be financed through mandatory prepayment that is distinct from other modes of payment such as voluntary prepayment and out-of-pocket payments.
- **Comprehensive Services:** NHI will cover a comprehensive set of health services that will provide a continuum of care from community outreach, health promotion and prevention to other levels of care.
- **Financial risk protection:** NHI will ensure that individuals and households do not suffer financial hardship and/or are not deterred from accessing and utilising needed health services. It involves eliminating various forms of direct payments such as user charges, co-payments and direct out-of-pocket payments to accredited health service providers.
- **Single fund:** This refers to integrating all sources of funding into a unified health financing pool that caters for the needs of the population.
- **Strategic purchaser:** In order to purchase services for all, there should be an entity that actively utilises its power as a single purchaser to proactively identify population health needs and determine the most appropriate, efficient and effective mechanisms for drawing on existing health service providers.
- **Single-payer:** This refers to an entity that pays for all health care costs on behalf of the population. A single-payer contracts for healthcare services from providers. The term "single-payer" describes the funding mechanism and not the type of provider.<sup>2</sup>

These reforms do not exist in a social and political vacuum. They are designed to align the funding and provisioning of health care in South Africa with several fundamental tenets of the Constitution

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<sup>1</sup> National Health Insurance For South Africa: White Paper (2015) available [http://www.gov.za/sites/www.gov.za/files/National\\_Health\\_Insurance\\_White\\_Paper\\_10Dec2015.pdf](http://www.gov.za/sites/www.gov.za/files/National_Health_Insurance_White_Paper_10Dec2015.pdf)

<sup>2</sup> NHI White Paper, p. 9

that demand redress; the promotion of equity, and the realization of basic human rights. In this regard, the NHI is underpinned by a core set of values or principles situated within a rights-based framework. Key principles outlined in the White Paper include:

- **Right to access health care:** NHI will ensure access to health care as enshrined in the Bill of Rights, Section 27 of the Constitution:

*"Everyone has the right to have access to health care services including reproductive health care... The State must take reasonable legislative and other measures within its available resources, to achieve the progressive realization of each of these rights. No one shall be refused emergency medical treatment".*

- **Social solidarity:** NHI will provide financial risk pooling to enable cross-subsidisation between the young and old, rich and poor as well as the healthy and the sick.
- **Equity:** NHI will ensure a fair and just health system for all and that those with the greatest health needs will be provided with timely access to health services.
- **Health care as a Public Good:** Health care shall not be treated like any other commodity of trade, but as a social investment.
- **Affordability:** Health services will be procured at a reasonable cost that recognises the need for sustainability within the context of the country's resources.
- **Efficiency:** Health care resources will be allocated and utilised in a manner that optimizes value for money. <sup>3</sup>

For the RHAP the key features and underpinning principles are uncontentious and mark an important move by government toward health system reform that is congruent with a national project to progressively realise the basic right to health for all.

In this submission we will not challenge any of these features or principles; we believe that the implementation of the NHI is long overdue and fully support its intentions. We do, nonetheless, believe that it is important to draw the Department's attention to what we believe are *gaps* in how the issue of rural health is dealt with in the White Paper.

Rural communities remain among the most neglected populations in South Africa in terms of benefitting from basic goods, services, and opportunities enshrined in our Constitution. It is absolutely critical that any health system reform explicitly focus on rural health and its unique contextual needs and challenges.

### **A necessary focus on Rural Health: Universal access for rural communities**

The relationship between poverty, poor health, and healthcare outcomes has been well established; not only do poor people experience higher burdens of disease because of various social determinants, they also have less access to care.<sup>4</sup> Globally research continues to show that this is particularly acute for rural populations. These populations tend to carry a disproportionate burden of both communicable and non-communicable diseases and across almost all indicators experience

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<sup>3</sup> NHI White Paper p. 10

<sup>4</sup> Peters, D.H., Garg, A., Bloom, G., Walker, D.G., Brieger, W.R. and Hafizur Rahman, M., 2008. Poverty and access to health care in developing countries. *Annals of the New York Academy of Sciences*, 1136(1), pp.161-171.

worse health outcomes.<sup>5</sup> The South African context is no different and any transformative project, such as the National Health Insurance (NHI), must necessarily account for the unique demographic, epidemiological and socio-economic factors that shape rural areas.

*Rural demographics and socioeconomic status*

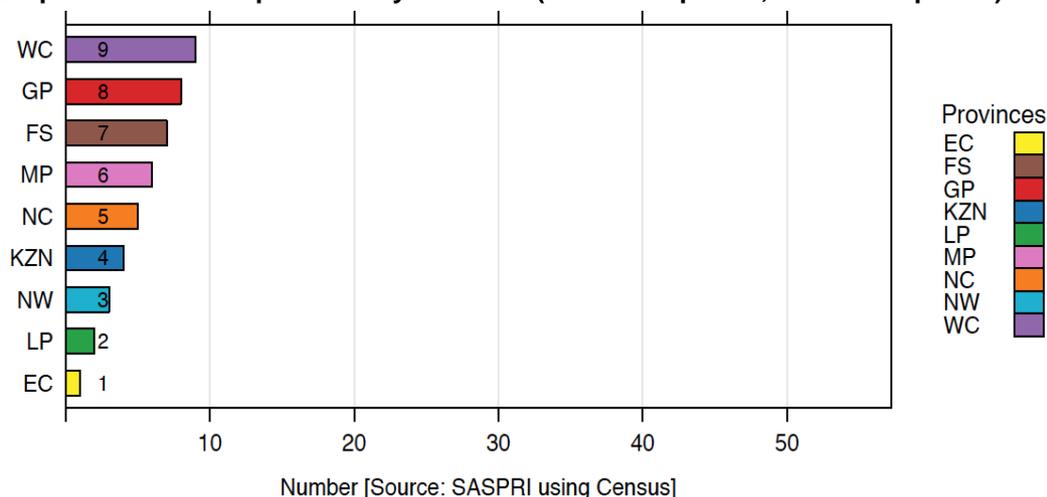
According to figures provided by the World Bank (2013), approximately 38% of South Africa’s population is considered rural. This population is not spread evenly across the country though and there are five provinces where the rural population exceeds 50% of the total (see Table 1).

**Table 1: Rural Population by province (percentage)<sup>6</sup>**

| EC | FS | GP | KZN | LP | MP | NC | NW | WC |
|----|----|----|-----|----|----|----|----|----|
| 58 | 20 | 4  | 53  | 88 | 59 | 29 | 55 | 7  |

The provinces with the largest rural populations are also those with the highest levels of relative deprivation (Graph 1).

**Graph 1: Relative Deprivation by Province (1=Most Deprived; 5= least deprived)**



Source: District Health Barometer 2014/15<sup>7</sup>

In fact, the 10 most deprived sub-districts in South Africa are all considered rural (Table 2).

<sup>5</sup> Smith, K.B., Humphreys, J.S. and Wilson, M.G., 2008. Addressing the health disadvantage of rural populations: how does epidemiological evidence inform rural health policies and research?. *Australian Journal of Rural Health*, 16(2), pp.56-66.

<sup>6</sup> Todes, A., Kok, P., Wentzel, M., Van Zyl, J. and Cross, C., 2010, August. Contemporary South African urbanization dynamics. In *Urban forum* (Vol. 21, No. 3, pp. 331-348). Springer Netherlands.

<sup>7</sup> <http://www.hst.org.za/publications/district-health-barometer-201415-1>

**Table 2: Relative Deprivation by local municipality**

| Province      | District     | Local Municipality | Population weighted average rank of wards in the local municipality (where 1=most deprived) | National rank (where 1=most deprived) |
|---------------|--------------|--------------------|---|---------------------------------------|
| KwaZulu-Natal | uMzinyathi   | Msinga             | 176   | 1                                     |
| Eastern Cape  | Alfred Nzo   | Ntabankulu         | 280   | 2                                     |
| Eastern Cape  | OR Tambo     | Port St Johns      | 304   | 3                                     |
| KwaZulu-Natal | Ugu          | Vulamehlo          | 383   | 4                                     |
| KwaZulu-Natal | iLembe       | Maphumulo          | 388   | 5                                     |
| Eastern Cape  | Alfred Nzo   | Mbizana            | 395   | 6                                     |
| Eastern Cape  | OR Tambo     | Ngquza Hill        | 399   | 7                                     |
| KwaZulu-Natal | uMkhanyakude | uMhlabuyalingana   | 400   | 8                                     |
| Eastern Cape  | Chris Hani   | Engcobo            | 449   | 9                                     |
| KwaZulu-Natal | Uthungulu    | Nkandla            | 453   | 10                                    |

Source: District Health Barometer 2014/15<sup>8</sup>

*Availability of care in rural settings: infrastructure and HR inequities (infrastructure inequity trap)*

The equitable distribution of HRH remains one of the most persistent challenges confronting access to healthcare for rural populations in South Africa. The number of HRH per 100 000 population is lowest in provinces with large rural populations.<sup>9</sup>

The differences are stark when one considers the difference in the number of doctors between largely rural (Eastern Cape, Limpopo, and Mpumalanga) and largely urban provinces (the Western Cape and Gauteng) (Table 3).

**Table 3: Medical practitioners per 100 000 population**

|   | EC   | FS   | GP   | KZN  | LP   | MP   | NC   | NW   | WC   | SA   |
|---|------|------|------|------|------|------|------|------|------|------|
| <b>Medical practitioners per 100 000 population</b> |      |      |      |      |      |      |      |      |      |      |
| 2014 Public sector                                  | 24.5 | 31.0 | 34.9 | 38.1 | 23.1 | 24.5 | 45.0 | 20.2 | 33.9 | 30.8 |
| 2015 Public sector                                  | 26.1 | 23.3 | 34.6 | 35.9 | 24.4 | 22.9 | 45.5 | 21.3 | 34.2 | 30.3 |

Source: South African Health Review (2016)<sup>10</sup>

These inequities are repeated when it comes to pharmacists. In this instance the Western Cape, for example, has nearly three times as many pharmacists per 100 000 population working in the province as the Eastern Cape (Table 4).

**Table 4: Number of pharmacists per 100 000 population**

|                    | EC  | FS   | GP   | KZN | LP  | MP  | NC   | NW  | WC   | SA   |
|--------------------|-----|------|------|-----|-----|-----|------|-----|------|------|
| 2014 Public sector | 6.7 | 12.9 | 11.5 | 7.8 | 8.5 | 7.5 | 14.5 | 7.5 | 19.4 | 10.2 |
| 2015 Public sector | 8.8 | 14.8 | 11.6 | 8.3 | 9.8 | 7.6 | 15.9 | 7.5 | 20.0 | 11.0 |

Source: South African Health review (2016)<sup>11</sup>

The pattern shifts with nursing where the spread of nurses between rural areas appears to be more even. In fact, rural provinces tend to have more professional nurses than largely urban provinces (Table 5).

<sup>8</sup> ibid

<sup>9</sup> As with other statistics or measures of resource distribution, service delivery or outcomes within the health system in South Africa, there are some questions around the accuracy of HRH data. Different sources often provide vastly different figures for the same cadres in the same areas. This is due to differences in approaches to measurement, sources of data and time-periods when data was collected. For the purposes of this submission, we draw on the SA Health Review Stats because these are taken directly from the DoH's HR systems and are so taken to be official statistics

<sup>10</sup> <https://www.health-e.org.za/2016/05/04/report-south-african-health-review-2016/>

<sup>11</sup> ibid

**Table 5: Nurses per 100 000 population by category**

|   | EC    | FS    | GP    | KZN   | LP    | MP    | NC    | NW    | WC    | SA    |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>Professional nurses per 100 000 population</b> |       |       |       |       |       |       |       |       |       |       |
| 2014 Public sector                                | 164.8 | 105.4 | 133.3 | 173.9 | 177.5 | 141.4 | 143.1 | 144.8 | 112.9 | 151.4 |
| 2015 Public sector                                | 166.0 | 101.7 | 133.7 | 172.6 | 178.7 | 142.5 | 143.6 | 137.3 | 115.3 | 151.3 |

Source: South African Health Review (2016)<sup>12</sup>

Most striking are the inequities in the availability of rehabilitation professionals between urban and rural settings (Table 6).

**Table 6: Occupational Therapists and Physiotherapists per 100 000**

|   | EC   | FS   | GP   | KZN  | LP   | MP   | NC   | NW   | WC   | SA   |
|---|------|------|------|------|------|------|------|------|------|------|
| <b>Occupational therapists per 100 000 population</b> |      |      |      |      |      |      |      |      |      |      |
| 2013 Public sector                                    | 1.9  | 3.2  | 2.8  | 1.9  | 3.9  | 2.2  | 4.7  | 1.4  | 3.1  | 2.6  |
| 2014 Public sector                                    | 2.0  | 3.3  | 3.4  | 2.3  | 3.8  | 2.7  | 6.0  | 1.6  | 3.1  | 2.8  |
| 2015 Public sector                                    | 2.2  | 2.9  | 3.2  | 2.4  | 3.9  | 2.6  | 7.2  | 1.9  | 3.2  | 2.9  |
| <b>Physiotherapists per 100 000 population</b>        |      |      |      |      |      |      |      |      |      |      |
| 2013 Public sector                                    | 2.35 | 3.59 | 2.29 | 3.04 | 3.17 | 2.18 | 6.25 | 2.54 | 3.27 | 2.82 |
| 2014 Public sector                                    | 2.39 | 2.94 | 2.19 | 3.22 | 3.12 | 2.47 | 6.34 | 2.35 | 3.23 | 2.81 |
| 2015 Public sector                                    | 2.59 | 2.90 | 2.16 | 3.42 | 3.59 | 2.06 | 6.63 | 2.38 | 3.39 | 2.92 |

Source: South African Health Review 2015/16

These statistics do not tell the whole picture in terms of inequities between urban and rural areas. The stats provided are based on provincial differences. There is significant inequities within provinces as well. For instance, in rural province such as the Eastern Cape, Limpopo, Mpumalanga, KwaZulu-Natal and the North West, there is a concentration of health care professionals in urban centres (for reasons mentioned below). So inequity between urban and rural areas is likely to be far greater than the stats provided here indicate. Unfortunately, data on the distribution of health care workers between urban and rural contexts within provinces is unavailable publicly.

There are a number of factors that contribute to difficulties in recruiting and retaining healthcare professionals in rural settings. Research has revealed that these include both push and pull factors such as: difficult working conditions; inadequate accommodation; lack of employment opportunities for partners; shortage of schooling for children; few opportunities for career development; and social and cultural isolation.<sup>13</sup>

#### *Inequities in health expenditure between urban and rural areas*

Research has shown that provinces that are the most deprived and with the least developed health systems have historically received the smallest share of healthcare funds. This has been explained as the 'infrastructure inequality trap', where provinces with comparatively well-developed health infrastructure and human resourcing compliments tend to receive a larger share of available resources.<sup>14</sup>

Over time this pattern has started to shift and there is some progress in achieving vertical equity between quintiles. In terms of total per capita District Health System expenditure median per capita, expenditure in the least deprived districts (quintile 5) in 2005 was R686 while median expenditure

<sup>12</sup> ibid

<sup>13</sup> World Health Organization, 2010. *Increasing access to health workers in remote and rural areas through improved retention: global policy recommendations*. World Health Organization.

<sup>14</sup> Stuckler, D., Basu, S. and McKee, M., 2011. Health care capacity and allocations among South Africa's provinces: infrastructure-inequality traps after the end of apartheid. *American journal of public health*, 101(1), pp.165-172.

for the most deprived districts (quintile 1) was R926, a difference of 34%. In 2014 median per capita DHS expenditure for quintile 5 has increased to R1622 while median expenditure for quintile 1 has only increased to R971.<sup>15</sup>

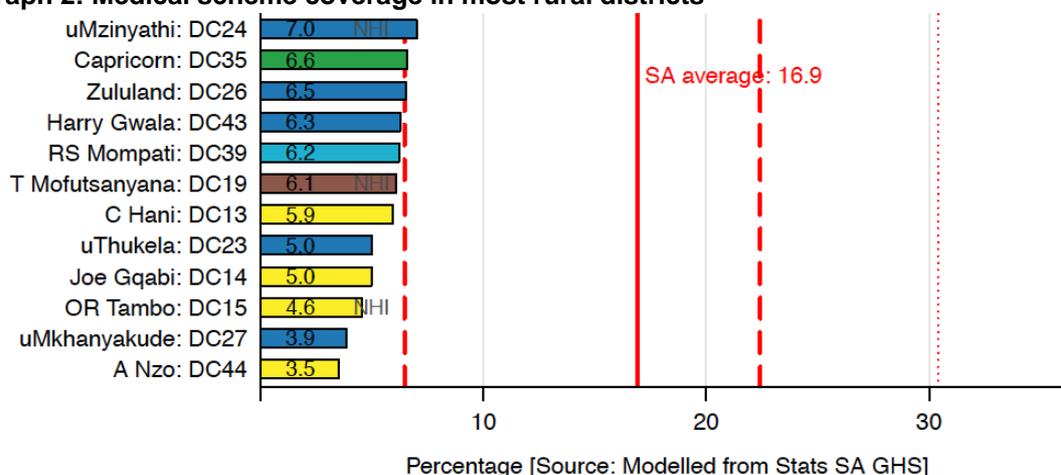
This trend changes, however, when we consider per capita Primary Healthcare (PHC) expenditure in relation to deprivation quintiles. Per capita PHC expenditure is an indicator of Department of Health Services (DHS) expenditure excluding expenditure on district management and district hospital services. In this instance, quintile 4 (second least deprived) had the highest median expenditure of R927 in 2013, while quintile 3 had the lowest median expenditure of R927. Quintile 5 districts had the second highest median per capita PHC expenditure of R856, while quintile 1 median district expenditure was R20 less per capita at R836.<sup>16</sup>

In some instances intra-provincial inequities are greater than inter-provincial inequities. In the Eastern Cape for example, the two metros Nelson Mandela Bay (R1218) and Buffalo City (R1002), which are the two least deprived districts in the province, have per capita PHC expenditure that is substantially higher than Alfred Nzo (R560) and OR Tambo (R676), the two most deprived and rural districts in the country.<sup>17</sup>

### Difficulties and costs in accessing care for rural patients

Rural districts also generally have the lowest levels of medical scheme coverage, which means they depend most heavily on the public health system for healthcare (Graph 2).

**Graph 2: Medical scheme coverage in most rural districts**



Source: District Health Barometer 2014/15<sup>18</sup>

The consequences of having to pay for healthcare at private or public facilities and providers are greatest for rural populations where out-of-pocket (OOP) is often catastrophic for rural households (Table 7).

<sup>15</sup> Health Systems Trust. District Health Barometer 2014/15: available [https://www.health-e.org.za/wp-content/uploads/2015/10/Complete\\_DHB\\_2014\\_15\\_linked.pdf](https://www.health-e.org.za/wp-content/uploads/2015/10/Complete_DHB_2014_15_linked.pdf)

<sup>16</sup> ibid

<sup>17</sup> ibid

<sup>18</sup> ibid

**Table 7: Catastrophic OOP expenditure by location type**

| Variable       | OOP transport to outpatient care |      | OOP Outpatient |      |         |      | OOP Inpatient |      |         |      |
|----------------|----------------------------------|------|----------------|------|---------|------|---------------|------|---------|------|
|                | 5-9%                             | >10% | Public         |      | Private |      | Public        |      | Private |      |
|                |                                  |      | 5-9%           | >10% | 5-9%    | >10% | 5-9%          | >10% | 5-9%    | >10% |
| Rural          | 22.4                             | 15.3 | 2.9            | 2.1  | 11.5    | 54.1 | 10.1          | 8.2  | 9.7     | 17.9 |
| Informal-urban | 8.6                              | 10.6 | 1.7            | 1.3  | 16.6    | 30.7 | 4.1           | 5.2  | 0.0     | 1.2  |
| Formal-Urban   | 6.7                              | 5.1  | 1.4            | 0.7  | 8.6     | 14.4 | 4.8           | 5.2  | 1.2     | 7.5  |

Adapted from Harris. *et al*, 2011<sup>19</sup>

\*Expenditure is catastrophic if it exceeds 10% of a household's monthly income)

Research (e.g. Harris *et al*, 2011) has shown that accessing services in rural areas generally takes more time and is more expensive than in urban centres (Table 8).

**Table 8: Cost and time of travel by area type**

|                                     | TB        |          |           |           |       | ART       |          |           |           |       | CEOC      |          |           |           |       |
|-------------------------------------|-----------|----------|-----------|-----------|-------|-----------|----------|-----------|-----------|-------|-----------|----------|-----------|-----------|-------|
|                                     | Urban COJ | Urban CT | Rural BBR | Rural HLA | Total | Urban COJ | Urban CT | Rural BBR | Rural HLA | Total | Urban COJ | Urban CT | Rural BBR | Rural HLA | Total |
| Mean costs of travel (ZAR)          | 2.11      | 3.77     | 23.15     | 23.42     | 12.86 | 14.20     | 9.70     | 39.95     | 35.34     | 24.36 | 36.44     | 51.72    | 148.83    | 99.38     | 82.52 |
| Mean travelling time**              | 40.1      | 41.8     | 88.3      | 121.0     | 71.7  | 66.7      | 46.9     | 152.0     | 134.4     | 98.3  | 47.5      | 59.8     | 94.9      | 177.8     | 90.0  |
| Proportion of total costs of use*** | 100%      | 95.4%    | 81.8%     | 80.6%     | 85.3% | 94.5%     | 94.5%    | 79.8%     | 69.3%     | 84.6% | 29.1%     | 34.8%    | 42.5%     | 51.7%     | 40.6% |

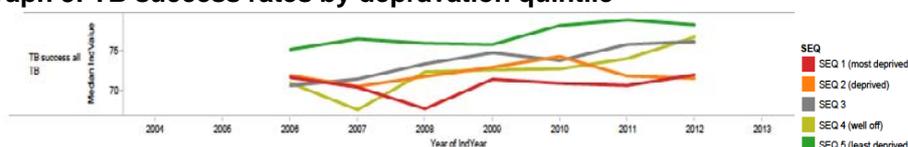
Figure 1: cost of transport urban and rural patients (both ways) \* costs collected in 2008/9 \*\* to and from facility \*\*\* other costs including food, child care and air time.

Source: Harris *et al*, (2011)<sup>20</sup>

### Differences in health outcomes between urban and rural contexts

All the factors described above mean that rural populations tend to have poorer health outcomes than their urban counterparts. For example, TB treatment success rates in the most deprived districts in South Africa, while improving, tend to be lower than in the least deprived districts (Graph 3).

**Graph 3: TB success rates by deprivation quintile**



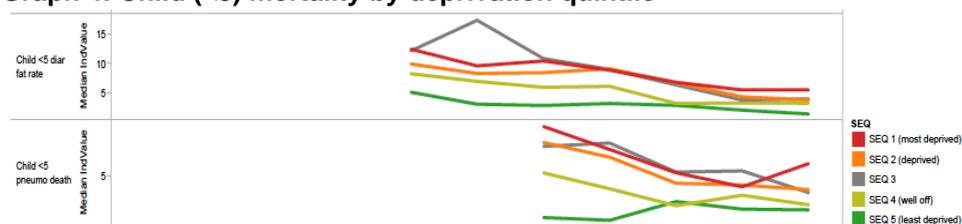
Source: District Health Barometer 2013/14

Children are particularly vulnerable in rural settings and mortality rates for treatable conditions such as diarrhoea and pneumonia tend to be far higher in deprived rural districts than they are in better off urbanised districts (Graph 4).

<sup>19</sup> Harris, B., Goudge, J., Ataguba, J.E., McIntyre, D., Nxumalo, N., Jikwana, S. and Chersich, M., 2011. Inequities in access to health care in South Africa. *Journal of public health policy*, pp.S102-S123.

<sup>20</sup> *ibid*

**Graph 4: Child (<5) mortality by deprivation quintile**



Source: District Health Barometer 2012/13

One of the challenges in ensuring that rural is fully considered in health policy, strategic planning, resourcing and service delivery is that there is a lack of technical clarity on what needs to be addressed in these areas to ensure that rural health receives a fair deal.

## Gaps in the NHI White Paper: Priority issues for Rural Health

In 2011 the RHAP, along with several of our other rural partners, contributed to the Rural Doctors Association of Southern Africa (RuDASA) submission on the NHI Green Paper.<sup>21</sup> In that submission we noted the general absence of a clearly articulated strategy to address historical and structural disadvantages faced by rural communities in accessing health care. In that submission we articulated a strategy aimed at prioritizing rural health in the form of the acronym **RURAL NOW**, which represents the following elements:

**Rural Accreditation First**

**User Fees Abolished and No Increase on VAT**

**Reverse the Existing Infrastructure/Inequality Trap through Needs-Based Budgeting**

**Access to Health by Addressing Social Determinants including Transport**

**Lure Sufficient Human Resources to Rural Areas**

**No to Delegated Management Responsibility WITHOUT Authority and Accountability**

**Only *through* Consultation with Communities, Health Workers and Activists**

**Wide-ranging PHC benefit package including Rehab, Mental Health Care and**

**Eye Care at all levels of care**

In many respects progress has been made in accounting for rural health in the White Paper and to some extent elements described above are dealt with or at least mentioned as a priority. In the White Paper rural health is dealt with in the following ways:

- User fees and other direct out-of-pocket payments for care will be abolished under the NHI.<sup>22</sup> This will offer some relief for poor and vulnerable communities. Although transport to facilities, which constitutes the largest portion of OOP payments for rural patients, is not addressed in the White paper.
- Rural populations, which are now considered a vulnerable group, will be amongst the first populations to be registered and issued with NHI cards<sup>23</sup>

<sup>21</sup> [http://www.rhap.org.za/wp-content/uploads/2014/03/NHI\\_GreenPaper-RuDASA-and-partners\\_11-December-2011.pdf](http://www.rhap.org.za/wp-content/uploads/2014/03/NHI_GreenPaper-RuDASA-and-partners_11-December-2011.pdf)

<sup>22</sup> NHI White Paper, p.9

<sup>23</sup> *ibid*, p.34

- In addition to demographics, additional factors such as “topography, facilities and structures, living environment, social and health deprivation and other contextual dynamics” will be taken into account when considering the needs of a population<sup>24</sup>
- A multi-sectoral response to providing basic social infrastructure and amenities will be used to improve the living and working conditions of health care professionals working in rural areas<sup>25</sup>
- Strategies aimed at attracting and retaining health care professionals in rural areas will be prioritized<sup>26</sup>

The recognition of rural populations as vulnerable and in need of special intention in the design and implementation of the NHI is an important step towards addressing the structural inequities entrenched within the health system. That said, there is precious little detail on what these strategies will entail or precisely how rural health and rural populations will be prioritized.

The remainder of this submission will deal with several key issues that should be considered in the revision of the White Paper in order to ensure that it is rural-proofed in such a way that structural inequities and barriers to access of services are progressively addressed as part of the implementation of the NHI.

## Defining rural

One of the first things that should be pointed out in an assessment of how rural health is considered and dealt with in the White Paper is that what constitutes rural is not clearly defined. While ‘rural’ is to some extent explicitly accounted for in the White Paper, especially in terms of identifying rural populations as a vulnerable group, it remains open to interpretation exactly what rural means.

The absence of a clear definition of rural is problematic because it remains unclear what exactly is being prioritized or how to implement strategies aimed at addressing structural inequities between urban and rural settings.

One of the challenges here is that there is no useful standard definition of rural that could be used to address this particular gap in the White Paper. While there are a number of government departments and agencies that do define rural for the purposes of policy and strategic planning, these definitions are generally designed to fit a specific purpose and are not of much use in the health sector.

It is critical that an approach to defining rural be developed to be used in informing strategies under the NHI aimed at addressing issues of equity, efficiency and effectiveness in the provisioning of health care.

There is no simple approach to doing this but we can draw on lessons from work done internationally as well as initial work undertaken by the RHAP to understand how this should be approached.

Our review of definitions of rural to be used in health systems internationally found that departments of health often adjust broader typologies to fit health specific policy purposes.<sup>27</sup> We found that it is

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<sup>24</sup> *ibid*, p.31

<sup>25</sup> *ibid*, p.42

<sup>26</sup> *ibid*, p. 41

necessary for these departments to select health specific factors - such as utilisation, burden of disease and unmet need - that are most appropriate and relevant for that department, policy or intervention and combine them with factors such as population density and socio-economic status to develop operational definitions for policy purposes<sup>28</sup>.

These operational definitions of rural used in health, often referred to as rural health indices, have become increasingly popular internationally because they offer a technically rigorous approach in fostering both efficiency and equity in health system planning and the allocation of resources<sup>29</sup>.

While the list of factors that are used as measures of rural in various indices can be fairly extensive, these factors can be grouped into the following five broad categories:<sup>30</sup>

- **Measures of health need:** measures of need can include utilisation, clinical, and epidemiological measures as well as demographic measures that act as proxies for need at the population level such as age, sex and socio-economic status.
- **Measures of geographical remoteness:** remoteness can include measures such as average distance and travel time to various levels of care for defined communities as well as average distance for inter-facility transfers.
- **Population measures:** these measures can include both the size of a designated population and the population density of a particular area.
- **Some measure of specific circumstances that affect particular communities:** these measures are usually based on policy decisions to focus on historically neglected groups (based on race, ethnicity, gender) that may contain high levels of unmet need.
- **Measures that account for variations in service delivery:** costs between urban and rural settings associated with the effects of diseconomies of scale governance costs and additional supply chain costs due to longer distances.

The selection of variables from each of these categories to be used in developing an operational definition of rural really depends on what the purpose of that definition is.

In a paper published in the South African Health Review 2015<sup>31</sup>, we tested this approach in an assessment of equity in allocations between urban and rural district hospitals in KZN. Using principle components analysis we developed a rural index (using the size of catchment populations, distance to the regional hospital and the deprivation index) to rank facilities from most rural to most urban. We then, using regression analysis, compared hospitals based on their rural score on the index with input variables such as expenditure and doctors per 100 000 population. We found for, example, that expenditure on a per capita basis was higher in rural facilities than urban ones. This was primarily due to the fact that the cost of providing services at rural facilities was higher owing to diseconomies of scale.

A similar approach could be used for every aspect of the NHI, from financing to the design of the service delivery platform. Its importance and utility is in the fact that it removes guess work or

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<sup>27</sup> <http://www.rhap.org.za/rhap-discussion-document-defining-rurality-within-context-health-policy-planning-resourcing-service-delivery/>

<sup>28</sup> Humphreys, J.S., 1998. Delimiting 'rural': implications of an agreed 'rurality' index for healthcare planning and resource allocation. *Australian Journal of Rural Health*, 6(4), pp.212-216.

<sup>29</sup> *ibid*

<sup>30</sup> *ibid*

<sup>31</sup> <http://www.profnetmedical.co.za/media/1168/south-african-health-review-2014-15-part-8compressed.pdf>

political considerations from decisions around which facilities should benefit from additional resources to compensate for contextual factors. Resourcing of the NHI and rural health

In order to address the persistent structural inequities in the resourcing of health care between urban and rural contexts, it is important that the approach to the financing of the NHI systematically address these inequities based on a rigorous determination of need.

There are two approaches to doing this. The first would be to introduce additional grants or payments to rural districts that facilitate the development of needed infrastructure, such as new clinics, hospitals and amenities to accommodate health care workers in these areas. This approach addresses specific issues identified as contributing to sustaining the infrastructure inequity trap. By taking a focused approach to increasing absorptive capacity in rural contexts an increasing share of revenue will flow into rural areas over time.

The second approach to dealing with inequity relates to the allocation of budgets to districts for the payment of health care providers (public and private). As is discussed in more detail later, under the NHI the allocation of financial resources to districts will be based on factors such as, “the size of the population served, epidemiological profile taking account of target utilisation rates and average costs of providing a comprehensive range of personal health services at the PHC level.”<sup>32</sup> The rural-proofing—or the systematic consideration of rural factors—of this approach would require the development of a rural adjuster based on the same factors used in developing an operational definition of rural. To reiterate, these factors include: health need, geographic remoteness, population measures and an assessment of costs associated with providing services in rural settings. This adjuster would then add rural weighting to the allocation of resources to rural districts. This weighting could increase progressively, relative to how rural a district is when compared to others.

In practice, both approaches would need to be used to meaningfully address inequities between urban and rural contexts. Specific allocations for addressing rural needs would be used for infrastructure and other once off costs, while the rural adjuster would compensate rural districts for the higher costs associated with the delivery of services in rural settings (discussed in more detail below).

For these broader issues of financing to be addressed, there are a number of foundational issues around financing and the NHI that must first be resolved. These include: determining how much the NHI is going to cost; how revenue for implementation is going to be generated; how providers (both public and private) will be reimbursed for services delivered; and what role the private sector can and should play.

### *Cost of the NHI*

In the White Paper, the Department of Health (DoH) has revised its Green Paper cost estimates and projections for the rollout and implementation of the NHI based on more recent cost estimates established from the NHI Pilot Districts and the implementation of PHC re-engineering.<sup>33</sup> The revised estimated costs of implementation are provided in Table 9.

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<sup>32</sup> NHI White Paper p. 73

<sup>33</sup> *ibid*

**Table 9: Projection of NHI costs adapted from Green Paper**

|   |                | Average annual per cent increase | Cost Projection R m (2010 prices) |
|---|----------------|----------------------------------|-----------------------------------|
| <b>Baseline public health budget:</b>                         | <b>2010/11</b> |                                  | <b>109 769</b>                    |
| <b>Projected NHI expenditure:</b>                             | 2015/16        | 4.1%                             | 134 324                           |
|   | 2020/21        | 6.7%                             | 185 370                           |
|   | <b>2025/26</b> | <b>6.7%</b>                      | <b>255 815</b>                    |
| <b>Funding shortfall in 2025/26 if baseline increases by:</b> |                | 2.0%                             | 108 080                           |
|   |                | 3.5%                             | 71 914                            |
|   |                | 5.0%                             | 27 613                            |

Source: National Treasury projection (2012)

It is not clear how costs were estimated and which factors were considered in the calculation. In the White Paper, it is stressed that these cost estimates are illustrative projections and actual expenditure will depend on a number of factors such as trends in population health needs, utilization, supply capacity and reimbursement arrangements.<sup>34</sup>

The caution with which cost estimates are presented in the White Paper are founded, especially since determining and projecting costs of a scheme of this magnitude is notoriously difficult. That said, costing remains a vital component in ensuring that goods and services are purchased as efficiently as possible while constantly promoting greater access and equity in the system.

In our view an important component of the costing of health care services that has been absent for far too long has been the determination of cost differentials between urban and rural settings.<sup>35</sup> Generally, the cost of delivering health care is higher in rural settings than in urban settings. This is the case for a number of reasons:

- Higher infrastructure costs due to distance to facility sites
- Higher supply chain costs due to distance from urban centres to outlying rural facilities
- Higher per capita service delivery costs for priority interventions due to diseconomies of scale caused by low population densities and dispersion
- Greater cost burdens placed on patients due to higher transport costs and, on average, lower household incomes<sup>36</sup>

As a result of these factors, more resources are required to realise similar health outcomes in a rural patient, when compared to an otherwise similar urban patient. The determination of these additional resource needs for service delivery in rural areas is critical in determining how providers should be reimbursed, but also in making decisions on what services will be offered and how those services should be delivered.

### **Raising revenue**

In the White Paper three different scenarios are provided that outline the estimated additional resources needed over and above projected government expenditure on public health care that will be needed to fully implement the NHI. According to the White Paper, “the funding shortfall is R71.9 billion in 2025/26 if the baseline increases by 3.5 per cent a year. It would be R27.6 billion if

<sup>34</sup> *ibid* p. 49

<sup>35</sup> <http://www.rhap.org.za/financing-rural-health-international-best-practice-options-south-african-context/>

<sup>36</sup> *ibid*

baseline resources grow by 5.0 per cent a year (in real terms) and would be R108 billion if baseline resources grow by 2.0 per cent per year”.<sup>37</sup>

Addressing this shortfall will require the government to generate additional revenue through one, or a combination of, revenue sources (see Table 10).

**Table 10: Options for raising additional revenue under the NHI**

| Revenue Source           | Definition  | Examples   |
|--------------------------|---|--|
| <b>Direct Taxation</b>   | Taxes imposed on individuals or entities in relation to their income, earnings or wealth.             | Personal or corporate income tax, surcharge on income, inheritance tax   |
| <b>Indirect Taxation</b> | Taxes levied on transactions or goods and services, irrespective of circumstances of buyer or seller. | Value-added tax, national health insurance levy, financial transactions, fuel levy, taxes on alcohol and tobacco |
| <b>Payroll Taxation</b>  | Taxes calculated on payroll, as either employer or employee contributions, or both.                   | Contribution to National Health Insurance deducted from pay check  |
| <b>Premiums</b>          | Collection of premiums or membership contributions from employee or informal sector.                  | Ghana NHI for informal sector workers  |

Appreciating the need to introduce a combination of additional taxes and NHI levies, we maintain that whichever options are selected these must be progressive. That is, contributions to the NHI through taxes and levies should be proportional to income. In this regard, we urge the Department and Treasury to reconsider the decision to include regressive tax instruments, such as VAT, in possible options for revenue generation.

Revenue generation mechanisms that do not account for the material conditions of those contributing to the NHI will have a significant impact on the poor, and in particular, the rural poor. In rural settings, which are the most socio-economically deprived, priority should be given to addressing cost barriers to accessing services—particularly the cost of transport—rather than the introduction of regressive taxes that would simply diminish household income even further.

#### *Provider payment mechanisms*

We believe that the decision to build the NHI around a single purchaser of services is an important one. This will not only allow for the negotiation of lower prices within the health system, it will also provide a great deal of control over the basis for purchasing services. As the White Paper points out, this will allow the NHI as a single purchaser to identify the needs of the population in determining which services will be purchased and which providers they will be purchased from.

Even though this level of control diminishes the possibility of supplier induced demand and allows for greater efficiency in expenditure, while still addressing population need, the provider payment mechanisms outlined in the White Paper do not adequately address how need is determined or the influence of contextual factors on aspects such as cost and access.

<sup>37</sup> NHI White Paper p.56

### *Provider payment at hospital level*

In the public system hospitals receive global budgets that are determined historically and for the most part budgets are only adjusted for inflation each year. In the private sector reimbursement is on a fee for service basis. Neither approach is particularly good at promoting efficiency, effectiveness or equity in the provisioning of services at the hospital level.<sup>38</sup>

We therefore support the Department's intention to move towards a case-mix approach to the reimbursement of hospitals in both the public and private sectors under the NHI. It is apparent the chosen approach will be payment based on Diagnostic Related Groups (DRGs). DRGs are groups of patients who have been treated for the same condition (based on diagnosis, procedures, and age), co-morbidities and individual needs. The use of DRGs provides a means of defining and measuring a hospital's case mix complexity. Normally, the term "case mix complexity" is used to refer to a set of patient attributes which include severity of illness, risk of dying, prognosis, treatment difficulty, need for intervention, and resource intensity.<sup>39</sup> The more complex the case mix, the more costly to manage; sufficient funds will then be allocated under the NHI.

The problem with using DRGs as the primary mechanism for reimbursing hospitals is that it is a method that uses inpatient numbers to determine utilisation. Utilisation is then used as a proxy for need. As is the case with other utilisation methods, this approach can be anti-rural if the following issues are not dealt with appropriately:

- Case mix complexity must not be evaluated on clinical criteria alone. The logistics associated with management of patients in rural areas increases the complexity and costs, for which more budget must be allocated.
- DRGs are concerned with in-patient numbers and case mix; but rural facilities spend proportionately more time and resources on comprehensive outpatient consultations than others, owing to the problems around continuity of care (referrals and admissions).
- Access to the health system will remain difficult in rural communities; this will mean outreach from the rural hospital will continue as a cost-effective method of health care delivery. This requires significant funding (transport, extra staff), and should be considered in addition to DRG funding mechanisms.
- Continuity of care and referral processes are, even if working well, more difficult between rural and their urban referral centres, resulting in greater treatment difficulty, higher resource intensity, and greater severity of illness (on average) being found at rural facilities, compared to similar urban facilities.
- Rural health needs are far greater than the current demand. It is vital to tie funding to health needs, rather than demand. Funding might be easy to calculate for the latter, based simply on provision of services and existing infrastructure and workforce, but this favours better-resourced, usually urban, facilities.
- DRGs are part of an utilisation-based model that incentivises unnecessary and inappropriate use of services.

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<sup>38</sup> Sutherland, J., Crump, R.T., Repin, N. and Hellsten, E., 2013. Paying for hospital services: a hard look at the options. *CD Howe Institute Commentary*, 378.

<sup>39</sup> Mathauer, I. and Wittenbecher, F., 2013. Hospital payment systems based on diagnosis-related groups: experiences in low-and middle-income countries. *Bulletin of the World Health Organization*, 91(10), pp.746-756A.

### *Provider payment at the PHC level*

In the White Paper the Department proposes a system where all funds for PHC services will be pooled at the district level and services will then be purchased from both public and private providers. The allocation of funds to districts will be based on factors including, “the size of the population served, epidemiological profile taking account of target utilisation rates and average costs of providing a comprehensive range of personal health services at the PHC level.”<sup>40</sup>

Service providers will then be reimbursed on a risk-adjusted capitation system linked to a performance-based mechanism. The annual capitation amount will be linked to: the size of the registered population; epidemiological profile; and target utilisation and cost levels.<sup>41</sup>

This approach to the financing of PHC services would be a marked improvement on the historical and incremental approach to financing PHC services in the public sector. The trouble, however, is that both the determination of budgets allocated to districts and then the payment of providers on the risk adjusted-capitation use utilisation as a benchmark for need. These approaches do not account for unmet need and the importance of implementing interventions to improve access.

It is also not clear that either model could account for variations in costs associated with the delivery of services in different contexts. As we have already argued, a number of factors make service delivery in rural settings more expensive. These include:

- The distance between facilities and different levels of care renders supply chain, referral and outreach more expensive
- Low population densities mean that rural facilities do not benefit from economies of scale, which results in higher per capita costs than in urban facilities
- The complexity of service delivery in rural settings (I.e. access and complexity of cases-mix) all renders the cost of providing services in rural communities more expensive.

These factors make rural providers seem less efficient. Artificially inflated per capita costs then make it seem as if rural providers are comparatively well funded when compared to their urban counterparts. This effect, if not properly mitigated, means that there is a significant risk that this approach will only serve to deepen real inequity between rural and urban facilities.

Rural providers could also potentially be disadvantaged by the performance component, which rewards providers for exceeding targets if contextual differences are not carefully considered in the determination of targets and what constitutes good performance more generally.

If this approach to the payment of providers at the PHC level is going to be effective, it is essential that the allocation of resources to the district and then the risk-adjusted capitation formula used in the payment of service providers must include a rural adjuster.

### *Role of the private sector (particularly accreditation of providers)*

As already mentioned in this submission, there is very little private sector presence in rural areas. Private sector providers generally operate on a fee for service basis with most patients relying on

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<sup>40</sup> NHI White Paper p. 70

<sup>41</sup> Ibid

medical aid, OOP, or a combination of both to pay for access. Low levels of medical scheme membership, high levels of poverty, comparatively high costs of establishing practices or hospitals in rural settings means that there is no real market or incentive for for-profit providers to establish practices or hospitals in rural settings.

The risk here is that if the NHI does not introduce mechanisms that either incentivise or compel private for-profit providers to establish practices or hospitals in rural areas then inequity in access to services is likely to increase under the NHI. Patients in urban areas will now have access to both public and private providers, effectively increasing the availability of services. Rural patients will then rely on the public sector, with little or no access to the additional resources available in the private sector.

There are two ways this effect could be managed: the first is to ensure that the re-imbursment of providers includes a rural adjuster that addresses the cost issue. This could be done in such a way that the incentive (profit) for private providers is equal across urban and rural contexts.

The second option for dealing with the risk of deepening inequity is to ensure that the accreditation of facilities includes a process of determining whether or not a practice or facility is needed in a particular area or if a license should rather be issued to underserved and rural contexts. Certificates of need are provided for in the National Health Act (61 of 2003: Section 36-39) but this section has not been promulgated and without clear regulations governing the process of their issue and oversight.

It is important that as part of NHI reforms that the issue of the certificate of need is re-visited. The first step would be to produce clear regulations that meet all the requirements of the National Health Act. In our view a central component of the regulations should be Section 36 (3) (b), which amongst other things requires the promotion of “an equitable distribution and rationalisation of health services and health care resources and the need to correct inequities based on racial, gender, economic and geographical factors”. It is vital that factors are interpreted through a rural-proofing lens, to account for the complexities and differences in service provisioning, between urban, underserved and rural settings. This again depends on how rural is defined operationally under the NHI.

### *Emergency Medical Services*

Like other components of service delivery, under the NHI services will be contracted from both public and private providers.<sup>42</sup> We welcome this move because it will allow for greater access to well-resourced private EMS sector for all and not just those who have medical aid or who are able to pay out-of-pocket for services. Ensuring that all patients can benefit from both public and private EMS providers will ensure that this sector will finally be brought in-line with Section 27 (3), which states, “no one may be refused emergency medical treatment”.

There are two issues that we would like to highlight regarding EMS and service delivery in rural settings. The first issue is that the White Paper does not account for service delivery in differing contexts. Specifically, it does not make provision for different models of reimbursement that consider the impact of distance, topography and the differing resource needs required to deliver services in rural settings. Meeting basic service delivery standards (response times, personnel and

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<sup>42</sup> NHI White Paper p. 44

equipment) will require additional resources to be directed to rural contexts to ensure that rural patients will experience the same service quality as urban patients. Longer distances, dispersed populations and more difficult roads mean that EMS services take longer to reach patients and then to transfer them to the nearest facility. Vehicles operating in rural areas will also require servicing and repair more often because of distance and the poor quality of the roads in these areas. Unavoidably, these factors render service delivery in rural settings more expensive and this fact should be accounted for in reimbursement models for EMS services.

The second factor that should be considered is that there is virtually no private EMS provision in rural settings. Private EMS companies are for-profit and the low number of patients who have medical aid or who can afford to pay for services out-of-pocket in combination with higher costs associated with delivering EMS services in rural areas, means that there is no financial incentive to establish services in these areas. If strategies are not introduced to mitigate these inequities—such as increasing public sector service offerings in rural areas or providing incentives for private companies to start working in these areas—it is unlikely that access to EMS will be significantly improved for rural populations.

### PHC re-engineering

PHC re-engineering is at the core of the systemic reforms of the NHI and was the first significant aspect of the reform to be implemented following the publication of the Green Paper. The aim of PHC re-engineering is to improve access to health care and to improve the quality of that care. For the NHI to reach achieve this aim, its delivery model needs to be: effective, efficient, equitable, and comprehensive in its service package and of high quality. Meeting these criteria is unlikely if the continued rollout of PHC re-engineering is not carefully rural-proofed.

There are currently four streams of PHC re-engineering being implemented in the public system, these are:

- 1) Municipal Ward-based Primary Health Care Outreach Teams (WBPHCOTs);
- 2) Integrated School Health Programme;
- 3) District Clinical Specialist Teams; and
- 4) Contracting of private health practitioners at non-specialist level.

The underlying purpose of each of these streams is to broaden access to care and ensure that health is promoted, disease prevented and when needed, patients enter the system soon enough to receive the best possible care.

The success of these each of these streams in broadening access to care depends largely on the extent to which health care providers are able to reach patients beyond the walls of health facilities and within the community. The extent to which these PHC interventions will be effective requires consideration of the demographic, socioeconomic and spatial conditions in rural areas.

WBOTs are a good example of this: their primary role is to offer services such as screening, health promotion, the management of chronic conditions and some curative interventions within the community and within people's homes. For this intervention to be effective there is a basic level of service delivery that should take place. This involves ensuring that outreach teams are sufficiently

resourced with team leaders, community health care workers and equipment. What constitutes sufficient, however, really depends on context.

Take for example the role of the CHW. CHWs are being used to do outreach and take health promotion, screening and other basic health services into the community and into people's homes. Achieving this will certainly be more difficult and costly in rural setting than in urban ones. A few reasons for this are:

- Due to the sparsely populated nature of rural areas, CHWs will have longer average distances to travel between households. This means that the number of households a CHW in a rural setting could reasonably be expected to visit each month would be far fewer than in urban settings. This means that each WBOT may need to either consist of more CHWs than urban teams, or these teams may have a far more limited number of households to visit per team.
- While CHWs working in urban settings may be able to walk from the clinic or health post to their home visits, this may not be the case for CHW's working in deeply rural areas, where households are several kilometres from the nearest facility. This means that transport should be included in the implementation of the programme in rural settings.
- CHWs in rural settings may be required to perform additional tasks, such as home based care for the elderly and disabled, that CHWs working in urban areas may not be required to do

It is these sorts of factors that need to be considered for every aspect of PHC re-engineering. Context and environmental factors have a far greater influence on resource needs than the White Paper currently allows for.

Beyond outreach envisioned as part of PHC re-engineering in the White Paper, there is not sufficient attention given to strategies that could improve access to facilities for rural patients. Even though EMS is covered, the White Paper does not go far enough to account for contextual factors—such as distance and topography—that render EMS more difficult to deliver.

Beyond EMS, there is little mention of approaches to facilitating greater access to PHC services at facility level. For rural patients access to health care services is often severely limited by the fact that they simply cannot get to the facilities due to the cost of transport or because they are not physically able to due to a disability.<sup>43</sup>

There are a number of interventions that could be used to facilitate greater access to facilities in these contexts and situations. The most obvious of these would be to make provision for patient transport for vulnerable patients living in outlying areas. The use of maternal ambulances to improve access to assisted birth has already been piloted in the Free State with some success.

In some areas—such as in the North West Province as part of the Campaign for Accelerated Reduction of Maternal Mortality in Africa (CARMMA)<sup>44</sup>—maternal waiting homes have added a degree of predictability and safety to giving birth for women with high risk pregnancies. Here, women are accommodated close to health facilities so they can be monitored and have quick access to care in the event of an emergency.

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<sup>43</sup> Harris, B., Goudge, J., Ataguba, J.E., McIntyre, D., Nxumalo, N., Jikwana, S. and Chersich, M., 2011. Inequities in access to health care in South Africa. *Journal of public health policy*, pp.S102-S123.

<sup>44</sup> <http://www.sanews.gov.za/south-africa/campaign-help-curb-maternal-child-mortality>

These sorts of interventions, that proactively address and overcome barriers such as geographic inaccessibility and cost burden to the patient and their household associated with transport, should be built into the fabric of the NHI and resourced appropriately. In their absence, levels of unmet need in rural communities will remain unconscionably high and we will fail to meet the most basic principles of the NHI.

### Human Resources for Rural Health

In the White Paper human resources for health are recognised as a core component of implementation. There is also recognition of the importance of implementing strategies aimed at attracting and retaining health care workers to rural areas. The White Paper does not elaborate on how this should be achieved, however.

It is important to note that changing the source of funding through the implementation of the NHI will not change the availability, retention and distribution of human resources. Specific attention must also be given to these issues.

As we have seen with some NHI pilot sites, private health professionals are not readily available in rural villages and remote communities and targeted strategies are required to address the human resource needs of such areas. In order for the goal of health equity to be achieved, all people of South Africa, regardless of where they live, need to have access to health care, and for that in turn, they need access to health care workers. There is thus urgent need for agreement to be reached on unequivocal and realistic goals and targets in terms of human resources for health for South Africa, with strategies and reasonable funds to meet these. Inter alia, this requires implementation of the Department's Human Resources for Health 2030 strategy, and, in terms of human resources for rural health in particular, focused implementation of strategic priority 8 in that plan, recognizing that the trickle-down effect will never provide sufficient numbers of rural health care workers. Without human resources for (rural) health, there can be no universal health coverage.

It is recommended that a high-level NHI working group should be established to focus specifically on human resources for health, to address NHI human resource needs in general, but especially also to address the human resource requirements for rural areas in terms of health care professionals.

There are a number of factors that should that such a working group should consider when accounting for rural health in the determination of human resource needs. Like other aspects of planning for rural, issues such as geographic remoteness, high levels of deprivation, under-developed infrastructure, the virtual absence of social infrastructure, and pervasive socio-economic deprivation all make it more difficult to attract and retain health care workers to rural areas. There are plans that could be put in place to alleviate these challenges though.

As a start, the determination of need or more specifically the determination of minimum staffing levels should be based on an assessment of factors beyond crude utilisation measures, such as bed occupancy or PHC headcount. Measures of utilisation cannot capture the complexity of service delivery in rural contexts where service delivery is often more time consuming due to a greater need to perform outreach; perform support activities such as administration and supervision; and greater demand on the facility due to few options for referral. Rural health care workers are also required to

have more generalist skill sets and perform tasks that would ordinarily be referred to more specialised cadres or levels of care.

A persistent issue with the determination of human resource needs in health planning in South Africa generally has been the neglect of categories of staff beyond nurses, doctors and pharmacists. Other cadres or health professional, such as those working in rehabilitation and dentistry, tend to be regarded as a 'nice to have' rather than a key component of a truly effective health system. In rural settings, the neglect of rehabilitation professionals (such as occupational therapists and physiotherapists), for example, has meant that most patients with disabilities seldom receive the support and care that they need. This often has the effect of preventing them from receiving care timeously and when they do eventually make it to a facility, their cases are often more complex and expensive to treat.

Careful consideration of the HR needs for these neglected categories of staff need to be specifically addressed under the NHI. For Rural Rehabilitation, as a critical example, the following elements should be considered:

- 1) By definition a comprehensive package of care must include rehabilitation services, including mental health, eye care, audiology and other assistive devices. Integrated MDT work is essential for benefits to be realised.
- 2) Need, particularly where rehabilitation is concerned, cannot be based on utilisation rates, as (a) in many places these services have not existed and therefore no data is available, and (b) many people with disabilities, by definition, struggle to access health services, and their needs are therefore underrepresented in utilisation data.
- 3) In the absence of adequate data on the nature and prevalence of disability in the SA population, a benchmarking from the few well-established rural rehabilitation services (e.g. Manguzi and Mseleni Hospitals in Kwazulu-Natal) should be undertaken as a matter of urgency.
- 4) HR planning must prioritise posts for permanent senior therapists, both production level and management. There is increased enthusiasm among graduate therapists to work in rural areas, but such workers can only supplement, not create, effective, high-quality and sustainable services.
- 5) Rehabilitation HR must be concentrated at PHC level. There is merit in the rural district hospital being a hub for PHC planning and service delivery, and we propose that multidisciplinary teams of rehab professionals may be based at these institutions in order to provide and support community-based rehabilitation. Adequate resources, particularly transport, are essential for this to be feasible.
- 6) Appropriately skilled and supported mid-level rehabilitation workers, placed within WBOT's, are the a central cadre of worker to deliver rehab services in rural communities, and have been shown to be effective in facilitating healthcare access for this hard to reach population. With the right planning, such workers could also deliver the bulk of psychosocial rehabilitation services envisaged in the Mental Health Strategic Framework.
- 7) Finally, private sector rehabilitation differs in several key respects from other types of private healthcare, and contracting proposals must address the unique situation of therapists, not simply apply the principles developed for doctors, dentists and other cadres. For a range of reasons, it seems unlikely that contracted private therapists will be able to make a significant contribution to rural healthcare. At present, creation of fulltime posts for permanent therapists in rural health facilities is a far more promising strategy.

In broadening access to care it is understood that resource constraints often limit what is possible. We appreciate that there is also a need to contain costs while not compromising on care. There are cost-effective solutions to addressing both the need to improve service delivery while not compromising limited resources. Task sharing offers one solution to addressing this issue.

Clinical Associates, for example, can alleviate much of the pressure on doctors by performing routine patient examination, diagnostics, therapeutic procedures, and inpatient care. In these instances ClinAs, under supervision, can be as effective as a doctor at a fraction of the cost. By performing more routine tasks, ClinAs free up the doctors time to perform more complex and specialised procedures. Similarly CHWs, under the supervision of nurses can undertake routine PHC tasks, such as routine health screening, which then allows nurses to perform more complex diagnostic and curative tasks in the PHC setting.

More generally though, the factors necessary to attract and retain health care professionals are well known and should be clearly articulated in any human resource planning under the NHI. The WHO Global Policy Recommendations: Increasing Access to Health Workers in Remote and Rural Areas through Improved Retention (WHO, 2010) is an important guide in this regard.

Key policy recommendations from this report include:

#### A. EDUCATION RECOMMENDATIONS

- 1) Use targeted admission policies to enroll students with a rural background in education programmes for various health disciplines, in order to increase the likelihood of graduates choosing to practice in rural areas.
- 2) Locate health professional schools, campuses and family medicine residency programmes outside of capitals and other major cities as graduates of these schools and programmes are more likely to work in rural areas.
- 3) Expose undergraduate students of various health disciplines to rural community experiences and clinical rotations as these can have a positive influence on attracting and recruiting health workers to rural areas
- 4) Revise undergraduate and postgraduate curricula to include rural health topics so as to enhance the competencies of health professionals working in rural areas, and thereby increase their job satisfaction and retention.
- 5) Design continuing education and professional development programmes that meet the needs of rural health workers and that are accessible from where they live and work, so as to support their retention.

#### B. REGULATORY RECOMMENDATIONS

- 1) Introduce and regulate enhanced scopes of practice in rural and remote areas to increase the potential for job satisfaction, thereby assisting recruitment and retention.
- 2) Introduce different types of health workers with appropriate training and regulation for rural practice in order to increase the number of health workers practicing in rural and remote areas.
- 3) Ensure compulsory service requirements in rural and remote areas are accompanied with appropriate support and incentives so as to increase recruitment and subsequent retention of health professionals in these areas.

- 4) Provide scholarships, bursaries or other education subsidies with enforceable agreements of return of service in rural or remote areas to increase recruitment of health workers in these areas.

### C. FINANCIAL INCENTIVES RECOMMENDATION

- 1) Use a combination of fiscally sustainable financial incentives, such as hardship allowances, grants for housing, free transportation, paid vacations, etc., sufficient enough to outweigh the opportunity costs associated with working in rural areas, as perceived by health workers, to improve rural retention.

### D. PERSONAL AND PROFESSIONAL SUPPORT RECOMMENDATIONS

- 1) Improve living conditions for health workers and their families and invest in infrastructure and services (sanitation, electricity, telecommunications, schools, etc.), as these factors have a significant influence on a health worker's decision to locate to and remain in rural areas.
- 2) Provide a good and safe working environment, including appropriate equipment and supplies, supportive supervision and mentoring, in order to make these posts professionally attractive and thereby increase the recruitment and retention of health workers in remote and rural areas.
- 3) Identify and implement appropriate outreach activities to facilitate cooperation between health workers from better served areas and those in underserved areas, and, where feasible, use telehealth to provide additional support to health workers in remote and rural areas.
- 4) Develop and support career development programmes and provide senior posts in rural areas so that health workers can move up the career path as a result of experience, education and training, without necessarily leaving rural areas.
- 5) Support the development of professional networks, rural health professional associations, rural health journals, etc., in order to improve the morale and status of rural providers and reduce feelings of professional isolation.
- 6) Adopt public recognition measures such as rural health days, awards and titles at local national and international levels to lift the profile of working in rural areas as these create the conditions to improve intrinsic motivation and thereby contribute to the retention of rural health workers.<sup>45</sup>

## Conclusion

The NHI offers a critical opportunity to address many of the underlying challenges in the South African health system that serve to sustain inequitable access to health care. It is a constitutional obligation to identify and implement strategies that deal with historical and structural injustices in access to health care.

The RHAP and its rural health partners welcome the government's commitment to the NHI and support its principles, aims and objectives. In this submission we offer some guidance on how the NHI could better cater for the all too often neglected needs of rural communities.

It is not the purpose of this submission to critique the government's intentions or even its general approach, but rather to draw attention to the need to view the NHI through a rural lens, to THINK RURAL!

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<sup>45</sup> World Health Organization, 2010. *Increasing access to health workers in remote and rural areas through improved retention: global policy recommendations*. World Health Organization p.5