

# BUDGET

## CHILDREN AND SOUTH AFRICA'S HEALTH BUDGET



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### KEY MESSAGES

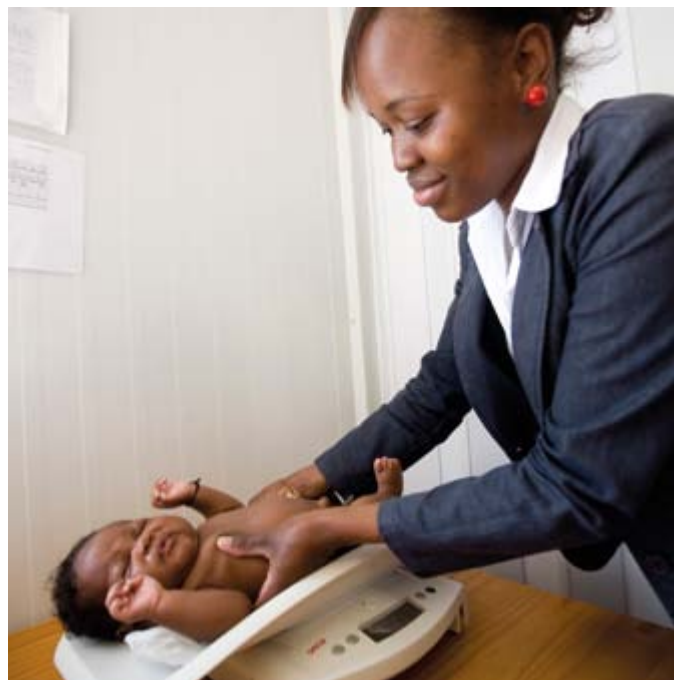
- The primary health care share of combined provincial budgets has increased steadily over time, and inequities in allocations between provinces are smaller than 10 years ago, but in 2016/17 primary health care still accounts for less than a third (29%) of total provincial health budgets.
- The health component of the formula for the equitable share may not adequately reflect the needs of the poorest children.
- A quarter of children who use public health facilities have travel time of half an hour or more to reach the facility, rising to 40% of children in rural areas.
- Children, alongside adults, have benefited enormously from the rollout of antiretrovirals and prevention of mother-to-child transmission, but in 2016 more than half of HIV-infected children under 15 years of age are still not receiving treatment.
- If all children under 5 years of age without medical aid made four visits to clinics and all pregnant women made four antenatal visits, the costs would account for 39% of the total primary health care budget, excluding funds for HIV and AIDS. In reality, young children make more than four visits on average to public health services.
- Health's dedicated funding for nutrition is equivalent to only 4% of Education's funding for the National School Nutrition Programme, yet Health focuses on the youngest children, for whom nutrition has the most severe and long-lasting negative impact.

**This brief is one of four that explore the extent to which government budgets in South Africa address the needs of children under 18 years in the country.** The briefs aim to describe the shape and size of the relevant budgets, and highlight some of the key funding-related issues. The objective is to contribute to informed advocacy and decision-making.

This brief looks at health budgets. It first presents and describes a set of key indicators. It then describes the structure of provincial budgets and, in particular, how one can identify funding for children's needs. This is followed by discussion of resourcing, accessibility and use of health services, and more detailed discussion of HIV and AIDS and nutrition.

# R168,526 million

## Total annual national and provincial health budget



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### Child health indicators and the size and shape of the health budget

Infant mortality rate per 1,000 births, 2014 <sup>1</sup>	28
Under-five mortality rate per 1,000 births, 2014	39
Health as percentage of consolidated budget, 2016/17	11%
Primary health care as percentage of health budget, 2016/17	35%
Personnel as percentage of health budget, 2016/17	62%
Official development assistance as percentage of health budget, 2016/17	0.7%

In 2014, South Africa's infant mortality was 28 deaths per 1,000 live births, while the under-five mortality rate was 39 deaths per 1,000 live births. Both of these indicators showed improvement compared to five years earlier, when they were 39 and 56 deaths per 1,000 live births respectively. The improvement is largely due to government's much improved response to HIV, as well as the use of two new child vaccines – rotavirus and pneumococcal. However, both the infant and under-five mortality rates are still high for a middle income country.

In South Africa, the national Department of Health (NDoH) is responsible for policy-making, coordination and oversight of health services in the country, while the nine provincial departments bear the main responsibility for service delivery. In 2016/17, the budget of the national Department is R38,563 million. Of this amount, R33,972 million (88%) consists of conditional grants which are transferred to provincial budgets. The combined budgets of the nine provincial departments,

**Table 1. Summary of national and provincial health budgets, 2016/17 (Rm)**

Department	National	Provincial	% of total
National Department of Health	38,563		23%
Of which transferred to provinces	-33,972		-20%
Combined provincial health		163,935	97%
Eastern Cape		20,244	12%
Free State		9,049	5%
Gauteng		37,408	22%
KwaZulu-Natal		36,579	22%
Limpopo		16,371	10%
Mpumalanga		10,642	6%
Northern Cape		4,198	2%
North West		9,461	6%
Western Cape		19,983	12%
<b>Total health budget</b>		<b>168,526</b>	<b>100%</b>

including these transfers, amount to R163,935 million in 2016/17. The provincial budgets are thus the main funding source for health services.

In some cases local government also allocates funds for health. In Gauteng, local government accounted for 18% of all district health spending in 2015/16. In other provinces, the local government share of district health spending was much lower. For all provinces combined, it was only 5%.<sup>2</sup>

The composition of the total national and provincial health allocation of R168,526 million is summarised in Table 1.

<sup>1</sup> Dorrington RE, Bradshaw D, Laubscher R & Nannan N. (2015) *Rapid mortality surveillance report 2014*. Cape Town: South African Medical Research Council: ii for infant and under-five mortality rates.

<sup>2</sup> Information provided by Candy Day, July 2016.



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**Table 2. Provincial budget structure**

<b>Programmes</b>	<b>Subprogrammes</b>
Administration	
<b><i>District health services</i></b>	District management
	Community health clinics
	Community health centres
	Community-based services
	Other community services
	<b><i>HIV and AIDS</i></b>
	<b><i>Nutrition</i></b>
	Coroner services
	District hospitals
Emergency medical services	
Provincial hospital services	
Central hospital services	
Health sciences and training	
Health care support services	
Health facilities management	

Table 2 shows the standardised budget programme structure used for provincial health budgets. It includes the subprogrammes for the budget that is the focus of this brief. These are shown in italic bold font.

Primary health care services are especially important for children, as they provide preventive and early intervention services (including immunisation) that are particularly necessary at a young age. If this care is not available, the children may develop serious problems that are more expensive to treat and have more negative effects for them. Furthermore, children tend to make

more visits, on average, than adults to primary health care services. Public primary health care services are also the only type of health service for which poorer people receive relatively more benefits than wealthier people.<sup>3</sup>

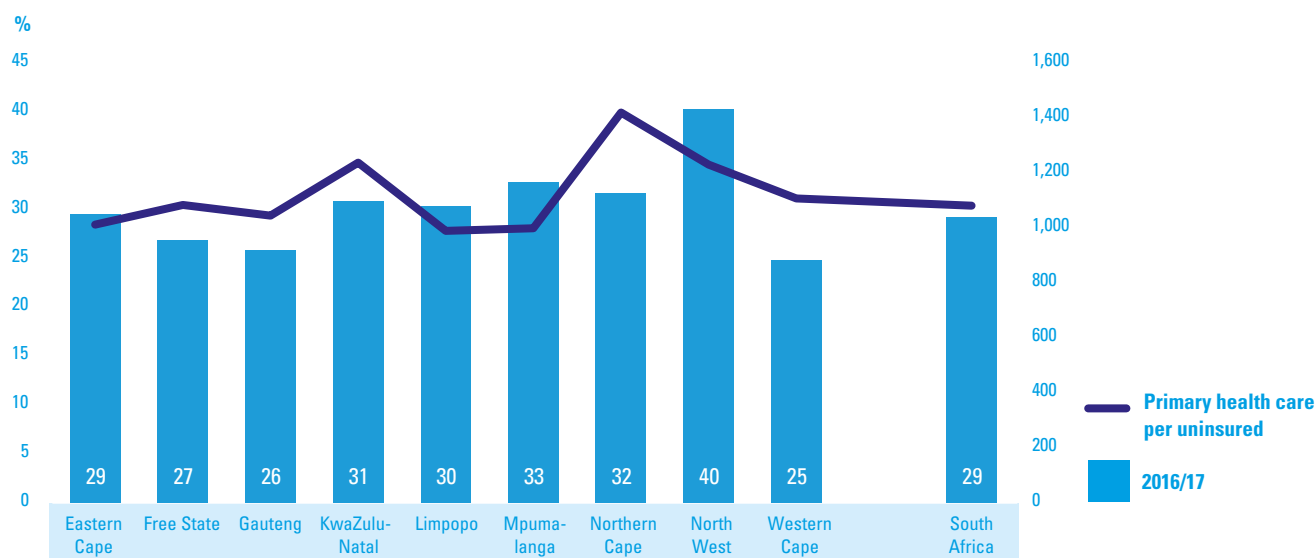
There are two programmes within the NDoH budget that relate directly to primary health care, namely the HIV and AIDS, Tuberculosis and Maternal and Child Health programme and the Primary Health Care programme. The budget for the first of these is R16,019 million in 2016/17, most of which (R15,291 million) represents the comprehensive HIV, AIDS and TB conditional grant. The NDoH budget for primary health care is only R258 million. These funds are for functions such as policy development, coordination and oversight rather than for service delivery.

Within provincial departments, there is no programme or subprogramme for which the name explicitly refers to maternal and child health. We use the District Health Services programme, excluding the allocations for coroner services and district hospitals, as our proxy for child-friendly allocations as it focuses on primary health care services. As seen above, the subprogrammes include HIV and AIDS and nutrition, both of which are especially important for very young children.

For the nine provinces combined, this programme's allocation, adjusted by excluding the two non-primary subprogrammes, amount to R47,821 million. Combining the national and provincial programmes, primary health care as reflected by these subprogrammes accounts for

3 McIntyre D, Brijlal V & Nkosi M. (2015) Health systems financing. In: Fryatt B, Matsoso MP & Andrews G. *The South African health reforms 2009–2014: Moving towards universal coverage*. Cape Town: Juta.

**Figure 1. Primary health care as a percentage of provincial health budget and allocation per uninsured person, 2016/17**



Source: Provincial estimates of revenue and expenditure; General Household Survey, 2015

35% of the total national and provincial health budget for 2016/17.

The primary health care share of combined provincial budgets increased steadily from 27% in 2012/13 to 29% in 2016/17, and is expected to reach 31% by 2018/19.

Figure 1 reveals that in 2016/17 primary health care's share of individual provinces' budgets ranged from 25% in Western Cape to 40% in North West. The trend line shows the allocation per person not covered by medical aid (i.e. 'uninsured')<sup>4</sup> and assumed to be dependent on public health services. The trend line has a fairly similar pattern to the columns showing the primary health care share of the provincial health budget. The match is not exact. For example, Northern Cape has the highest per capita amount but only the third highest budget share, while the reverse ranking is shown for North West.

The trend line is more informative than the share of the provincial health budget, as the latter is complicated by the fact that wealthier provinces such as Gauteng and Western Cape house tertiary hospitals that provide services nationally and also provide medical training. These services imply extra allocations to services other than primary health care. This factor helps explain the relatively small share of district health services in these two provinces' budgets, as does the fact that some municipalities – and the metros in particular – allocate some funding for primary health care.

The graph highlights the disparities in primary health care allocations across provinces. The amount per uninsured person ranges from R987 per annum in Limpopo to R1,417 in Northern Cape. For the country

as a whole, the amount is R1,098. There are further disparities within provinces. In 2014/15, the District Health Barometer shows Amajuba in KwaZulu-Natal ranking last, at R967 per uninsured person, while the same province has uMzinyathi, which ranks fourth highest at R2,330.<sup>5</sup> These disparities serve as one of the strong motivations for national health insurance.

More positively, there has been some progress over the years. In 2006/07, the primary health allocation per uninsured person was equivalent to R526 in 2016 rands, as against R1,098 – more than double – 10 years later. Further, the ratio between the most generous and least generous province has fallen from 1.6:1 in 2006/07 to 1.4:1 in 2016/17. The conditional grant for HIV and AIDS was the main driver of this increase, with the additional funds spent mainly on antiretroviral therapy (ART) for adults.

The **personnel budget** of NDoH amounts to R873 million, while provinces have a combined personnel budget of R103,910 million. For national and provinces combined, personnel accounts for 62% of the national health budget. Within provinces, the personnel share ranges from 54% in Northern Cape to 74% in Limpopo.

For 2016/17, NDoH's budget records **official development assistance** of R1,143 million, equivalent to only 0.7% of the total health budget. For the previous year an even smaller amount – R637 million – was recorded. Most of the development assistance is linked to HIV and AIDS. These estimates do not reflect the full donor contribution. In particular, they do not include a substantial contribution by the US President's Emergency Plan for AIDS Relief (PEPFAR). The PEPFAR

4 Estimated using data from the General Household Survey, 2014.

5 The District Health Barometer includes both district hospital expenditure and primary health care expenditure by municipalities in the calculation.





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contribution is largely paid to non-profit organisations and has amounted to approximately USD 450 million for the past few years.

### WHAT ARE THE MOST COST-EFFECTIVE EXPENDITURES FOR CHILD HEALTH?

Expenditure on health care is not the only – or even the main – determinant of child health. As important are the ‘social determinants of health’. These refer to the social, economic and political conditions in which people live. For example, access to safe drinking water is especially important for children’s health. A report on recent modelling on the most cost-effective way of reducing South Africa’s high rates of maternal and child mortality notes that having a water connection in the home ranks seventh in terms of the number of lives saved among 11 interventions for reducing newborn and child mortality.<sup>6</sup> Yet the General Household Survey of 2015 suggests that nearly a third (32%) of children under 18 years live in households in which drinking water is not sourced on the site of the dwelling. As many as 60% of children in Eastern Cape are in households that source drinking water off-site.

Social determinants are important, but health interventions are also essential. For example, the same study found that prevention of mother-to-child transmission ranked third in terms of young lives saved, and oral rehydration solution for diarrhoea ranked fourth.

6 Chola L, Pillay Y, Barron P, Tugendhaft A, Kerber K & Hofman K. (2015) “Cost and impact of scaling up interventions to save lives of mothers and children: taking South Africa closer to MDGs 4 and 5.” *Global Health Action* 2015 8: 27265.

### DOES THE EQUITABLE SHARE FORMULA TAKE CHILDREN’S NEEDS INTO ACCOUNT?

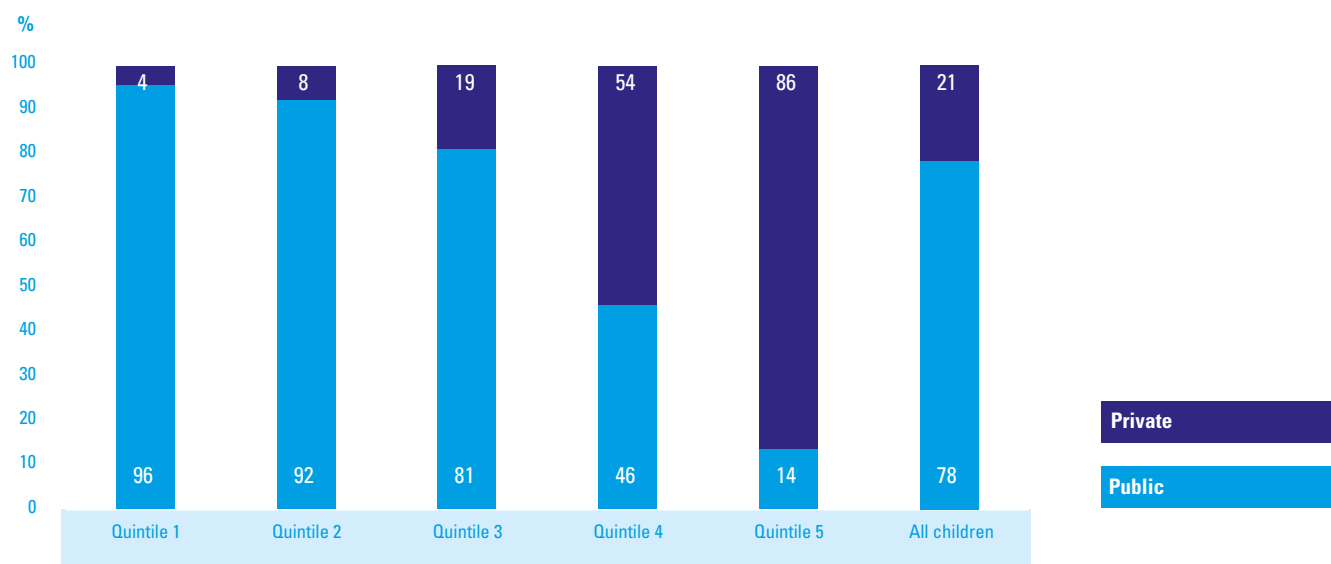
More than a fifth (21%) of provincial health budgets is funded through conditional grants. Most of the rest of the health budget is funded from the provincial equitable share.

The equitable share is made up of six components, one of which relates to health. The health component accounts for 27% of the total equitable share. The amount for each province is based on a range of factors, including the province’s demography, the risk profile and the caseloads in public hospitals and at public health clinics.

For the risk profile, which makes up 75% of the health component, the formula considers only people who are not covered by medical aid. The ‘weight’ given to each person is adjusted to reflect the individual’s likely need of health services. The weight is based on usage patterns of medical aid members for the prescribed medical benefits package. Children under 1 year of age are weighted very heavily because they often need intensive care. The weight for other children is generally low, but increases for the later teenage years because young women and men often need reproductive health care, care in respect of violence and accidents, and treatment related to substance abuse. The weight for women is higher than that for men in the childbearing years.

The formula indicates the special importance of health care for very young children. However, the need for health care among children from wealthier households with medical aid cover, which is what the formula is based on, may not match that of children from poorer households which struggle to provide adequate

**Figure 2. Type of facility used when children are ill by household income quintile, 2014**



Source: General Household Survey, 2015

nutrition, among other things, and where children are vulnerable to diseases of poverty. Yet the services to be funded primarily target the latter group of children.

### RESOURCING AND USE OF PRIVATE AND PUBLIC HEALTH CARE SERVICES

In South Africa, the overwhelming majority of education takes place in public institutions. For health, a larger share of provision is private. In 2011/12, for example, 49.4% of all expenditure on health in South Africa was in the private sector – with medical aid expenditure accounting for 40.8% of the total, and ‘out-of-pocket’ expenditure by individuals and households at 6.9%. Medical insurance and on-site services provided by employers account for a further small share of private spending. A further 48.6% of health expenditure was in the public sector, and the remaining 2.0% was by donors or non-governmental organisations.<sup>7</sup>

While nearly half of health expenditure was in the private sector, in 2014 only 18% of the population – and 15% of children – were covered by medical aids.<sup>8</sup> Thus, nearly half of all health expenditure mainly benefits less than a fifth of the population. Expressed differently, in 2012, spending per person by medical aids was 4.8 times as large as spending per person reliant on public spending.

Figure 2 shows that, according to the General Household Survey of 2014, 78% of children were likely to be treated at public health facilities when ill. The percentage using public health facilities was 96% for the poorest children

as against only 14% for children in the wealthiest households. The poorer children are reliant on allocations from government budgets. Not shown in the figure, in former homeland areas, 96% of children were likely to use public health facilities, as against 64% in formal urban areas. Among black African children, 85% would use public facilities, as against only 9% of white children.

More than 60% of out-of-pocket payments are made by medical scheme members. These payments are required, for example, when medical aid benefits are exceeded or the medical aid does not cover a certain service at all. There are minimal, if any, charges for primary health care in the public sector. However, although poorer people are less likely to have out-of-pocket health expenses, these expenses account for a larger proportion of their expenditure than for wealthier people.

Children under 6 years, and pregnant women, have been exempt from fees for public primary health care services since 1996, and subsequently exempt from fees for all public health services. For secondary and tertiary care for older children, public hospitals use a sliding scale based on income.

### HOW ACCESSIBLE ARE THE HEALTH FACILITIES?

Even users who pay no fees often incur costs when they access primary health care services. In particular, many incur time and money costs in travelling to the health care facility and further time costs while waiting for services. These costs add up when a user must visit the health facility often, for example to receive antenatal care or collect antiretroviral medicine.

Figure 3 shows that 25% of children using public health facilities have travel time of half an hour or more to

<sup>7</sup> McIntyre D, Brijlal V & Nkosi M. (2015) Health systems financing. In: Fryatt B, Matsoso MP & Andrews G. *The South African health reforms 2009–2014: Moving towards universal coverage*. Cape Town: Juta

<sup>8</sup> General Household Survey, 2014.

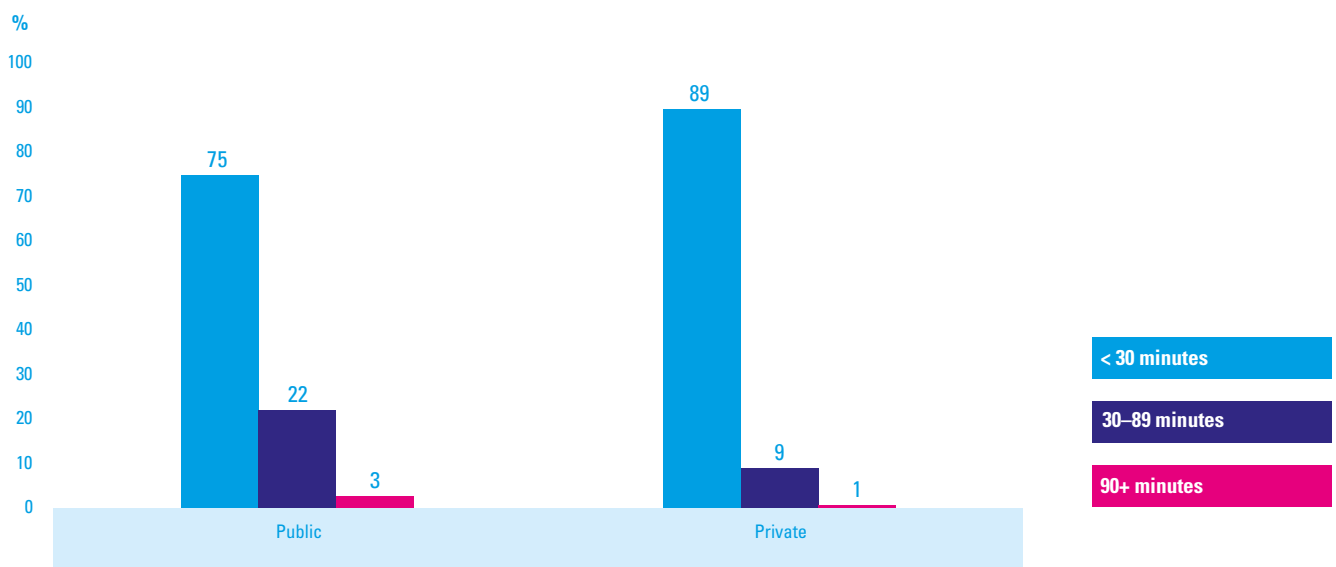
Nearly **40%**

Rural children who travel half an hour or more to health care facilities



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Figure 3. Children's distance from health facility by whether they use public or private facilities, 2014



Source: General Household Survey, 2015

reach the facility, as against only 10% of children using private facilities. Among the poorest children, 32% travel half an hour or more versus only 5% of children in the wealthiest households. In rural areas, nearly 40% of children travel half an hour or more.

In the years after the first democratic elections of 1994, government had a substantial programme of construction of primary health care clinics. Figure 3 suggests that further work may now be needed in this area. In 2016/17, provinces allocated R5,473 million for new infrastructure assets. These already limited funds were not necessarily intended for construction of primary health care facilities.

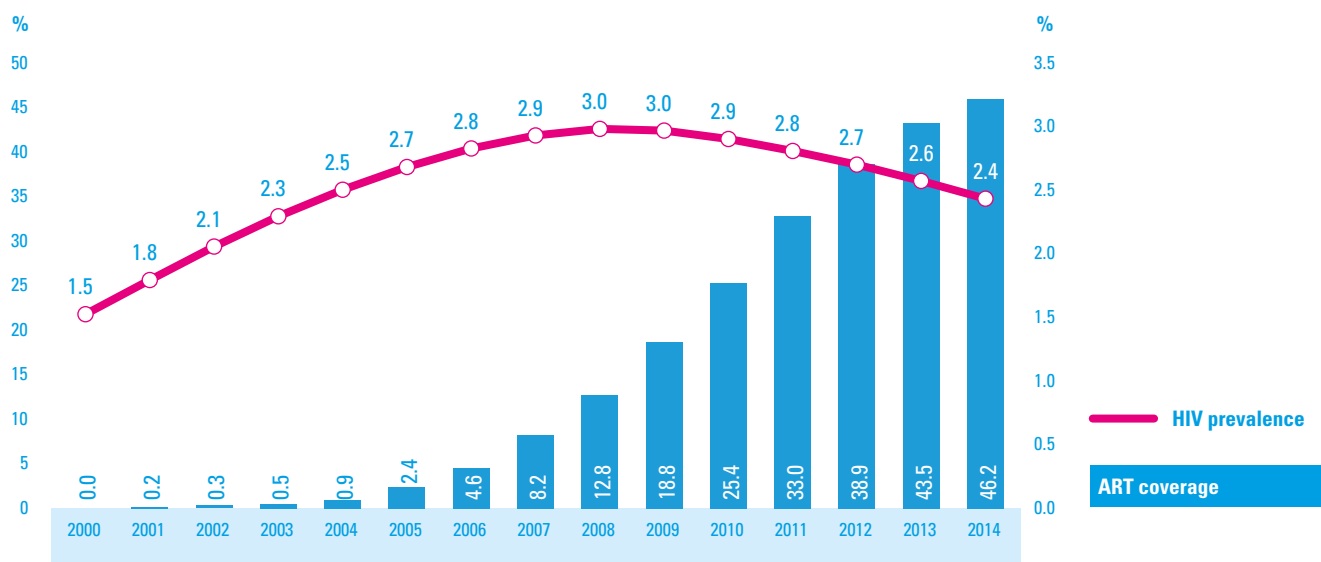
### WHAT HAS BEEN ACHIEVED IN RESPECT OF HIV AND AIDS?

South Africa currently has a positive story to tell in relation to health care in respect of HIV and AIDS. This good story emerged after a tragic period of AIDS denialism. In 2010, AIDS still accounted for 25% of deaths of children under 5 years of age.<sup>9</sup>

Figure 4 shows HIV prevalence among children under 15

9 Chola L, Pillay Y, Barron P, Tugendhaft A, Kerber K & Hofman K. (2015) "Cost and impact of scaling up interventions to save lives of mothers and children: taking South Africa closer to MDGs 4 and 5." Global Health Action 2015 8: 27265.

Figure 4. HIV prevalence and antiretroviral coverage of HIV-positive children aged 0–14 years, 2000–2014<sup>10</sup>



Source: Estimates from Thembisa model

Table 3. HIV, AIDS and TB conditional grant as a percentage of subprogramme, 2016/17

Province	Subprogramme (R000)	Conditional grant (R000)	Grant as % of allocation
Eastern Cape	1,775,385	1,755,385	99%
Free State	1,051,113	1,015,061	97%
Gauteng	3,451,142	3,259,407	94%
KwaZulu-Natal	4,244,243	4,244,243	100%
Limpopo	1,176,488	1,176,489	100%
Mpumalanga	1,047,410	1,032,055	99%
Northern Cape	456,570	413,231	91%
North West	1,140,067	1,127,523	99%
Western Cape	1,341,104	1,267,209	94%
South Africa	15,683,522	15,290,603	97%

years increasing from 1.5% in 2000 to a peak of 3% in 2007. It subsequently fell to 2.4% in 2014. The improvement resulted from provision of ART and the prevention of mother-to-child transmission of HIV. Coverage of HIV-positive children and adults with ART increased slowly from virtually no coverage in 2000 to just over 2% in 2005. After 2005 there has been a steady and rapid increase to current levels of coverage, which reaches almost half of all HIV-positive children and adults.

For the nine provinces combined, the HIV and AIDS subprogramme increased from an allocation of R9,277 million in 2012/13 to R15,684 million in 2016/17. It is expected to increase to R20,440 million by 2018/19. In 2016/17, the subprogramme accounts for 33% of combined provincial primary health care allocations. The percentage of the primary health care budget allocated to HIV and

AIDS ranges from 24% in Limpopo to 43% in Free State.

Table 3 shows that across all provinces, 91% or more of the subprogramme's funding is through the HIV, AIDS and TB conditional grant. KwaZulu-Natal and Limpopo, in particular, have not added any funding from the equitable share to this subprogramme.<sup>11</sup> The 2014 Division of Revenue Bill stated that the amount allocated to each province is based on the province's population, HIV prevalence and estimated share of HIV cases. No formula is specified, but the amount appears to be based on need, as reflected in past expenditure patterns and provincial business plans.<sup>12</sup>

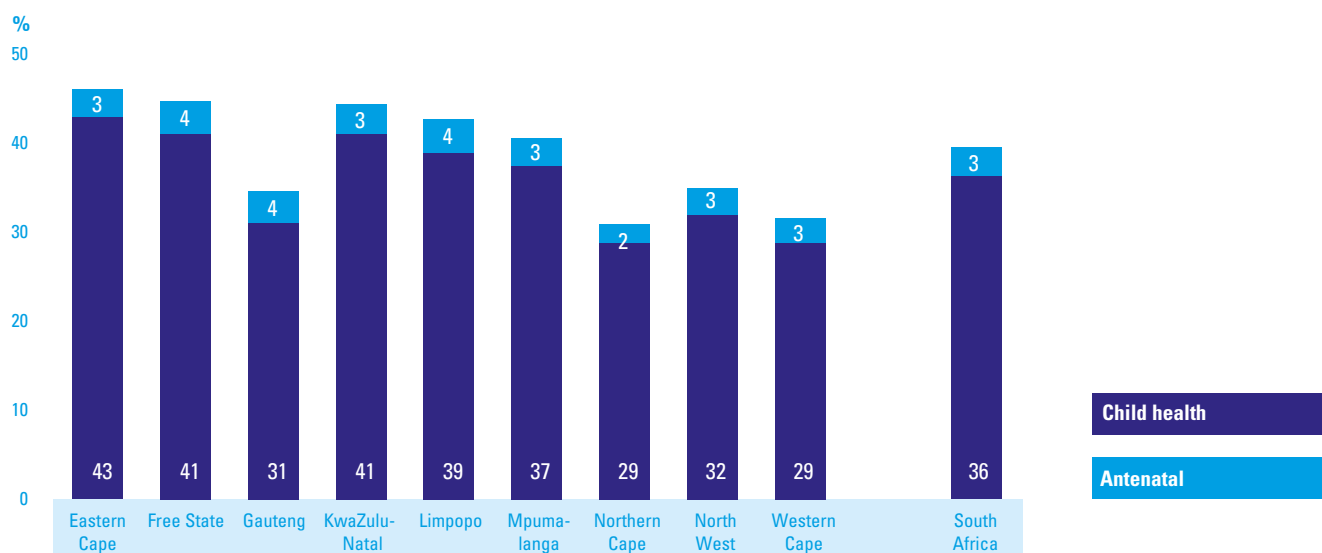
11 The amount for this subprogramme recorded in Limpopo's budget is, in fact, marginally less than the amount of the grant for the province recorded in the Division of Revenue Act, 2016.

12 Strauss M, Surgey M & Cohen S. (2015) *A review of the South African Comprehensive HIV and AIDS Grant*. South African National AIDS Council: 21–22.

10 Estimates provided by Leigh Johnson, University of Cape Town.



**Figure 5. Estimated child health and antenatal costs as a percentage of district health services excluding HIV and AIDS, 2014/15**



Source: Estimates of provincial revenue and expenditure; cost estimates provided by National Treasury

### HOW MUCH IS AVAILABLE AFTER HIV AND AIDS FUNDS ARE SUBTRACTED?

To avoid misleading estimates, analysis of the adequacy of funding for other primary health care services is best done after subtracting the HIV and AIDS amount, given the latter's substantial size.

In 2014/15, government commissioned a study of the cost of delivering different types of services at the primary health care level. The study arrived at a cost of R178 per consultation for integrated management of childhood illnesses (IMCI), and R244 for maternal health services.<sup>13</sup> Figure 5 shows the percentage of the primary health care budget, excluding the HIV and AIDS amount that is needed to provide four IMCI visits to all children not on medical aid, and four antenatal visits in respect of all births to women not on medical aid.<sup>14</sup> A high percentage suggests that children and pregnant women will have to compete more with other users to access the services that they need.

Figure 5 suggests that in Eastern Cape these two services together would account for nearly half (46%) of the total primary health care budget if the average of four visits per year was achieved. At the other end of the scale, in Northern Cape these two services would account for 31% of the total. The fact that these services would account for a large percentage of the budget after HIV and AIDS is excluded is not necessarily concerning, as pregnant women and

children – particularly the under-5s – are priority groups for health services.

Figure 6 combines information from the District Health Information System for 2015 on the number of visits to primary health care facilities with estimates of the population not covered by medical aid from the General Household Survey of 2015. For all provinces the average number of visits is higher for children under 5 years of age than for the population as a whole. Further, the number of visits per child is more than four per year in all provinces, and there is relatively little variation across provinces. This pattern is what one would want to see. What is less clear is whether older children are receiving the services they need.

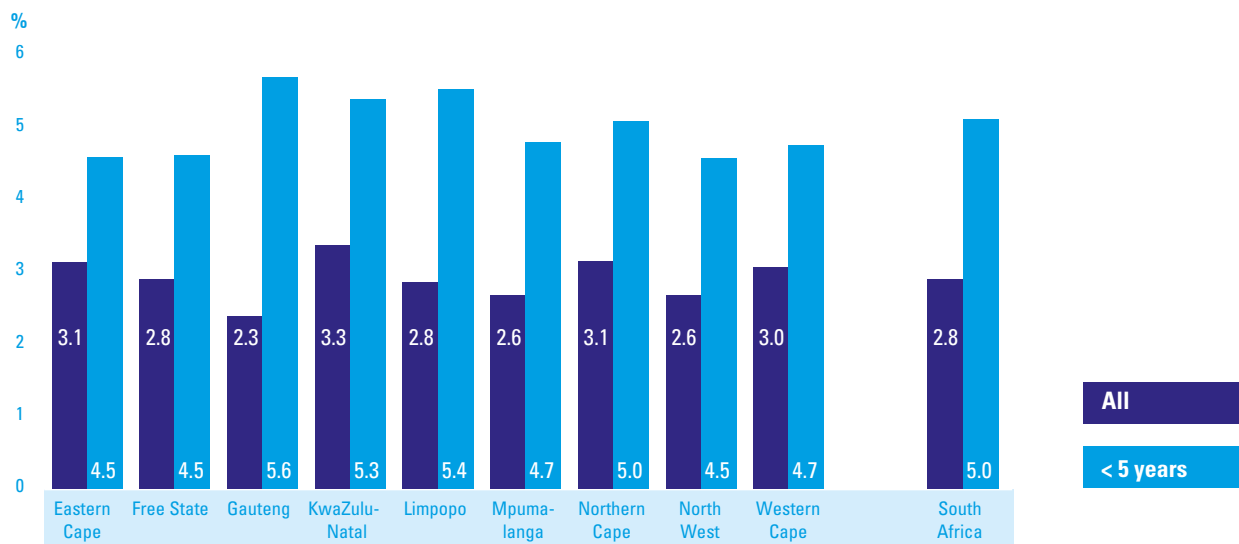
### WHAT IS THE HEALTH SECTOR ALLOCATING FOR NUTRITION?

In 2015/16, the District Health Information System recorded a total of 15,537 admissions of children aged 0–4 years to public health facilities on account of severe acute malnutrition. Health experts estimate that, due to poor detection in communities and primary health care facilities, these admissions account for only between 50% and 70% of all cases that need treatment. Of the admissions, 1,380 (8.9%) ended in the death of the child concerned. Overall, admissions accounted for 0.3% of the child population of this age, with the percentage highest (0.5%) in Northern Cape, and lowest (0.2%) in Gauteng and Western Cape. Mpumalanga had the highest death rate (12.5%) among children admitted. Western Cape's death rate from severe malnutrition was only 0.9% in 2015, and had decreased steadily over time with improved quality of care. Fewer children would

13 Information provided by Mark Blecher, National Treasury.

14 The latter is estimated using an estimate of the number of births per province provided by Rob Dorrington of University of Cape Town and the percentage of women aged 15–49 years not on medical aid in the General Household Survey of 2014.

**Figure 6. Visits per annum for population and children under 5 years not covered by medical aid, 2015**



Source: District Health Information System; General Household Survey, 2015

reach a stage of severe acute malnutrition, and a smaller proportion would need hospitalisation if prevention interventions and detection rates were improved.<sup>15</sup>

A national survey conducted in 2012 found that 26.9% of boys and 25.9% of girls aged 0–3 years were stunted, noticeably higher than for older children. North West province recorded the highest rate of stunting for boys, and the second highest rate for girls when the broader age group of all children under 15 years is included. Coloured children were more likely than those of other race groups to be stunted.<sup>16</sup>

General primary health care service delivery will often include a nutrition component. The full extent of health’s funding of nutrition interventions is thus difficult, if not impossible, to estimate. There is, however, also a dedicated nutrition subprogramme

within district health services. This subprogramme has the smallest budget of all subprogrammes in eight provinces. KwaZulu-Natal is the exception in that it allocates an even smaller amount to community-based services. For all provinces combined, the dedicated allocation for nutrition amounts to only 0.5% of the primary health care budget throughout the period 2013/14 to 2018/19, after a decrease from 0.7% in 2012/13. Western Cape is the best performer on this measure. Even in this province, nutrition’s share of the primary health care budget is only 0.9% in 2016/17.

Health’s dedicated nutrition allocations are also only a small fraction of the National School Nutrition Programme Grant within the education sector. In 2016/17, the conditional grant for the school nutrition programme amounts to R6,006 million across the nine provinces, while health’s nutrition subprogramme amounts to R245 million – equivalent to 4% education’s conditional grant. Further, the conditional grant is targeted exclusively at children, while health’s subprogramme focuses on young children alongside pregnant women and other vulnerable groups.

<sup>15</sup> Shuaib Kauchali, July 2016, personal communication.

<sup>16</sup> Shisana O, Labadarios D, Rehle T, Simbayi L, Zuma K, Dhansay A, Reddy P, Parker W, Hoosain E, Naidoo P, Hongoro C, Mchiza Z, Steyn NP, Dwane N, Makoae M, Maluleke T, Ramlagan S, Zungu N, Evans MG, Jacobs L, Fabert M & the SANHANES-1 Team. (2014) *South African National Health and Nutrition Examination Survey*. HSRC Press: Cape Town: 18–9; 208–9.