4

Health

Introduction

Priority goals: increase life expectancy, decrease maternal and child mortality, combat HIV and AIDS, decrease the burden of TB

The goal of government's Outcome 2 is a long and healthy life for all South Africans. To accomplish this, four priority goals have been identified to increase life expectancy, decrease maternal and child mortality, combat HIV and AIDS and decrease the burden of tuberculosis (TB), and strengthen health system effectiveness.

The National Development Plan (NDP) also envisages that, by 2030, South Africa should have:

- raised the life expectancy rate to at least 70 years for men and women
- produced a generation of under-20s that is largely free of HIV
- reduced the burden of disease
- progressively improved TB prevention and cure
- achieved an infant mortality rate of fewer than 20 deaths per thousand live births, including an under-5 mortality rate of less than 30 per thousand
- achieved a significant shift in the equality, efficiency, effectiveness and quality of health care provision
- achieved universal health coverage
- significantly reduced the risks posed by the social determinants of disease and adverse ecological factors.

Despite considerable challenges, such as the current large disease burden and weaknesses in governance and in accountability procedures, there is measurable progress in public health:

- Life expectancy increased from 51.6 years in 2005 to 59.6 years in 2013, and infant mortality declined significantly from 58 deaths per 1000 live births in 2002 to 41.7 in 2013. The under-5 mortality rate has declined from 85.4 to 56.6 per 1000 live births (Source: Mid-year population estimates, Stat SA, 2013).

- With the rapid expansion of the prevention of mother to child transmission (PMTCT) programme, mother to child transmission of HIV declined from 8 per cent in 2009 to 2.7 per cent in 2012 (Source: Rapid Mortality Surveillance Report, Medical Research Council, 2012). This is in spite of the HIV prevalence increasing from 9 per cent of the population in 2005 to 12.6 per cent in 2013.
- The number of people on antiretroviral treatment had increased from 1.46 million in March 2011 to 2.68 million by March 2014.
- Approximately 86 new clinics, 20 new hospitals and 13 new community health centres have been completed and handed over since 2010/11.
- Provincial public health sector staff levels reached 307 042 in March 2014, up from 261 851 in March 2008.

Provincial departments are the main delivery agents in the health sector

Health services are a concurrent national and provincial competence. Local government is responsible for municipal health services, which are largely limited to environmental health. Provincial health departments are the main delivery agents, with the national department responsible for policy development, legislation and programme leadership. A significant change to these arrangements proposed in the Green Paper on national health insurance (NHI) is the separation of the health service into purchase and provision arms, with a national health insurance fund (NHIF) operating as an autonomous public entity under the Minister of Health.

This chapter reviews the funding of health services, highlights budget and expenditure trends, and discusses the medium-term outlook. Health spending has grown strongly in recent years, especially on compensation of employees. However, this growth has slowed considerably since 2012/13 due to the expenditure ceilings introduced by the National Treasury because of the unfavourable domestic and international fiscal and macro-economic climate.

Funding health services

Unlike other social sectors, health has a significant private sector component. Private health care is provided for people with medical aid coverage or who can afford out-of-pocket payments.

Table 4.1 Health expenditure in the public and private sectors, 2010/11 – 2016/17

R million	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	Average annual growth 2010/11 - 2016/17
	Outcome				Medium-term estimates			
Public sector								
National Department of Health (core)	1 478	1 678	1 827	2 442	3 844	4 548	4 204	19.0%
Provincial departments of Health	97 957	111 324	122 551	134 574	140 801	149 592	154 117	7.8%
Department of Defence	3 150	3 400	3 460	3 762	3 849	4 059	4 325	5.4%
Department of Basic Education	3 993	4 929	5 274	5 561	5 873	6 133	6 458	8.3%
Department of Correctional Services	508	519	584	657	694	748	780	7.4%
Local government (own revenue)	1 865	1 977	2 096	2 221	2 355	2 496	2 628	5.9%
Compensation Fund	3 368	5 768	3 028	3 282	4 372	4 659	4 889	6.4%
Road Accident Fund	768	785	1 138	1 204	1 279	1 352	1 424	10.8%
Total public sector health	**113 088**	**130 379**	**139 958**	**153 703**	**163 068**	**173 587**	**178 825**	**7.9%**
Private sector								
Medical schemes	96 482	107 383	117 528	125 520	134 558	143 573	152 905	8.0%
Out of pocket	17 172	18 202	19 294	20 452	21 679	22 980	24 198	5.9%
Medical insurance	2 870	3 120	3 392	3 687	4 007	4 356	4 587	8.1%
Employer private	1 372	1 491	1 621	1 762	1 915	2 081	2 192	8.1%
Total private sector health	**117 896**	**130 196**	**141 835**	**151 421**	**162 159**	**172 991**	**183 882**	**7.7%**
Donors or non-government institutions	5 787	5 308	5 574	5 852	6 145	6 452	6 794	2.7%
Total	**236 771**	**265 884**	**287 367**	**310 977**	**331 372**	**353 030**	**369 501**	**7.7%**
Total health expenditure as a % of GDP	8.7%	8.9%	9.0%	9.0%	8.7%	8.5%	8.2%	
Public health expenditure as a % of GDP	4.1%	4.4%	4.4%	4.4%	4.3%	4.2%	4.0%	
Public health expenditure as % of total government expenditure (non-interest, main budget)	14.4%	15.0%	15.2%	15.5%	15.1%	15.0%	14.9%	
Private financing as a % of total	49.8%	49.0%	49.4%	48.7%	48.9%	49.0%	49.2%	
Public health per capita (real 2010/11 prices)	2 709	2 915	2 934	3 021	3 011	3 011	3 483	4.3%
Public health per family of four per month (real 2010/11 prices)	903	972	978	1 007	1 004	1 004	1 161	4.3%

Sources: National Treasury provincial and local government database, Estimates of National Expenditure, Council for Medical Schemes, Road Accident Fund and South African Reserve Bank

Table 4.1 shows private and public health expenditure, including by government departments and entities with health-related functions, from 2010/11 and with MTEF projections to 2016/17. About 8.7 per cent of GDP will be spent on health services in 2014/15, with government expenditure matching that of the private sector. Average public sector spending on health care per person per year is R3 011 in 2014/15, growing to R3 483 in 2016/17; see also Table 4.3 below for information about increased provincial health expenditure. This level of expenditure is relatively high compared to other upper-middle-income countries. In 2012, public health expenditure per capita was 470 USD (adjusted for purchasing power parity) compared with the upper-middle income country median of 384 USD. Since 2010/11, spending by provincial health departments has exceeded contributions to medical schemes. Spending by the national department has also increased significantly since 2012/13, largely due to the introduction of an indirect conditional grant for NHI piloting, health infrastructure and, as of 2014/15, the introduction of the human papilloma virus (HPV) vaccine which protects females against cervical cancer.

Provinces receive the HPV funding from 2016/17 to continue with vaccinating girls aged 9 to 10 in quintile one to four schools. The vaccine will be delivered through the Integrated School Health Programme. Although the amount of expenditure in the public and private sectors is relatively similar, almost 81.2 per cent (43 million) of the population in

South Africa relies on the public health services and only about 18.4 per cent (9.7 million) on health services paid for by medical schemes. This is shown in Table 4.2 below. This very large disparity, together with the higher disease burden among the uninsured population, has major significance for the public health services. The Department of Health seeks to address this through the introduction of NHI, which aims to provide universal health coverage to all the country's citizens.

Table 4.2 Medical aid coverage by province, 2013

Thousand	Total	Covered	Not covered	Unspecified	Percentage covered	Percentage not covered	Unspecified
Eastern Cape	6 620	693	5 894	33	10.5%	89.0%	0.5%
Free State	2 753	471	2 280	2	17.1%	82.8%	0.1%
Gauteng	12 728	3 713	8 959	56	29.2%	70.4%	0.4%
KwaZulu-Natal	10 457	1 384	9 020	53	13.2%	86.3%	0.5%
Limpopo	5 518	493	5 010	15	8.9%	90.8%	0.3%
Mpumalanga	4 128	641	3 479	8	15.5%	84.3%	0.2%
Northern Cape	1 163	234	928	1	20.1%	79.8%	0.1%
North West	3 598	559	3 026	13	15.5%	84.1%	0.4%
Western Cape	6 017	1 543	4 451	23	25.6%	74.0%	0.4%
Total	**52 982**	**9 731**	**43 047**	**204**	**18.4%**	**81.2%**	**0.4%**

Source: Statistics South Africa, General Household Survey 2013

Budget and expenditure trends

Spending by provincial departments of health is the largest component of total public spending on health services.

Table 4.3 Provincial expenditure on health by province, 2010/11 – 2016/17

R million	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
	Outcome			Outcome	Medium-term estimates		
Eastern Cape	13 273	14 892	15 603	17 048	17 509	18 235	18 893
Free State	6 019	6 811	7 612	7 779	8 155	8 735	8 656
Gauteng	20 475	23 666	26 834	27 416	31 524	33 985	35 776
Kw aZulu-Natal	20 735	24 791	27 391	29 531	30 914	32 882	33 822
Limpopo	10 506	11 366	12 830	13 138	14 371	14 799	15 288
Mpumalanga	6 347	7 023	7 501	8 065	8 992	9 570	10 111
Northern Cape	2 540	3 006	3 165	3 402	3 696	3 942	3 719
North West	5 717	6 380	7 014	8 393	8 184	8 837	8 926
Western Cape	12 345	13 388	14 601	15 917	17 338	18 467	18 925
Total	**97 957**	**111 324**	**122 551**	**130 690**	**140 684**	**149 452**	**154 117**
Percentage growth (average annual)		**2010/11– 2013/14**		**2013/14– 2014/15**		**2013/14– 2016/17**	
Eastern Cape		8.7%		2.7%		3.5%	
Free State		8.9%		4.8%		3.6%	
Gauteng		10.2%		15.0%		9.3%	
Kw aZulu-Natal		12.5%		4.7%		4.6%	
Limpopo		7.7%		9.4%		5.2%	
Mpumalanga		8.3%		11.5%		7.8%	
Northern Cape		10.2%		8.7%		3.0%	
North West		13.7%		-2.5%		2.1%	
Western Cape		8.8%		8.9%		5.9%	
Total		**10.1%**		**7.6%**		**5.6%**	

Source: National Treasury provincial database

Spending by programme

Provincial health spending increased at an average annual rate of 10.1 per cent between 2010/11 and 2013/14

Between 2010/11 and 2013/14, provincial spending on health increased by an average annual rate of 10.1 per cent, from R98 billion to R130.6 billion. Allocations vary according to the discretion of each provincial government and to some extent to the amount of under- or over-spending in the previous year. The rate of growth has continued to fall, from the 10.1 per cent of 2010/11-2013/14 to the expected 5.6 per cent of 2013/14-2016/17. Year-on-year growth from 2013/14 to 2014/15 is 7.6 per cent nationally. The higher growth from 2013/14 to 2014/15 relates mainly to Gauteng, Limpopo, Mpumalanga, Northern Cape and Western Cape, as shown in Table 4.3 above. North West's budget in 2014/15 is lower than it was in 2013/14 due to a once-off allocation for purchasing the head office building.

Table 4.4 Provincial expenditure on health by programme, 2010/11 – 2016/17

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
R million		**Outcome**		**Outcome**	**Medium-term estimates**		
Administration	2 674	3 130	3 200	3 578	3 617	3 694	3 927
District Health Services	42 003	47 076	53 369	57 890	64 086	68 887	73 698
Emergency Medical Services	3 863	4 620	5 050	5 349	5 649	6 029	6 351
Provincial Hospital Services	20 632	22 831	24 301	26 420	28 673	30 589	32 303
Central Hospital Services	17 365	20 414	22 183	23 558	24 786	26 786	28 030
Health Sciences and Training	3 308	3 467	3 726	4 039	4 360	4 577	4 856
Health Care Support Services	1 528	1 595	1 764	1 928	1 471	1 547	1 700
Health Facilities Management	6 583	8 191	8 958	7 926	8 042	7 343	3 252
Total	**97 957**	**111 324**	**122 551**	**130 690**	**140 684**	**149 452**	**154 117**
Percentage of provincial health expenditure							
Administration	2.7%	2.8%	2.6%	2.7%	2.6%	2.5%	2.5%
District Health Services	42.9%	42.3%	43.5%	44.3%	45.6%	46.1%	47.8%
Emergency Medical Services	3.9%	4.1%	4.1%	4.1%	4.0%	4.0%	4.1%
Provincial Hospital Services	21.1%	20.5%	19.8%	20.2%	20.4%	20.5%	21.0%
Central Hospital Services	17.7%	18.3%	18.1%	18.0%	17.6%	17.9%	18.2%
Health Sciences and Training	3.4%	3.1%	3.0%	3.1%	3.1%	3.1%	3.2%
Health Care Support Services	1.6%	1.4%	1.4%	1.5%	1.0%	1.0%	1.1%
Health Facilities Management	6.7%	7.4%	7.3%	6.1%	5.7%	4.9%	2.1%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Percentage growth (average annual)		**2010/11 – 2013/14**		**2013/14- 2014/15**		**2013/14 – 2016/17**	
Administration		10.2%		1.1%		3.1%	
District Health Services		11.3%		10.7%		8.4%	
Emergency Medical Services		11.5%		5.6%		5.9%	
Provincial Hospital Services		8.6%		8.5%		6.9%	
Central Hospital Services		10.7%		5.2%		6.0%	
Health Sciences and Training		6.9%		7.9%		6.3%	
Health Care Support Services		8.1%		-23.7%		-4.1%	
Health Facilities Management		6.4%		1.5%		-25.7%	
Total		**10.1%**		**7.6%**		**5.6%**	

Source: National Treasury provincial database

Administration

Spending in the offices of members of executive councils reaches R85 million in 2014/15

Spending on Administration grew by an annual average of 11.3 per cent between 2010/11 and 2012/13, with the strongest growth being in the District Management and Management sub-programmes. From R61 million in 2010/11, spending in the MECs' offices is expected to reach R99 million in 2016/17. At an annual average of 11.5 per cent, this is the fastest growing item of expenditure over the MTEF. In 2014/15, spending at head offices and regional offices is expected to increase to R3.5 billion

from the R2.6 billion of 2010/11. These offices have overall responsibility for managing provinces' health services. However, despite the increase in its rate of growth, as a percentage of total health expenditure the Administration budget decreases from 5 per cent to 4.9 per cent over the seven-year period.

Table 4.5 Provincial health expenditure on administration by subprogramme, 2010/11 – 2016/17

R million	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
		Outcome		Outcome	Medium-term estimates		
Office of the MEC[1]	61	69	74	71	85	94	99
Management	2 614	3 060	3 125	3 507	3 532	3 600	3 828
District Management	2 181	2 578	3 011	3 114	3 298	3 475	3 697
Total	**4 855**	**5 707**	**6 210**	**6 692**	**6 914**	**7 169**	**7 623**
Administration as a percentage of total	5.0%	5.1%	5.1%	5.1%	4.9%	4.8%	4.9%
Percentage growth (average annual)		**2010/11– 2013/14**		**2013/14– 2014/15**		**2013/14– 2016/17**	
Office of the MEC[1]		5.6%		4.3%		11.5%	
Management		10.3%		-10.9%		3.0%	
District Management		12.6%		-3.3%		5.9%	
Total		**11.3%**		**-7.2%**		**4.4%**	

1. Member of Executive Council.

Source: National Treasury provincial database

Primary health care

Primary health care falls under District Health Services, and between 2010/11 and 2016/17 accounts on average for 21.1 per cent of total provincial health spending.

Table 4.6 Provincial expenditure on primary health care by subprogramme, 2010/11 – 2016/17

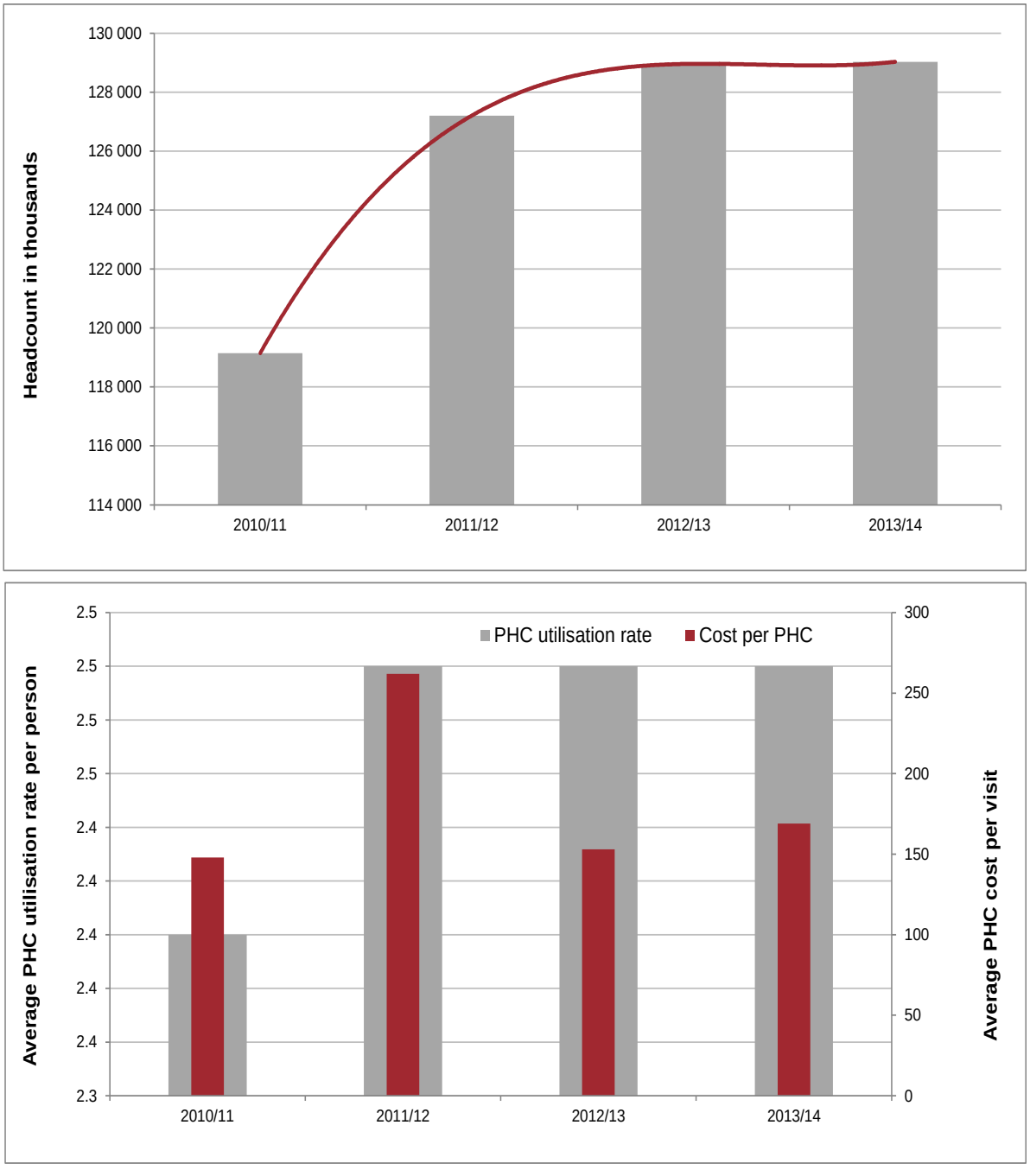
R million	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
		Outcome		Outcome	Medium-term estimates		
District Management	2 181	2 578	3 011	3 114	3 298	3 475	3 697
Community Health Clinics	9 027	10 086	11 448	11 769	12 767	13 701	14 376
Community Health Centres	4 541	5 205	5 792	6 231	7 351	7 954	8 550
Community-Based Services	1 851	1 979	2 050	2 049	2 319	2 492	2 724
Other Community Services	1 119	1 174	1 318	1 560	1 660	1 706	1 723
Nutrition	195	238	232	185	245	262	266
Primary Health Care Training	364	365	326	377	437	468	493
Community Health Facilities	1 021	1 194	1 435	2 110	2 050	1 845	1 601
Total	**20 299**	**22 820**	**25 612**	**27 395**	**30 127**	**31 904**	**33 430**
Rand per capita uninsured	305	372	438	504	546	579	610
PHC[1] as a percentage of total	20.7%	20.5%	20.9%	21.0%	21.4%	21.3%	21.7%
Percentage growth (average annual)		**2010/11 – 2013/14**		**2013/14- 2014/15**		**2013/14 – 2016/17**	
District Management		12.6%		5.9%		5.9%	
Community Health Clinics		9.2%		8.5%		6.9%	
Community Health Centres		11.1%		18.0%		11.1%	
Community-Based Services		3.4%		13.2%		10.0%	
Other Community Services		11.7%		6.4%		3.4%	
Nutrition		-1.6%		32.2%		12.8%	
Primary Health Care Training		1.2%		15.9%		9.3%	
Community Health Facilities		27.4%		-2.8%		-8.8%	
Total		**10.5%**		**10.0%**		**6.9%**	

1. Primary health care.

Source: National Treasury provincial database

Re-engineering primary health care is central to government's vision for the NHI and for better public access to good-quality health services. This is being done in three main ways: through the deployment of ward-based outreach teams, the creation of district clinical specialist teams, and delivery of school health services. As Table 4.6 shows, spending on primary health care increased to R27.4 billion in 2013/14 from R20.3 billion in 2010/11, from an average of R305 per person in the uninsured population to R504. This total is expected to increase to R33.4 billion in 2016/17, equating to an average of R610 per uninsured person, or an average annual increase of 6.9 per cent over the MTEF period.

Figure 4.1 Trends in primary health care outputs and unit costs, 2010/11 – 2013/14



Source: National Department of Health, National Treasury

Primary care spending is up sharply as a result of increased patient visits

As Figure 4.1 shows, the number of visits to primary health care centres increased from 2010/11 to 2011/12 and has remained relatively stable since then.

The figure also shows that between 2010/11 and 2013/14 increasing primary care expenditure was driven by growth in the number of visits and by unit costs. The average cost per visit increased over the period by 14.1 per cent, from R148 to R169. It is important to ascertain whether value for money is being achieved for these higher unit costs.

HIV and AIDS and TB services fall under district health services but are shown separately in Tables 4.7 and 4.8 Spending on HIV and AIDS has grown very strongly, from R6.3 billion in 2010/11 to R11.1 billion in 2013/14, equating to 40.6 per cent of primary care spending.

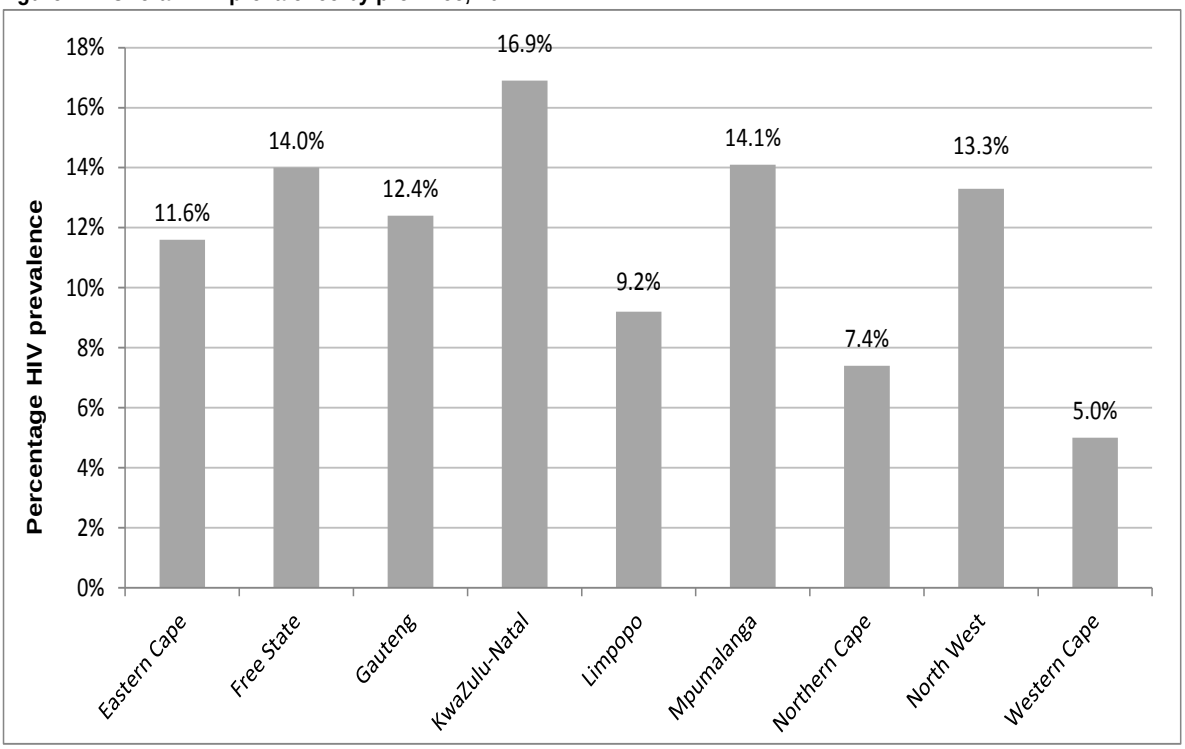
Table 4.7 Provincial expenditure on HIV and AIDS by province, 2010/11 – 2016/17

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
R million		Outcome		Outcome	Medium-term estimates		
Eastern Cape	706	924	1 033	1 302	1 461	1 635	1 802
Free State	425	503	673	732	879	961	1 078
Gauteng	1 422	1 728	2 134	2 460	2 801	3 185	3 626
KwaZulu-Natal	1 500	1 914	2 393	2 726	3 258	3 874	4 357
Limpopo	524	578	692	859	978	1 074	1 208
Mpumalanga	419	420	653	865	854	942	1 059
Northern Cape	185	237	231	332	372	410	458
North West	597	611	731	911	954	1 029	1 157
Western Cape	555	661	738	928	1 083	1 228	1 376
Total	**6 333**	**7 575**	**9 277**	**11 114**	**12 638**	**14 338**	**16 121**
Percentage growth (average annual)		**2010/11– 2013/14**		**2013/14– 2014/15**		**2013/14– 2016/17**	
Eastern Cape		22.6%		12.2%		11.4%	
Free State		19.9%		20.1%		13.8%	
Gauteng		20.0%		13.8%		13.8%	
KwaZulu-Natal		22.0%		19.5%		16.9%	
Limpopo		17.9%		13.8%		12.0%	
Mpumalanga		27.3%		-1.3%		7.0%	
Northern Cape		21.5%		12.2%		11.4%	
North West		15.1%		4.7%		8.3%	
Western Cape		18.7%		16.7%		14.0%	
Total		**20.6%**		**13.7%**		**13.2%**	

Source: National Treasury provincial database

Expenditure on the HIV and AIDS programme increases to R16.1 billion in 2016/17. This growth reflects a large increase in uptake of the anti-retroviral treatment (ART) programme after the CD4 count threshold was increased to 350 cells/mm3. Between March 2011 and March 2014, the number of people on ART grew from 1.69 million to 2.68 million, an increase of about 278 660 patients per year. By 2016/17, the number is expected to be 4.2 million. The increase in the number of people on ART treatment has led to a decrease in AIDS mortality and an increase in life expectancy from 58.1 in 2011 to 59.6 in 2013. However, the number of patients on ART remains below the 6.4 million (or 12.2 per cent of the population) people estimated by the Human Sciences Research Council in 2014 to be living with the disease.

Figure 4.2 Overall HIV prevalence by province, 2012



Source: South African National HIV Prevalence, Incidence and Behaviour Survey, 2012

Spending on the HIV and AIDS programme more than triples over the review period, reaching R16.1 billion in 2016/17

In line with the 2012-2016 National Strategic Plan for HIV, STIs and TB, the Department of Health is rolling out a number of prevention programmes including medical male circumcision and PMTCT. The latter has led to a dramatic reduction in transmission from mothers to children, from 8 per cent in 2009 to 2.7 per cent in 2012. As noted elsewhere in this chapter, this expenditure is starting to show substantial health benefits, with reductions in child mortality and improvement in national life expectancy.

Emergency medical services

Table 4.4 shows that expenditure on Emergency Medical Services (EMS) increased from R3.9 billion in 2010/11 to R5.3 billion in 2013/14. The growth in spending is projected to slow from the annual average of 11.3 per cent of 2010/11-2013/14 to 5.9 per cent over the MTEF period, to a total of R6.4 billion in 2016/17. Per capita spending on EMS is highest in Northern Cape (due to the low population density and large geographic area) and Western Cape, and lowest in Mpumalanga and North West.

Hospital services

Table 4.10 shows recurrent and health facilities costs separately. Spending on Hospital Services is projected to grow from R59.4 billion in 2010/11 to R87.1 billion in 2016/17. From 2010/11 to 2013/14, spending grew at an annual average rate of 8.6 per cent, and is projected to be 4.6 per cent over the MTEF. Spending is mainly driven by personnel, laboratory, medicines and medical supplies costs. Overall, the share of spending on Hospital Services (including facilities building programmes) is projected to have declined from 60.6 per cent in 2010/11 to 56.5 per cent in 2016/17. This is largely due to spending increases in other areas such as HIV and AIDS (a stand-alone sub-programme) and EMS.

Table 4.8 Provincial expenditure on hospital services by subprogramme, 2010/11 – 2016/17

R million	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
	Outcome			Outcome	Medium-term estimates		
District Hospitals	16 410	17 817	19 830	21 410	23 297	24 437	25 691
General (Regional) Hospitals	15 363	17 049	18 402	20 100	21 414	22 975	24 205
Tuberculosis Hospitals	1 571	1 697	1 418	1 496	1 904	1 959	2 063
Psychiatric/Mental Hospitals	2 972	3 290	3 632	3 877	4 319	4 560	4 863
Sub-acute, Step down and Chronic Medical Hospitals	305	333	341	377	399	423	447
Dental Training Hospitals	375	414	453	512	567	599	643
Other Specialised Hospitals	45	48	54	58	70	73	83
Central Hospitals	11 774	14 043	15 303	16 269	16 190	17 215	17 783
Provincial Tertiary Hospitals	5 591	6 371	6 880	7 289	8 596	9 571	10 247
Subtotal hospitals	**54 407**	**61 061**	**66 313**	**71 389**	**76 756**	**81 811**	**86 025**
District Hospital Services	2 851	3 640	3 711	2 414	2 417	2 291	461
Provincial Hospital Services	1 682	2 196	2 372	1 766	2 272	1 932	405
Central Hospital Services	410	296	312	473	574	327	236
Subtotal facilities	**4 943**	**6 132**	**6 395**	**4 653**	**5 263**	**4 549**	**1 101**
Total	**59 350**	**67 193**	**72 708**	**76 042**	**82 019**	**86 360**	**87 126**
Percentage of total expenditure	60.6%	60.4%	59.3%	58.2%	58.3%	57.8%	56.5%

Percentage growth (average annual)	**2010/11–2013/14**	**2013/14–2014/15**	**2013/14–2016/17**
District Hospitals	9.3%	8.8%	6.3%
General (Regional) Hospitals	9.4%	6.5%	6.4%
Tuberculosis Hospitals	-1.6%	27.3%	11.3%
Psychiatric/Mental Hospitals	9.3%	11.4%	7.8%
Sub-acute, Step down and Chronic Medical Hospitals	7.3%	5.8%	5.8%
Dental Training Hospitals	10.9%	10.7%	7.9%
Other Specialised Hospitals	8.9%	21.4%	12.7%
Central Hospitals	11.4%	-0.5%	3.0%
Provincial Tertiary Hospitals	9.2%	17.9%	12.0%
Subtotal hospitals	**9.5%**	**7.5%**	**6.4%**
District Hospital Services	-5.4%	0.1%	-42.4%
Provincial Hospital Services	1.6%	28.6%	-38.8%
Central Hospital Services	4.9%	21.3%	-20.7%
Subtotal facilities	**-2.0%**	**13.1%**	**-38.1%**
Total	**8.6%**	**7.9%**	**4.6%**

Source: National Treasury provincial database

Spending on district hospitals grew by 9.3 per cent a year between 2010/11 and 2013/14 as a result of wage and supply costs

Table 4.8 shows that expenditure on district hospitals increased from R16 .4 billion in 2010/11 to R21.4 billion in 2013/14, an average annual growth rate of 9.3 per cent. This was mainly due to OSDs for medical personnel, wage agreements and the increasing cost of medicines and medical supplies. Long-term health inflation tends to be about 2 per cent above general inflation, and needs to be contained.

Over the MTEF period, the district hospitals budget is projected to increase by an annual average of 6.3 per cent. Between 2010/11 and 2013/14, spending on regional hospitals increased by an annual average of 9.4 per cent; however, over the MTEF this declines to 6.4 per cent. This is in line with inflationary assumptions and the expected workload.

There are additional funds for TB diagnostics, treatment and management

Spending on TB hospitals declined by an annual average of 1.6 per cent between 2010/11 and 2013/14. This resulted particularly from KwaZulu-Natal's reducing the budget for this sub-programme and moving it to

district and regional hospitals which also deal with TB. It was also due to the province's paying a flat fee to the National Health Laboratory Service (NHLS) instead of a fee per service. Currently, there is a dispute about service charges between the department and the entity; this is expected to be resolved during 2014/15.

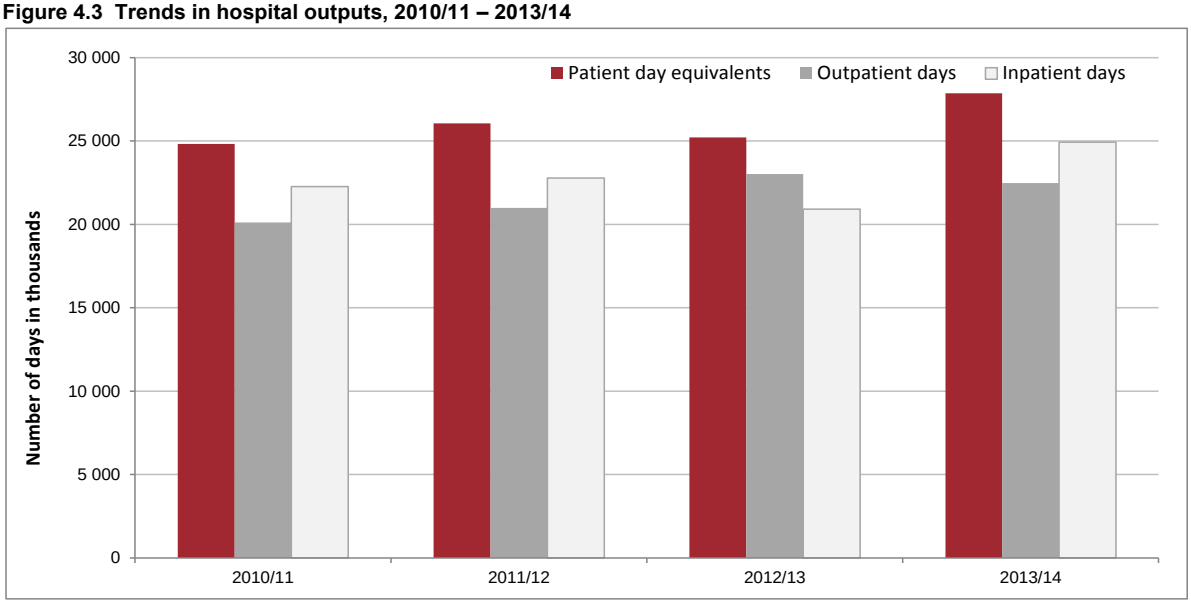
Spending on TB hospitals is expected to increase over the MTEF at an annual average rate of 11.3 per cent; this is particularly influenced by Gauteng's increased allocation for TB treatment. TB caseloads, and the complexity of the disease, have increased as a result of co-infection with HIV and AIDS. According to the Joint Review of HIV, TB and PMTCT by the national Department of Health in 2014, TB prevalence (including HIV positive TB patients) was 349 582 cases in 2013. GeneXpert, a new molecular, DNA-based diagnostic test for TB which is more rapid and sensitive than previous tests, was introduced in 2012. Funding for continued roll-out of this technology was provided over the 2013 MTEF to improve TB prevention and treatment outcomes.

Gauteng and Western Cape consume the largest share of the hospital services budget over the MTEF period

Central hospital services are funded partly by the *National Tertiary Services* grant. Spending grew at an average annual rate of 11.4 per cent between 2010/11 and 2013/14 but is expected to slow considerably, to 3 per cent, over the MTEF period and particularly in Gauteng. Central hospital budgets in Gauteng and Western Cape are projected to consume the largest share of the total central hospital services budget between 2014/15 and 2016/17, at 78.2 per cent and 78.2 per cent respectively. North West's budget accounts for the smallest share, grows slowly at an annual average of 3.1 per cent over the MTEF period and is funded solely through the *National Tertiary Services* grant.

Hospital outputs

Figure 4.3 Trends in hospital outputs, 2010/11 – 2013/14



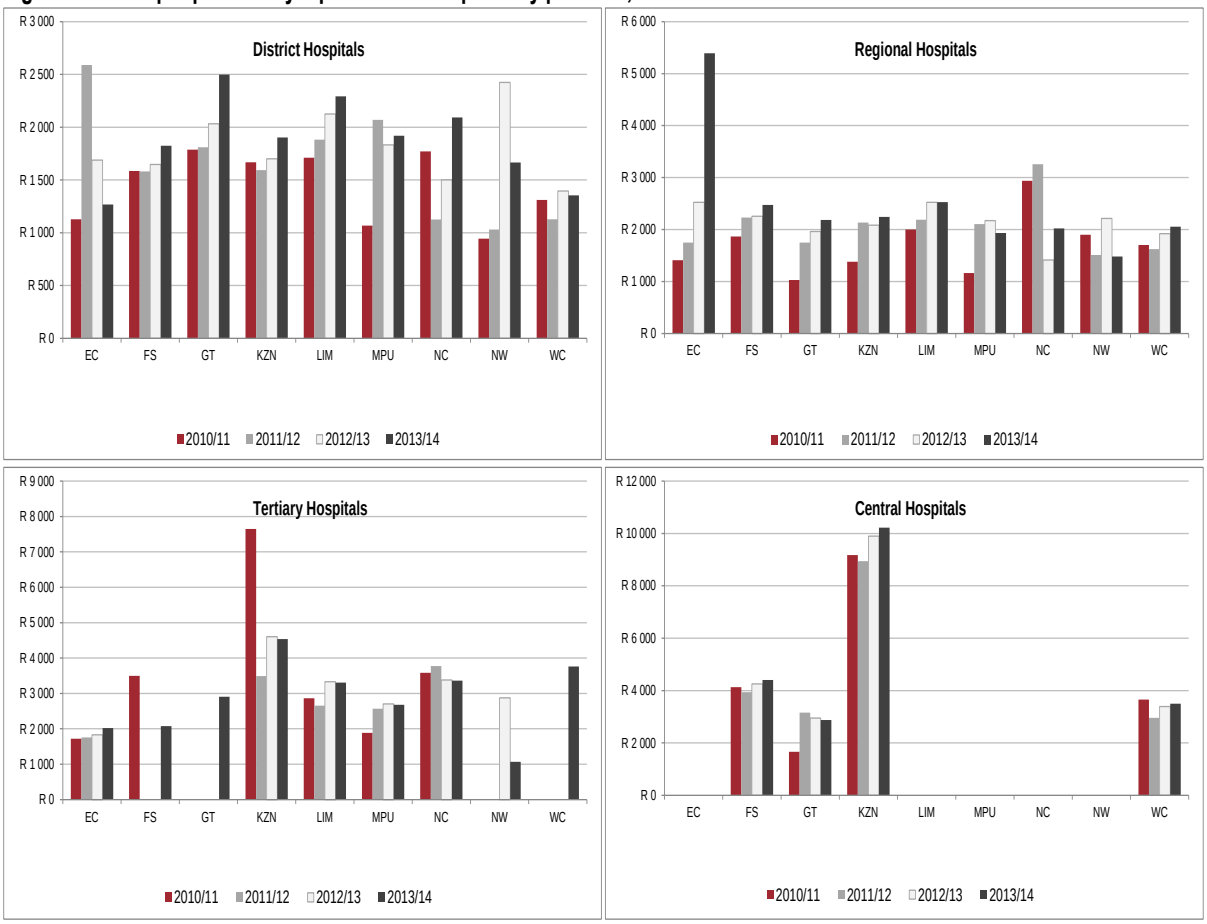
Source: National Department of Health

The composition of hospital workload is shifting from inpatient to outpatient care

Hospital workload as measured by patient day equivalents (PDEs), an aggregate measure of inpatient days spent in hospital and outpatient visits, did not increase substantially between 2010/11 and 2013/14. The composition of the workload, however, changed over this time period, with outpatient visits increasing from 21.4 million to 23.1 million and

inpatient days increasing slightly from 22.3 million to 24.9 million. The average length of stay increased from 4 to 5 days, mainly in the tertiary hospitals.

Figure 4.4 Cost per patient day equivalent in hospitals by province, 2010/11 – 2013/14



Source: National Department of Health, National Treasury

In 2013/14, the average cost per patient per day in equivalent hospitals was R1 794

In 2011/12 and 2013/14, Eastern Cape had the highest average spend per PDE in both district hospitals and regional hospitals. KwaZulu-Natal has one central hospital: the Inkosi Albert Luthuli Central Hospital. Its PDE expenditure increased from R9 171 in 2010/11 to R10 419 in 2013/14.

Health sciences and training

Spending on the Health Sciences and Training programme increased from R3.3 billion in 2010/11 to R4 billion in 2013/14. This programme has sub-programmes for nursing colleges, EMS, training colleges and bursaries. Much of the *Health Professions Training and Development* grant is spent on programmes providing clinical training.

Table 4.9 Provincial expenditure on health sciences and training by subprogramme, 2010/11 – 2016/17

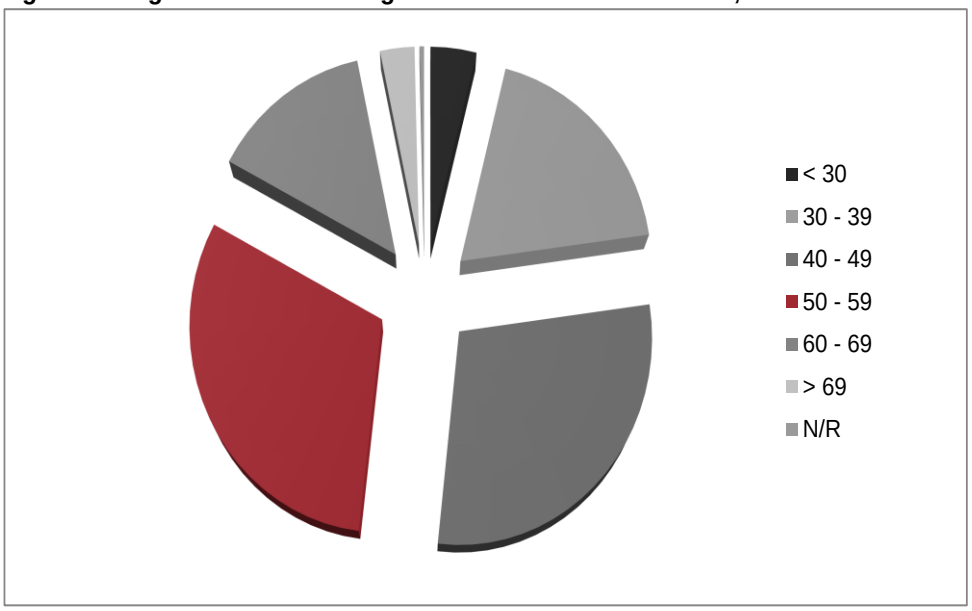
R million	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
	Outcome			Outcome	Medium-term estimates		
Nurse Training Colleges	1 766	1 884	1 955	1 803	2 185	2 371	2 489
Emergency Medical Services Training Colleges	88	96	103	262	134	143	149
Bursaries	350	343	416	613	598	525	556
Primary Health Care Training	364	365	326	377	437	468	493
Training: Other	741	779	925	983	1 005	1 069	1 169
Total	**3 308**	**3 467**	**3 726**	**4 039**	**4 360**	**4 577**	**4 856**
Other related:							
Health Professions Training and Development grant	1 312	1 295	2 028	2 191	2 322	2 429	2 557
Further Education and Training Colleges Sector grant	2 862	4 060	4 365	2 423	2 631	2 819	2 974
Percentage growth (average annual)		**2010/11– 2013/14**		**2013/14– 2014/15**		**2013/14– 2016/17**	
Nurse Training Colleges		0.7%		21.2%		11.3%	
Emergency Medical Services Training Colleges		43.9%		-49.0%		-17.2%	
Bursaries		20.6%		-2.4%		-3.2%	
Primary Health Care Training		1.2%		15.9%		9.3%	
Training: Other		9.9%		2.3%		5.9%	
Total		**6.9%**		**7.9%**		**6.3%**	
Other related:							
Health Professions Training and Development grant		18.6%		6.0%		5.3%	
Higher Education Institutions		-5.4%		8.6%		7.1%	

Source: National Treasury provincial database

About R8.6 billion was spent on health sciences education and training in 2013/14, including spending by higher education institutions (HEIs). In the past, there has been relatively poor coordination between provinces and HEIs. In 2011, the national Department of Health released a human resources strategy which includes a model and proposals for increasing the numbers of health science students and graduates. The strategy aims to deal with three issues: the supply of health professionals and equity access to appropriately trained health care workers for the whole population; education, training and research; and the working environment of the health workforce. Various challenges, and recommendations about how to address them, are highlighted in the strategy.

The budget of the Nursing Training Colleges sub-programme grew marginally by 0.7 per cent per year between 2010/11 and 2013/14 mainly due to a reduced allocation in KwaZulu-Natal where student nurses were moved from the more expensive salary system to a system of stipends. A new *Nursing Colleges and Schools* conditional grant was introduced in 2012/13 to prioritise the recapitalisation and upgrading of nursing colleges. This has now been merged with two other infrastructure grants to form the *Health Facility Revitalisation* grant.

Figure 4.5 Age distribution of registered nurses and midwives, 2013



Source: South African Nursing Council

At the end 2013, 4 per cent of nurses were 30 years old or younger, compared with 3 per cent in 2009. More than 45 per cent were 50 years of age or older and were thus approaching retirement age. These figures reflect inadequate levels of nurse training. The administrative rationalisation of nursing colleges in the 1990s, changes to the training programme and the loss of nurse tutors all contributed to fewer nurses being trained. Unless this trend is reversed, South Africa will face a shortage of nurses, with far-reaching consequences for public health.

Health care support services

Table 4.4 shows that spending on the Health Care Support Services programme, which includes laundries, engineering and orthotic and prosthetic services, increased at an average annual rate of 10.1 per cent between 2010/11 and 2013/14 but that it drops over the MTEF at an average annual rate of 5.6 per cent. This is caused particularly by changes in Limpopo where the medical trading account is moved to District Health Services, Provincial Hospital Services and Central Hospital Services.

Health facilities management

Increased focus on improving hospital infrastructure is evident in spending trends

Total spending on Health Facilities Management grew from R6.6 billion in 2010/11 to R7.9 billion in 2013/14, and decreases to R3.3 billion in 2016/17 mainly due to reforms made to the provincial infrastructure grant system. These are intended to institutionalise proper infrastructure planning. Provinces are now required to bid for infrastructure allocations two years in advance, and financial incentives will be built into the infrastructure grant for provinces that implement best practices. The shift of funds from the direct provincial *Health Facility Revitalisation* grant to the indirect *National Health* grant implemented by the national department also contributes to the decrease in the provincial infrastructure budgets over the MTEF. The *National Health* grant, introduced in 2013/14, is spent by the national Department of Health on behalf of provinces. The grant has three components: support for infrastructure projects; support for NHI pilot sites; and support for the rollout of HPV treatment. The

infrastructure component will be used to accelerate the construction, maintenance, upgrading and rehabilitation of new and existing health infrastructure, and to supplement expenditure on infrastructure delivered through public-private partnerships.

The small amount spent in 2013/14 as compared with 2012/13 relates mainly to provinces' underspending the infrastructure allocation by about R1.1 billion, with Gauteng accounting for 49.8 per cent of the sector's total under-expenditure. KwaZulu-Natal and Eastern Cape overspent on their allocation.

Table 4.10 Provincial expenditure on health facilities management by subprogramme, 2010/11 – 2016/17

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
R million		**Outcome**		**Outcome**	**Medium-term estimates**		
Community Health Facilities	1 021	1 194	1 435	2 110	2 050	1 845	1 601
Emergency Medical Rescue Services	40	47	44	275	11	7	8
District Hospital Services	2 851	3 640	3 711	2 414	2 417	2 291	461
Provincial Hospital Services	1 682	2 196	2 372	1 766	2 272	1 932	405
Central Hospital Services	410	296	312	473	574	327	236
Other Facilities	578	818	1 084	889	718	942	541
Total	**6 583**	**8 191**	**8 958**	**7 926**	**8 042**	**7 343**	**3 252**
Other related:							
Health Facility Revitalisation Component	4 575	5 925	6 191	5 291	5 240	5 389	5 652

Percentage growth (average annual)	**2010/11–2013/14**	**2013/14–2014/15**	**2013/14–2016/17**
Community Health Facilities	27.4%	-2.8%	-8.8%
Emergency Medical Rescue Services	89.5%	-95.9%	-69.3%
District Hospital Services	-5.4%	0.1%	-42.4%
Provincial Hospital Services	1.6%	28.6%	-38.8%
Central Hospital Services	4.9%	21.3%	-20.7%
Other Facilities	15.4%	-19.2%	-15.2%
Total	**6.4%**	**1.5%**	**-25.7%**
Other related:			
Health Facility Revitalisation Component	5.0%	-1.0%	2.2%

Source: National Treasury provincial database

Over the 2013 MTEF, all infrastructure-related grants including the *Hospital Revitalisation* grant, the *Health Infrastructure* grant and the *Nursing Colleges and Schools* grant were amalgamated into the new *Health Facility Revitalisation* grant. The aim in amalgamating these grants is to accelerate the delivery of new and existing infrastructure projects; and enable provinces to plan, manage, modernise, rationalise and transform health infrastructure and technology, and improve the quality of care. The merging of the grants also allows for greater flexibility to shift funds between projects previously funded from different grants.

Between 2010/11 and the end of 2013/14, over 540 projects had been completed and 409 were still in progress. They included 86 new clinics, 20 new hospitals and 13 new community health centres. 188 upgrades and 67 additions were also completed during this period.

Table 4.11 Completed health projects, 2010/11 – 2013/14

Type of Infrastructure	2010/11 Handed over	2011/12 Handed over	2012/13 Handed over	2013/14 Handed over and retention
Accomodation	–	11	5	29
Ambulance base	18	4	3	8
Civil Work	1	–	–	–
Clinic	157	33	11	112
Community Health Centre	9	6	8	30
Health Technology		–	1	1
Hospital - Central	4	12	5	10
Hospital - District	75	28	13	113
Hospital - Regional	22	10	5	52
Hospital - Specialised	10	12	7	27
Laboratory	–	10	3	1
Medical equipment	–	–	–	–
Mobile clinic		–	–	1
Mortuary	–	3	11	16
Pharmaceutical depots	1	–	–	2
Sanitation	–	–	–	2
Training College	–	4	1	10
Other (Type not captured)	3	2	–	34
Total	**300**	**135**	**73**	**448**
Nature of investment				
New and Replacements	82	30	30	119
Maintenance and repairs	9	5	–	11
Upgrade and additions	112	83	3	208
Rehabilitation, renovations and refurbishments	97	16	40	108
Nature of investment not captured	–	1	–	2
Total	**300**	**135**	**73**	**448**

Source: National Treasury Infrastructure Reporting Model (IRM)

Government's infrastructure programmes still face delivery challenges

Despite the progress made and the various interventions put in place to improve capacity in the Department of Public Works and client departments, government's infrastructure programmes continue to face problems. Of the R1.1 billion of capital under-expenditure in 2013/14, approximately R943 million related to the *Health Facility Revitalisation* grant. However, there was a general decline in underspending from 2010/11 to 2013/14 due to partnerships with the Development Bank of Southern Africa (DBSA) and the Council for Scientific and Industrial Research (CSIR).

Budget and expenditure trends by economic classification

Table 4.12 shows provincial expenditure on health by economic classification. The largest spending areas are Compensation of employees, and Goods and services.

Table 4.12 Provincial expenditure on health by economic classification, 2010/11 – 2016/17

R million	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
		Outcome		Outcome	Medium-term estimates		
Current payments	**87 779**	**99 591**	**109 325**	**118 467**	**128 960**	**137 812**	**145 618**
of which:							
Compensation of employees	*58 907*	*67 834*	*74 212*	*81 877*	*89 627*	*95 562*	*100 683*
Goods and services	*28 848*	*31 736*	*35 104*	*36 580*	*39 331*	*42 248*	*44 935*
Transfers and subsidies	**3 507**	**3 501**	**4 737**	**4 550**	**4 285**	**4 390**	**4 704**
of which:							
Provinces and municipalities	*954*	*874*	*1 454*	*1 075*	*1 222*	*1 285*	*1 349*
Departmental agencies and accounts	*230*	*110*	*123*	*104*	*124*	*125*	*151*
Higher education institutions	*113*	*124*	*71*	*52*	*6*	*6*	*6*
Non-profit institutions	*1 626*	*1 712*	*2 126*	*1 513*	*1 934*	*1 976*	*2 107*
Households	*582*	*671*	*960*	*1 805*	*1 000*	*998*	*1 090*
Payments for capital assets	**6 631**	**8 187**	**8 471**	**7 540**	**7 439**	**7 249**	**3 795**
of which:							
Buildings and other fixed structures	*183*	*190*	*282*	*801*	*228*	*231*	*238*
Machinery and equipment	*5 036*	*5 642*	*6 436*	*5 252*	*4 931*	*4 863*	*1 237*
Payments for financial assets	**41**	**44**	**17**	**134**	**–**	**–**	**–**
Total	**97 957**	**111 324**	**122 551**	**130 690**	**140 684**	**149 452**	**154 117**
Percentage of total							
Current payments	89.6%	89.5%	89.2%	90.6%	91.7%	92.2%	94.5%
of which:							
Compensation of employees	*60.1%*	*60.9%*	*60.6%*	*62.6%*	*63.7%*	*63.9%*	65.3%
Goods and services	*29.4%*	*28.5%*	*28.6%*	*28.0%*	*28.0%*	*28.3%*	29.2%
Transfers and subsidies	3.6%	3.1%	3.9%	3.5%	3.0%	2.9%	3.1%
Payments for capital assets	6.8%	7.4%	6.9%	5.8%	5.3%	4.9%	2.5%
Payments for financial assets	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Percentage growth (average annual)		**2010/11 – 2013/14**		**2013/14 – 2014/15**		**2013/14 – 2016/17**	
Current payments		10.5%		8.9%		7.1%	
of which:							
Compensation of employees		*11.6%*		*9.5%*		*7.1%*	
Goods and services		*8.2%*		*7.5%*		*7.1%*	
Transfers and subsidies		9.1%		-5.8%		1.1%	
Payments for capital assets		4.4%		-		-20.5%	
Payments for financial assets		48.1%		13.7%		-100.0%	
Total		**10.1%**		**19.2%**		**5.6%**	

Source: National Treasury provincial database

Compensation of employees

Table 4.12 shows that spending on compensation of employees increased by 11.6 per cent annually between 2010/11 and 2013/14, from R58.9 million to R81.9 million. A number of factors contributed to this:

OSD and the growth in the numbers of health sector personnel contributed to the increase in employee compensation

- The OSD was implemented for nurses from 2007/08, for doctors from 2009/10 and for therapeutic personnel from 2010/11. There was also a re-grading of clerical staff in 2013/14.
- The number of provincial health sector employees increased from 289 986 in 2010/11 to 307 042 in 2013/14.
- Annual salary increases for public servants exceeded inflation over several years.
- The average cost per employee rose from R203 137 per year in 2010/11 to R266 380 in 2013/14.

Table 4.13 Provincial health expenditure on compensation of employees by province, 2010/11 – 2016/17

R million	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
		Outcome		Outcome	Medium-term estimates		
Eastern Cape	8 391	9 481	9 827	10 698	11 608	12 247	12 861
Free State	3 773	4 372	4 944	5 153	5 762	6 000	6 160
Gauteng	12 221	14 164	15 245	17 097	18 778	20 413	21 567
KwaZulu-Natal	12 935	15 118	16 886	18 677	20 188	21 700	22 919
Limpopo	6 617	7 736	8 692	9 378	10 235	10 787	11 329
Mpumalanga	3 614	4 083	4 475	4 989	5 663	6 016	6 349
Northern Cape	1 277	1 426	1 578	1 786	1 953	2 079	2 180
North West	3 269	3 789	4 129	4 861	5 104	5 299	5 619
Western Cape	6 808	7 665	8 437	9 238	10 335	11 022	11 698
Total	**58 907**	**67 834**	**74 212**	**81 877**	**89 627**	**95 562**	**100 683**
Percentage growth (average annual)		**2010/11– 2013/14**		**2013/14– 2014/15**		**2013/14– 2016/17**	
Eastern Cape		8.4%		8.5%		6.3%	
Free State		11.0%		11.8%		6.1%	
Gauteng		11.8%		9.8%		8.1%	
KwaZulu-Natal		13.0%		8.1%		7.1%	
Limpopo		12.3%		9.1%		6.5%	
Mpumalanga		11.3%		13.5%		8.4%	
Northern Cape		11.8%		9.3%		6.9%	
North West		14.1%		5.0%		5.0%	
Western Cape		10.7%		11.9%		8.2%	
Total		**11.6%**		**9.5%**		**7.1%**	

Source: National Treasury provincial database

Over-expenditure on compensation in Gauteng Eastern Cape, Limpopo and North West

Over the 2014 MTEF, compensation of employees in the public health sector increases by 7.1 per cent, slightly above the average inflationary adjustment of 6.4 per cent. Between 2010/11 and 2013/14, there was a double-digit increase in spending on personnel in all provinces except for Eastern Cape.

Control of personnel expenditure has improved significantly in the sector since 2010/11, when there was over-expenditure of R1.4 billion. This compares with under-expenditure of R471 million in 2013/14. With the exception of North West which provides for growth in personnel expenditure at a rate below inflation, over the MTEF spending on personnel is expected to remain under control. Gauteng has shown significant improvement, with over-expenditure falling from R1.3 billion in 2010/11 to R98 million in 2013/14. The number of personnel in the sector grew from 289 986 in March 2011 to 307 042 in March 2014, an increase of 17 056 over the period.

Some provinces show a severe imbalance between expenditure on personnel and on goods and services, with the Free State and Limpopo spending over 60 per cent of their budgets on personnel and less than 25 per cent on goods and services. It is essential that such imbalances are addressed to ensure that critical goods and services are sufficiently provided for in provinces' budgets.

Trends in health sector personnel

As Table 4.14 shows, between March 2008 and March 2014 the number of personnel in the public health sector grew by 52 070 from 254 972 to 307 042, with the number of medical practitioners growing by 5 102 and nurses by 24 765. This growth partly represents the success of the OSD in recruiting and retaining staff. It is also in contrast to the period of contraction from the late 1990s when the sector downsized by almost 30 000 employees, so that the 2006 staff total of 235 000 is not dissimilar to that of 1996. However, the current combination of substantially higher salaries and increased personnel numbers puts great pressure on compensation budgets.

Table 4.14 Trends in health personnel as at the end of March, 2008 – 2014

	2008	2009	2010	2011	2012	2013	2014	Change March 2008 to March 2014
Nurses	114 627	117 641	122 783	131 592	138 255	138 511	139 392	24 765
Medical Doctors	14 831	15 392	15 998	17 439	18 666	19 210	19 933	5 102
Ambulance and Emergency Services Workers	10 915	11 603	11 979	12 780	13 555	13 876	13 842	2 927
Health Sciences Related	4 423	5 976	6 053	6 398	6 245	5 949	5 741	1 318
Pharmacists and Assistants	2 805	2 545	3 997	4 702	5 405	5 639	5 986	3 181
Radiography and Diagnostic Radiographers	2 335	2 380	2 480	2 646	2 807	2 844	2 931	596
Dentists	872	907	1 154	1 300	1 447	1 507	1 592	720
Physiotheraphy	908	956	1 018	1 068	1 150	1 216	1 243	335
Occupational Therapy	789	796	846	948	1 057	1 095	1 238	449
Dieticians and Nutrionists	612	648	764	871	1 000	1 078	1 209	597
Environmental Health	820	739	800	812	914	956	859	39
Psychologists and Vocational Counsellors	441	487	506	561	617	653	728	287
Speech Therapy and Audiology	337	358	406	421	479	540	582	245
Medical Technicians/Technologists	413	413	402	417	498	542	482	69
Oral Hygiene	159	157	161	226	237	249	262	103
Optometrists and Opticians	33	105	119	148	207	243	250	217
Community Development Workers	164	144	81	101	68	71	66	-98
Medical Research and Related Professionals	69	89	73	80	83	96	108	39
Subtotal health professionals	**155 553**	**161 336**	**169 620**	**182 510**	**192 690**	**194 275**	**196 444**	**40 891**
Administration and related personnel	99 419	99 376	98 130	107 476	118 747	119 507	110 598	11 179
Total	**254 972**	**260 712**	**267 750**	**289 986**	**311 437**	**313 782**	**307 042**	**52 070**

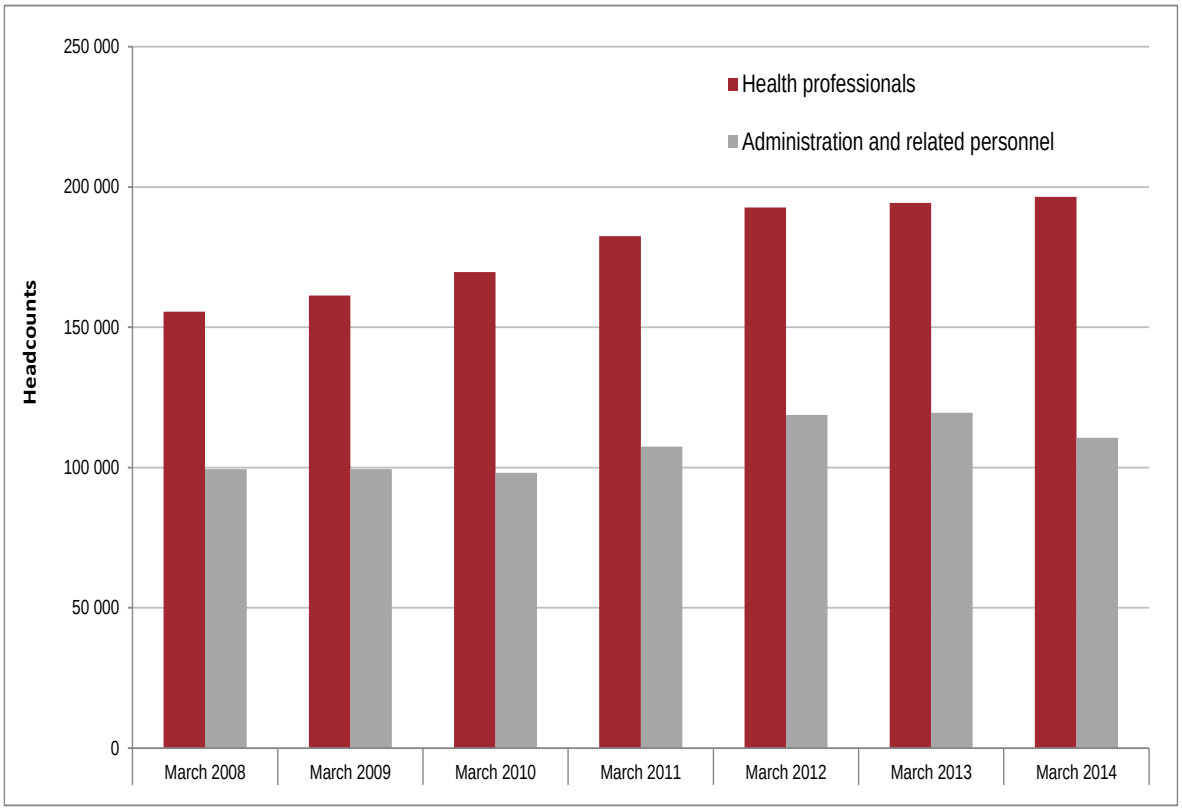
Source: Vulindlela

Currently at 0.8 per 1 000 population, South Africa has a relatively low density of physicians. It is only half the 1.6 median for upper-middle-income countries. However, the density of nurses and midwives is relatively high at 4.9 per 1 000 population compared with the upper-middle-income median of 2.8. Government is addressing this imbalance by expanding medical training programmes and piloting contracting with private sector general practitioners.

Progressive growth in medical professionals shows that the public sector is making progress in attracting and retaining skilled personnel

Figure 4.6 below shows the growth in the number of health professionals in relation to administrative staff since 2008. Between March 2013 and March 2014, the number of administrative and related personnel fell, with the number of health professionals growing by 1.1 per cent.

Figure 4.6 Trends in health personnel numbers, 2008 – 2014



Source: Vulindlela

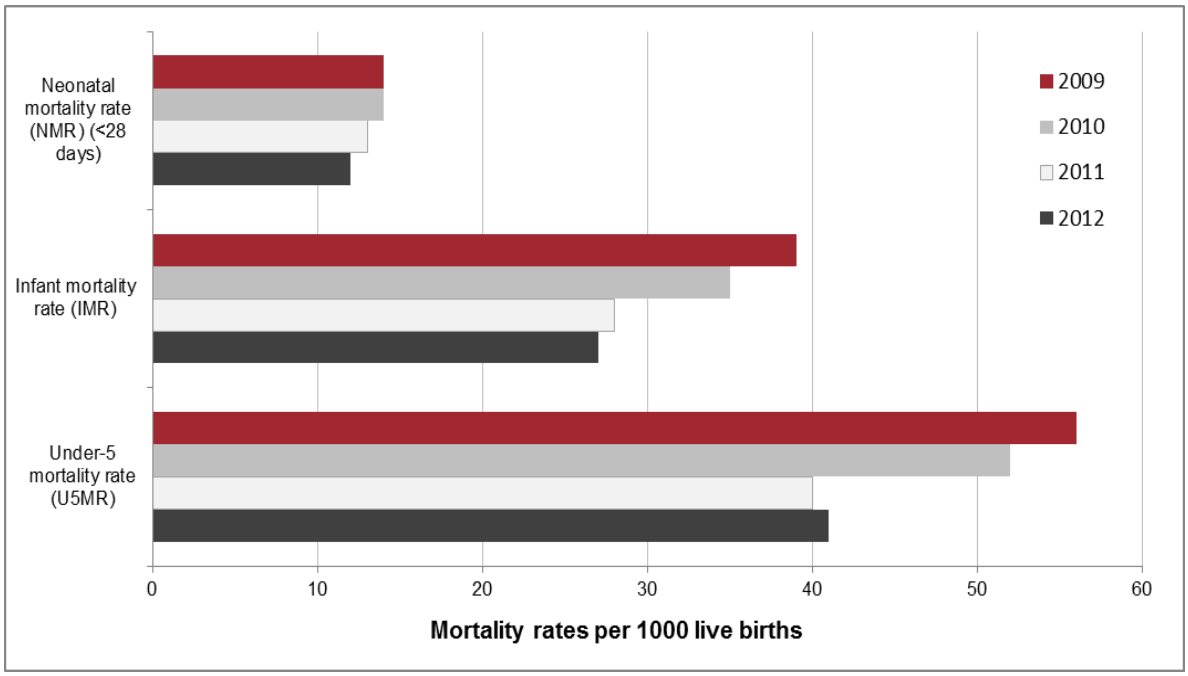
Goods and services

High prices for medicine, supplies, catering and laboratory services drive the goods and services trend

Spending on goods and services is projected to have increased from R28.8 billion in 2010/11 to R44.9 billion by 2016/17. This growth is mainly driven by the rollout of antiretroviral medicines. The largest spending areas in goods and services are medicines, medical supplies, laboratory services, consumables, property payments and agency and outsourced services (mainly patient catering, management of medical waste, and outsourced professional and support staff). Most of these items are pillars of health delivery and have been declared non-negotiable items. Departments are therefore required to prioritise them when budgeting.

In the 2009 MTEF, government added R2 billion for medical goods and services, a top-up of R468 million for TB and R1.8 billion to reduce infant and child mortality through PMTCT and the introduction of the pneumococcal and rotavirus vaccines for children. Infant mortality rate is estimated to have declined from 49.1 per 1 000 births in 2009 to about 41.7 in 2013.

Figure 4.7 Estimated under-5 mortality rate (U5MR), infant mortality rate (IMR), vital registration (VR), neonatal mortality rate (NMR) and rapid mortality surveillance (RMS), 2009 – 2012



Source: Medical Research Council

Laboratory services

In 2014/15, provincial laboratory services expenditure is expected to reach R4.7 billion. Gauteng had the highest expenditure, and the highest per capita expenditure, in the preceding three years suggesting that it may not have sufficient guidelines and controls on the use of laboratory tests. Gauteng's health facilities, and in particular its central hospitals, to a substantial extent serve patients from neighbouring provinces.

Table 4.15 Provincial health expenditure on laboratory services by province, 2010/11 – 2016/17

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	Average annual growth (nominal)	
	Outcome			Outcome	Medium-term estimates			2010/11 - 2013/14	2013/14 - 2016/17
R million									
Eastern Cape	528	393	465	635	542	617	617	6.3%	-0.9%
Free State	212	185	174	254	262	309	364	6.1%	12.8%
Gauteng	810	1 207	1 235	593	1 480	1 531	1 631	-9.9%	40.1%
KwaZulu-Natal	408	566	540	588	707	717	817	12.9%	11.6%
Limpopo	213	192	267	318	330	374	386	14.2%	6.7%
Mpumalanga	256	249	249	227	430	488	527	-3.9%	32.3%
Northern Cape	106	102	91	84	150	167	177	-7.2%	28.0%
North West	246	226	132	227	267	340	459	-2.7%	26.5%
Western Cape	407	423	475	529	572	626	658	9.1%	7.6%
Total	**3 188**	**3 541**	**3 627**	**3 454**	**4 740**	**5 168**	**5 637**	**2.7%**	**17.7%**

Source: National Treasury provincial database

Table 4.16 Provincial health expenditure on goods and services by item, 2010/11 – 2016/17

R million	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	Average annual 2010/11 - 2013/14	Average annual 2013/14 - 2016/17
	Outcome			Outcome	Medium-term estimates				
Administrative fees	32	27	25	25	34	35	37	-7.9%	13.3%
Advertising	81	90	92	110	107	111	102	10.9%	-2.5%
Assets less than the capitalisation threshold	235	286	276	248	457	453	432	1.7%	20.3%
Audit cost: External	122	113	152	151	165	173	180	7.5%	6.0%
Bursaries: Employees	118	20	25	18	34	35	38	-46.6%	28.4%
Catering: Departmental activities	63	63	57	59	48	50	47	-2.3%	-7.4%
Communication (G&S)	527	515	546	540	570	578	617	0.8%	4.6%
Computer services	339	530	523	539	590	511	554	16.7%	0.9%
Consultants and professional services: Business and advisory services	303	433	393	372	273	246	238	7.1%	-13.8%
Consultants and professional services: Infrastructure and planning	27	43	118	10	16	18	6	-29.8%	-14.3%
Consultants and professional services: Laboratory services	3 188	3 541	3 627	3 454	4 740	5 168	5 637	2.7%	17.7%
Consultants and professional services: Scientific and technological services	–	–	–	–	–	–	–	-	-
Consultants and professional services: Legal costs	64	155	220	274	126	75	76	62.1%	-34.7%
Contractors	1 439	1 565	1 348	1 312	1 377	1 430	1 500	-3.0%	4.5%
Agency and support/ outsourced services	2 143	2 216	2 582	2 847	2 703	2 883	3 000	9.9%	1.8%
Entertainment	3	2	22	1	1	1	1	-30.7%	2.4%
Fleet services (including government motor transport)	576	636	873	962	1 250	1 382	1 363	18.7%	12.3%
Housing	1	–	0	0	–	–	–	-76.8%	-100.0%
Inventory: Clothing material and accessories	–	–	–	63	48	46	44	-	-11.1%
Inventory: Farming supplies	–	–	–	4	0	1	1	-	-47.2%
Inventory: Food and food supplies	717	747	647	693	896	937	1 023	-1.1%	13.9%
Inventory: Fuel, oil and gas	446	495	442	561	482	498	537	8.0%	-1.5%
Inventory: Learner and teacher support material	2	1	2	2	7	3	4	6.8%	19.9%
Inventory: Materials and supplies	151	143	140	115	88	103	111	-8.7%	-1.1%
Inventory: Medical supplies	4 999	4 926	5 402	5 707	6 023	6 747	7 235	4.5%	8.2%
Inventory: Medicine	7 264	7 689	8 991	9 877	10 774	12 046	13 207	10.8%	10.2%
Medsas inventory interface	1	57	1	–	–	–	–	-73.9%	-100.0%
Inventory: Other supplies	24	19	45	1	50	49	52	-68.3%	306.5%
Consumable supplies	1 021	1 158	1 268	1 314	1 233	1 351	1 447	8.8%	3.3%
Consumable: Stationery, printing and office supplies	347	328	385	369	396	421	451	2.0%	7.0%
Operating leases	851	798	575	612	593	687	742	-10.4%	6.6%
Property payments	2 682	3 749	4 609	4 921	5 100	5 003	4 996	22.4%	0.5%
Transport provided: Departmental activity	112	149	217	149	194	154	153	10.0%	1.0%
Travel and subsistence	466	652	955	765	496	529	558	18.0%	-10.0%
Training and development	235	245	240	168	243	271	287	-10.6%	19.5%
Operating payments	172	207	253	260	144	167	166	14.7%	-13.9%
Venues and facilities	40	66	48	54	62	72	79	10.0%	13.6%
Rental and hiring	58	72	5	23	11	15	15	-26.1%	-12.9%
Total	**28 848**	**31 736**	**35 104**	**36 580**	**39 331**	**42 248**	**44 935**	**8.2%**	**7.1%**

Source: National Treasury provincial database

A concerted effort to shift from non-core to core functions will show results over the medium term

In 2014/15, the provinces are expected to spend about R10.8 billion on medicines, R6 billion on medical supplies and R4.7 billion on laboratory services. They are making a concerted effort to shift spending from non-core (entertainment, venue hire and catering: departmental activities) to core health functions (medicines and laboratory tests).

Payments for capital assets

Relatively low average growth in payment for capital assets reflects slow performance of the hospital upgrade programme

Payments for capital assets grow from R6.6 billion in 2010/11 to a projected R7.4 billion in 2014/15, and declines in 2016/17 following the reforms made to the provincial infrastructure grant system, as previously indicated. However, average annual growth of 4.4 per cent between 2010/11 and 2012/13 is low given the large budgetary additions, and reflects underspending and slow performance on the health infrastructure grants.

Gauteng is expected to experience high growth rates over the MTEF period. The *Health Facility Revitalisation* grant falls under payments for capital assets in the provincial budgets. The variability in spending trends reflects the project-based nature of large capital projects and the degree of underspending in the base year (2013/14).

Table 4.17 Provincial health expenditure on payments for capital assets by province, 2010/11 – 2016/17

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
R million		**Outcome**		**Outcome**	**Medium-term estimates**		
Eastern Cape	738	1 068	872	1 073	1 192	1 005	809
Free State	432	546	733	530	569	692	162
Gauteng	1 103	1 036	941	832	1 191	1 444	1 206
KwaZulu-Natal	981	1 900	2 157	1 863	1 597	1 435	431
Limpopo	932	936	1 108	308	526	244	99
Mpumalanga	594	691	639	554	562	527	541
Northern Cape	338	520	552	503	492	502	76
North West	540	593	593	1 039	637	713	203
Western Cape	973	897	876	838	673	688	267
Total	**6 631**	**8 187**	**8 471**	**7 540**	**7 439**	**7 249**	**3 795**
Percentage growth (average annual)		**2010/11– 2013/14**		**2013/14– 2014/15**		**2013/14– 2016/17**	
Eastern Cape		13.3%		11.1%		-9.0%	
Free State		7.0%		7.4%		-32.7%	
Gauteng		-9.0%		43.2%		13.2%	
KwaZulu-Natal		23.9%		-14.3%		-38.6%	
Limpopo		-30.9%		70.8%		-31.4%	
Mpumalanga		-2.3%		1.4%		-0.8%	
Northern Cape		14.2%		-2.2%		-46.7%	
North West		24.4%		-38.7%		-41.9%	
Western Cape		-4.9%		-19.6%		-31.7%	
Total		**4.4%**		**-1.3%**		**-20.5%**	

Source: National Treasury provincial database

Comparison across provinces

Table 4.18 shows spending on selected critical programmes and sub-programmes and economic classification items (mainly non-negotiables) as percentages of total 2013/14 provincial health expenditure. There is significant variation, partly because each province takes its own approach to the health function.

Limpopo, Western Cape and Northern Cape spend the lowest proportion of their allocation on HIV and AIDS because of their lower prevalences compared with other provinces. However, at 16.9 per cent of its population KwaZulu-Natal has the highest HIV and AIDS prevalence according to the HRSC's South African National HIV Prevalence, Incidence and Behaviour

Survey (2012), but allocated only 9.2 per cent of its 2013/14 budget on HIV and AIDS. This is lower than Free State, North West and Mpumalanga. To address this, the national Department of Health significantly increased the *Comprehensive HIV and AIDS* grant to KwaZulu-Natal over the 2014 MTEF. At 2 per cent, the province also spends the lowest proportion of its allocation on laboratory costs and is still paying a flat fee unlike other provinces, which are paying on a fee-for-service basis.

Table 4.18 Provincial selected health programmes/subprogrammes and economic classification expenditure as a percentage of total provincial health expenditure, 2013/14

R million	EC	FS	GT	KZN	LIM	MPU	NC	NW	WC
Selected programmes/subprogrammes									
HIV and Aids	7.6%	9.4%	9.0%	9.2%	6.5%	10.7%	9.7%	10.9%	5.8%
District Hospitals	20.4%	14.0%	6.2%	18.3%	29.5%	27.1%	11.9%	12.7%	13.9%
Community Health Clinics	10.3%	9.4%	6.0%	9.4%	14.6%	10.2%	9.6%	9.8%	6.0%
Community Health Centres	4.8%	0.9%	4.0%	3.6%	2.7%	7.3%	6.3%	8.9%	8.3%
Emergency Medical Services	4.8%	6.9%	3.4%	3.4%	4.0%	3.1%	5.9%	3.1%	5.2%
Provincial Hospital Services	25.2%	14.5%	18.8%	28.6%	12.8%	11.7%	5.9%	24.3%	15.7%
Central Hospital Services	4.5%	25.6%	37.3%	10.0%	9.5%	10.1%	21.7%	2.9%	28.7%
Economic classification									
Compensation of employees	62.8%	66.2%	62.4%	63.2%	71.4%	61.9%	52.5%	57.9%	58.0%
Goods and services	28.1%	25.3%	29.4%	27.8%	22.4%	27.8%	30.2%	28.3%	31.1%
of which									
Medical supplies	*3.1%*	*4.0%*	*5.9%*	*4.5%*	*1.4%*	*4.1%*	*3.6%*	*3.2%*	*6.4%*
Medicines	*6.4%*	*7.5%*	*8.1%*	*8.5%*	*6.9%*	*10.6%*	*5.7%*	*7.5%*	*5.6%*
Laboratory costs	*3.7%*	*3.3%*	*2.2%*	*2.0%*	*2.4%*	*2.8%*	*2.5%*	*2.7%*	*3.3%*
Agency and support/outsourced services	*1.4%*	*1.3%*	*1.1%*	*3.2%*	*3.9%*	*0.9%*	*2.2%*	*2.2%*	*2.5%*
Property payments	*5.6%*	*0.4%*	*5.1%*	*3.7%*	*1.3%*	*1.4%*	*3.3%*	*4.0%*	*4.5%*
Payments for capital assets	6.3%	6.8%	3.0%	6.3%	2.3%	6.9%	14.8%	12.4%	5.3%

Source: National Treasury provincial database

Of all the provinces, Limpopo spends the largest percentage of its total on district hospitals, followed by Mpumalanga and Eastern Cape. Gauteng spends the lowest percentage, with the largest single share of its budget going to central hospitals as 4 of the country's 10 central hospitals are in the province.

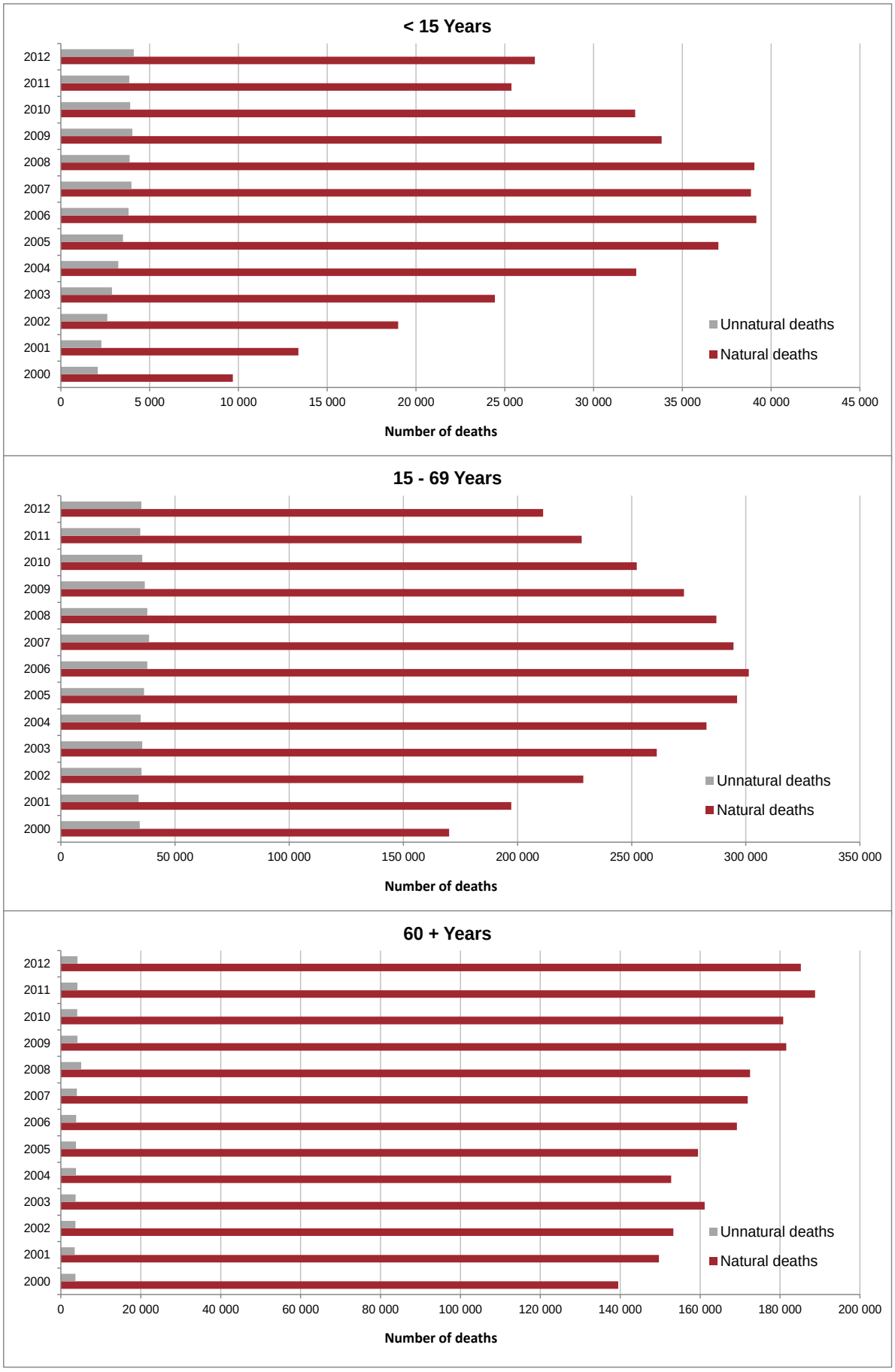
Medium-term outlook

Building on service-delivery achievements

Mortality levels are beginning to decline and other outcomes are improving

The evidence suggests that South Africa's health outcomes are improving. Figure 4.8 shows that mortality levels peaked in 2006/07 and are beginning to decline, partly because approximately 2.68 million people are on antiretroviral treatment. Other contributing factors are the expansion of the PMTCT and the introduction of pneumococcal and rotavirus vaccines. There is evidence of a real reduction in infant and child mortality beyond expectations and targets. The public health sector must continue to build on these accomplishments.

Figure 4.8 Natural and unnatural deaths by age group, 2000 – 2012



Source: Medical Research Council

Health infrastructure

Government is working with the DBSA to improve the delivery of health infrastructure

The persistent under-spending of large health infrastructure grants seen in recent years is beginning to diminish. Considerable efforts have been made to improve health departments' planning, management capacity and technical skills. Through the Infrastructure Unit Support Systems **(**IUSS) project, the national Department of Health is collaborating with the DBSA and the CSIR to improve the delivery and financing of health infrastructure conditional grants. The IUSS focuses on the development of norms and standards, cost modelling, implementation of a Project Management Information System (PMIS) and a project monitoring and oversight support unit (PMSU) to provide oversight to the provinces, and the rapid assessment of all current public health sector capital projects in the country. The conditional grant reforms aim to improve performance of and expenditure on the health infrastructure programme.

Human resources for health

The Human Resources for Health Strategy 2012/13 – 2016/17 aims to ensure sufficient availability and numbers of trained, skilled, suitably placed, motivated and properly remunerated health care providers. It focuses on leadership and governance; planning; revitalising education training and resources; improving quality; and increasing health human resources in rural and remote areas. With the OSDs in place, the sector is better able to attract and retain staff. With the rising demand for antiretroviral treatment, government needs to invest in training and technical support for treatment personnel. Task-shifting or nurse-initiated treatment is a potential solution to the shortage of doctors.

National health insurance

National health insurance is to be established over a fourteen-year period

Government is preparing for the implementation of NHI. This is a key part of the government's proposed framework for achieving universal health coverage and ensuring equitable access to health services for all South Africans. In a fully developed NHI system, public and private services are to be purchased by a new NHI fund, established to manage the financing and purchasing of health care. The Green paper on NHI was released for public comment by the national Department of Health in August 2011 and the White Paper will be submitted to Cabinet in the near future. Financing options have been reviewed by the National Treasury and will be submitted with the White Paper.

In February 2012, the Minister of Health announced ten pilot NHI districts: OR Tambo (Eastern Cape), Thabo Mofutsanyane (Free State), City of Tshwane (Gauteng), uMgungundlovu and Umzinyathi (KZN), Vhembe (Limpopo), Gert Sibande (Mpumalanga), Dr KK Kaunda (North West), Pixley ka Seme (Northern Cape) and Eden (Western Cape). KwaZulu-Natal added Amajuba district as a pilot site.

A direct NHI conditional grant was created in 2012/13 primarily to test innovations to strengthen health systems in the pilot districts. In 2013/14, provinces were allocated R87.6 million in pilot funding; 81.4 per cent of this was spent. Also in 2013/14, an indirect NHI conditional grant, managed by the national department, was created to test general practitioner (GP) contracting and to develop new hospital reimbursement mechanisms. Challenges experienced include lack of organisational

capacity, and weak monitoring and evaluation systems. It is planned that NHI will be implemented over fourteen years, with the first five years focusing on strengthening the public health sector. The Office of Health Standards Compliance will play an important role in NHI implementation and will be responsible for inspecting and certifying all public and private health facilities in the NHI system.

Primary health care

Primary health care is being reconfigured, with emphasis on preventative care

The national Department of Health is focusing efforts on improving primary health care (PHC), with an emphasis on preventative care to reduce the disease burden and resulting costs. At the heart of the PHC model is the deployment of ward-based outreach teams, district clinical specialist teams, and school health services to expand access to PHC.

The national department is also strengthening its efforts to combat non-communicable diseases which increasingly contribute to the burden of disease in South Africa.

Maternal and child health

Significant progress has been made in improving child health, with a dramatic reduction in infant and child mortality. This is due to interventions such as pneumococcal and rotavirus vaccines, improved PMTCT and encouragement of breastfeeding, combined with improved access to water and sanitation. However, maternal and neonatal mortality continue to be of concern. Among the approaches to dealing with it is South Africa's participation in the African Union's campaign on accelerated reduction of maternal mortality in Africa (CARMMA). Public sector interventions to strengthen primary health care and improve maternal and child health include appointing district specialist teams consisting of an obstetrician/gynaecologist, paediatrician, family physician, midwife and professional nurse.

HIV and AIDS

Strengthening human resources at treatment sites is key given the increasing demand for ART

Given the country's high HIV prevalence and the CD4 count eligibility criterion of 350 cells/mm3, the demand for ART is increasing. It is projected that the number people on antiretroviral treatment will increase from 2.68 million to 5.1 million in the next five years. Treating HIV and AIDS will therefore require significant additional resources over this period. Strengthening human resources at treatment sites is crucial, given the increasing demand for services. Behavioural change strategies that target individuals in multiple, concurrent partnerships are key to reducing the number of new HIV infections. The National Strategic Plan for HIV, STIs and TB 2012-2016 (launched in December 2011) aims to build on achievements made in HIV, TB and STI prevention, treatment and care; address social and structural barriers that increase vulnerability to HIV, TB and STIs; and ensure that the human rights of those living with HIV, STIs and/or TB are respected, protected and promoted.

Tuberculosis

Early diagnosis and management of TB and co-infection with HIV help to reduce the caseload and prevent the spread of the disease. Given that approximately 60 per cent of South Africa's TB patients are co-infected with HIV, the national department is rolling out GeneXpert which provides more effective, quicker diagnosis of TB, including better detection of multidrug-resistant TB.

Conclusion

Definite progress is being seen in the health sector. Mortality rates for adults and children have peaked and are declining. Provincial health departments now employ more than 300 000 personnel, of whom about 64 per cent are health practitioners. There are, however, continuing signs of inefficiency, with rising unit costs, high administration budgets and relatively limited growth in hospital outputs. Personnel management and control has improved significantly. However, under-expenditure on health infrastructure remains a concern given the state of some of the country's health facilities. Results from the collaboration with the DBSA and the CSIR, through the IUSS project, look promising and it is hoped that it will improve management and performance at all stages of infrastructure projects. NHI will change the financing and delivery arrangements in the sector over time, in order to achieve universal health coverage. Strengthening the public health sector is a precondition for full NHI implementation and is therefore a priority of the national Department of Health.